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Patient satisfaction with outpatient physiotherapy : an examination of needs and expectations of patients with acute and chronic musculoskeletal conditions

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PATIENT SATISFACTION WITH OUTPATIENT PHYSIOTHERAPY

**An Examination of the Needs and Expectations of patients with Acute and
Chronic Musculoskeletal Conditions**

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Thesis submitted for the Degree of Doctor of Philosophy (PhD)

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ABSTRACT

Patient satisfaction is generally viewed as an important component in assessing quality of health care and can be predictive of subsequent improvements in health. While the majority of satisfaction studies have dealt with the doctor-patient consultation, there has been little research into patient satisfaction with physiotherapy, and the lack of a validated tool specifically designed for use by physiotherapists in evaluating their service to musculoskeletal outpatients in the UK prompted this study.

The aims of the study were to:

1. Explore the factors that affect patients' satisfaction with outpatient musculoskeletal (MS) physiotherapy.
2. Establish which of the above factors are commonly identified as affecting satisfaction in patients with acute and chronic MS conditions.
3. Develop a tool with which to examine the level of satisfaction that these patients have with their physiotherapy MS outpatient care.

Interviews were conducted in 3 phases from 8, 30 and 66 patients with acute and chronic musculoskeletal conditions discharged from OP physiotherapy within the previous 4 months and two explanatory models of patient satisfaction with OP physiotherapy were proposed. A 38-item self-completion questionnaire was developed, pilot tested and mailed to a random sample of 420 subjects, drawn from the discharge lists of 14 physiotherapy OP departments, in hospitals throughout three Health Regions in England.

Results showed that subjects evaluated their physiotherapy treatment in relation to six principal dimensions of care; expectations, communication, therapist, organisation, outcome and satisfaction. While they were generally satisfied with their physiotherapy there were differences between the acute and chronic groups in relation to the factors affecting their satisfaction with the physiotherapy encounter (communication, therapist, organisation) and with the result of treatment (outcome). These differences could be attributed to the pathology of their condition and subsequent expectations of care.

Although the newly developed survey tool performed well further psychometric testing is recommended before it is available for general use in physiotherapy OP departments.

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PREFACE

The chief purpose for every health care professional is the welfare of their patients, with a special interest in how the patient responds to treatment. Patient satisfaction is an important outcome of health care quality and patients are in a unique position to provide information about their experiences and perceptions of care that cannot be achieved through direct observation.

Within physiotherapy, research into patient satisfaction is attracting increasing attention although the majority of work published is from other fields of health care. There is much that is not known about patients' perceptions of their physiotherapy experience, therefore eliciting patients' views could give therapists important information. This will contribute towards monitoring care quality as well as contributing to therapists' knowledge about the effectiveness of specific treatment interventions.

INTRODUCTION

Investigations into patient satisfaction with their care have steadily increased over the last three decades, with the number of published surveys in the medical literature reaching a peak of over 1,000 annually in 1994 (Sitzia & Wood, 1997). The impetus for the development of patient satisfaction studies in the 1970s, principally in the USA, was due to government support and an increased interest in the quality of medical care, but was focussed principally on medical consultations (Ware & Snyder, 1975).

Research in this field has proceeded largely without the establishment of a theoretical base or conceptualisation of the term 'satisfaction'. Nevertheless, increasing interest in seeking the views of patients for monitoring and improving services in the UK, particularly since the 1980s, has prompted the development of satisfaction studies in a great diversity of fields.

The Griffiths Report (1983) in the UK encouraged the role of the consumer as a legitimate judge of quality and called for the measurement of satisfaction through patient surveys. This was followed by the publication of the government policy documents 'Promoting Better Health' (1987) and 'Working for Patients' (1989). The result was a general shift towards consumerism in the health service with the development of the internal market and managers were encouraged to adopt a consumer-orientated culture in the interests of maintaining a competitive edge (McIver, 1991a & b). Patient satisfaction has been shown to be a predictor of subsequent improvements in health (Fitzpatrick, 1993), linked with appointment keeping (Frankel et al., 1989; Bigby et al., 1984) and compliance with medical regimes (Kincey et al., 1975; Willson & McNamara, 1982). In the interests of providing an efficient and cost effective health service therefore, taking patients' views into consideration would appear to be both rational and prudent.

Satisfaction studies have typically used either an interview or survey design. A literature analysis by Hall & Dornan (1988) showed that nearly half the satisfaction studies dealt with adult ambulatory medical care. A variety of aspects of care were examined, the highest number being concerned with the provider's humaneness (65% of studies), and the lowest with the provider's handling of psychosocial problems (3% of studies). On average 46% of studies used satisfaction scales to assess two to four aspects of care and 25% measured only one. It has been suggested that the majority of topics chosen for patient assessment tend to be those

identified by the researcher, rather than the patient. These are more likely to represent the organisational aspects of care which lend themselves to quality assessment by the patients, rather than topics selected in conjunction with patients to address their own concerns (Wensing et al., 1994).

While the majority of patient satisfaction research has centred on the medical encounter, there has been an increasing emphasis on patient participation and choice, with subsequent evaluation of care, in the field of nursing. This has arisen largely in response to developments such as the nursing process and primary nursing (Salvage, 1990). Studies have evaluated the quality of nursing care and the performance of nurse practitioners, as well as the effectiveness of educational and organisational interventions (Bond & Thomas, 1992). Specific features of nursing care have also been investigated using specifically designed tools (Hinshaw et al., 1981; Mangen & Griffith, 1982; McColl et al., 1996).

The use of questionnaires to obtain patients' views of the physiotherapy service stems from work initiated by the Kings' Fund on Quality Assurance (1987). Tools for evaluating physiotherapy services published at that time have been updated in response to recent Government initiatives (Secretary of State for Health, 1998) by The Chartered Society of Physiotherapy (CSP, 2000). Physiotherapists respond to the increasing need to inform and evaluate their service through research and evidence based practice. However, research in physiotherapy has tended to be primarily quantitative in nature and has concentrated on the evaluation of specific treatment interventions and the investigation of their pathophysiological effects. As a result there have been comparatively small numbers of qualitative studies investigating patients' perceptions and attitudes towards physiotherapy, with only a few dealing specifically with patient satisfaction.

WHAT IS PHYSIOTHERAPY?

Physiotherapy is a health care profession concerned with human function and movement and maximising potential. It uses physical approaches to promote, maintain and restore physical, psychological and social well being, taking account of variations in health status (CSP Curriculum Framework, 2002). The profession has evolved under a strong influence from the medical profession, from which extensive theory building and formal knowledge generation was conveyed (Thornquist, 1994). Biomedical theories that underpinned physiotherapy in the past have been replaced by a more holistic view, which is a different concept of health from

the medical model. The framework underlying the current curriculum of training for physiotherapists comprises four main areas. The first, 'Professional knowledge', relates to knowledge of the normal anatomy and physiology of the human body, specific approaches, techniques and procedures used in physiotherapy practice, and factors influencing the dynamics of health, illness and health care in adopting an holistic approach to the management of individual's problems and conditions. The second area, 'Professional skills', identifies those skills that are needed in adopting a patient-centred approach to care, including effective communication, clinical reasoning, critical evaluation and reflexivity in the successful implementation of treatment strategies. The third, 'The application of professional knowledge and skills' deals with the intrinsic and external factors that impact on physiotherapy practice in the delivery of specific physiotherapeutic techniques in diverse health care environments. Finally, the area of 'Professional attributes, identity and relationships' develops those skills necessary to become an autonomous practitioner through an understanding of the ethical, moral and legal contexts of physiotherapy practice, critical appraisal of research findings and incorporation of available evidence in the delivery of safe and effective treatment choices (CSP Curriculum Framework, 2002). These four areas therefore synthesise both bio-medical and psychosocial elements thereby encouraging an holistic approach to the delivery of patient-centred physiotherapy care.

Physiotherapists treat a wide variety of patients in in-patient, out-patient and community settings. The focus of this study is limited to an examination of the effects of the treatment and management of patients with musculoskeletal conditions attending for out-patient physiotherapy in an NHS hospital setting. Patients with acute and chronic musculoskeletal conditions were chosen for this study as they comprise a large proportion of a physiotherapist's workload, particularly in primary care (Klaber Moffett & Richardson, 1995) and are generally in good health apart from their presenting symptoms. The clinical outcome of care can therefore more easily be attributable to the physiotherapeutic than to medical intervention.

It has been hypothesised that there may be differences in the way that patients in the acute and chronic groups perceive their physiotherapy treatment. The literature suggests that physiotherapists may have a preference for treating patients with acute injuries rather than chronic conditions, as they are often more compliant with treatment regimes and achieve better clinical outcomes (Condie, 1991). Some patients may also be perceived as "problem" patients by therapists when they appear to have exceptional health care needs, resist the self-care

approach, or want minimal involvement with the therapist (Thomson, 2000). On the other hand, patients with longstanding chronic musculoskeletal conditions, or those for whom the clinical manifestations represent some other underlying problem, may benefit more from the social aspect of the clinical visit than the actual physical intervention in effecting a positive outcome (Walker, 1995). Results from the current studies should give an indication of the extent to which physiotherapists are meeting the perceived needs of patients with acute and chronic musculoskeletal conditions attending for outpatient physiotherapy.

Referrals for outpatient treatment are received principally from hospital consultants and general practitioners, comprising patients with both acute and chronic musculoskeletal conditions affecting central and peripheral joints and soft tissue structures. The length of the waiting list and staffing levels ultimately impact on the time patients have to wait for their first appointment. In general, patients with acute conditions (recent fracture or trauma) are accorded priority, and are seen within days/weeks, while those with chronic or recurrent problems usually need to wait weeks/months (Ratstall & Fashanu, 2001). This prioritisation accords with clinical evidence of the benefit of immediate intervention for acute conditions and the pathology of healing (Kesson & Atkins, 1998).

At initial assessment, the patients' perceptions of their needs and their expectations of treatment should be identified in order that a treatment plan can be formulated in conjunction with the patient. Throughout the course of treatment this should be constantly evaluated to ensure that it is effective and relevant to the patient's changing condition so that an optimum outcome of care is achieved. On completion of the treatment plan the patient should be involved in the discharge arrangements and future management of their care (Core standards, CSP 2000). The majority of patients attend for a course of treatment rather than one session, although some require only a single attendance for the provision of a specific aid or appliance. The current study is concerned with those patients receiving more than three sessions of treatment, in order that their relationship with the therapist in the course of the therapeutic encounter can be explored.

PHYSIOTHERAPY TREATMENT AND MANAGEMENT OF ACUTE AND CHRONIC MUSCULOSKELETAL CONDITIONS

The patients recruited into this study were those who have been attending for outpatient treatment for a variety of acute and chronic musculoskeletal conditions. Acute musculoskeletal

problems account for an estimated 3.5 million Accident and Emergency attendances each year (Wardrope & English, 1998). There is usually a clear history of injury with symptoms compatible with the mechanism of injury following the expected clinical course. An injury may be defined as an interruption in the continuity of a tissue and repair begins immediately following the injury by attempting to re-establish that continuity (Hertling & Kessler, 1996). Whereas acute pain can be considered a mainly physiological response to tissue damage, chronic pain involves psychological and behavioural mechanisms in addition to physiological mechanisms (Verhaak et al.,1998). Chronic pain has been defined in terms of a time dimension and has varied from the persistence of pain for 1 month (Magni et al.,1993), 3 months or longer (Croft et al., 1993; Andersson et al., 1993), and 6 months (Verhaak et al., 1998; Von Kroff et al., 1988; Potter & Jones, 1992; Rosentiel & Keefe, 1983; Geisser et al., 1994). Findings from the literature therefore broadly support the notion of a distinction between acute and chronic pain based on a temporal dimension.

The difference in the management of acute and chronic conditions, evident in clinical practice (Condie, 1991; Walker, 1995) suggests that the distinction drawn above could provide the basis for decisions concerning inclusion criteria to the current study. Condie (1991) distinguished between patients' presentations of impairment, disability and handicap and contended that while therapists were good at dealing with impairment, i.e. more acute problems, they are relatively poor at helping individuals manage their handicap including chronic and severe disability. It could therefore be hypothesised that patients might have different expectations and experiences of symptomatic improvement from physiotherapy intervention depending on the acuity or chronicity of their condition. While interventions involving more technical skills might be more appropriate in the management of acute conditions (Condie, 1991), the emphasis changes to teaching coping strategies and enabling skills in those whose conditions will affect them for the rest of their lives (Walker, 1995). It could therefore be further hypothesised that patients' perceptions of the efficacy of their physiotherapy treatment might differ between the groups.

The variables that have been most consistently associated with chronic pain are age (older people), gender (female), depressive symptoms and those in lower socioeconomic groups (Verhaak et al.,1998; Croft et al.,1993; Magni et al.,1993). In terms of symptom prevalence Andersson et al. (1993) found, in a study of 1,806 randomly selected individuals aged 25-74 years, that for both genders the most prevalent location of chronic pain were the neck and shoulders (women 32.9%; men 27.5%) and low back (women 22.8%; men 23.8%). There was an increasing prevalence of chronic pain by age to a maximum at 55-64 years followed by a

slow decline. In terms of chronic widespread pain, Croft et al. (1992) found that the highest prevalent rates were in those aged 75. In their study of 2034 individuals, aged between 18-85 years, results suggested that with increasing age, pain reported at specific sites was probably due to the presence of arthritis and explained the highest rates in this age group. These studies indicate a trend towards chronicity of condition with increasing age and this has been reflected in the increasing number of referrals to physiotherapy to treat problems occurring in the middle-aged and working populations (Walker, 1995).

However it is also acknowledged that in some chronic pain conditions, such as complex regional pain syndrome (CRPS) chronic pain may start within hours or days of the injury, thus calling into question the duration of acute pain as defining chronic pain (Breen, 2002). Patients presenting with chronic pain syndromes such as CRPS, have often not been amenable to effective treatment from a range of previous services eg. medication, physiotherapy, TENS or surgery, and are among those that tend to be referred on to specialist pain clinics (McHugh & Thoms, 2001). These clinics offer a multidisciplinary approach to the care and management to these patients, as the complex and multifaceted nature of their pain calls for the skills and expertise of a range of health professionals. This need for a multidisciplinary approach to treatment therefore precluded patients with chronic pain syndromes from inclusion in the current study, which focussed on the unidisciplinary input of outpatient physiotherapy treatment and management.

There are three principal reasons why patients with musculoskeletal conditions visit the doctor (Salter, 1999). Pain is by far the most important presenting symptom and is typically aggravated by movement and relieved by rest. Secondly, decreased function in terms of muscle weakness, instability or stiffness in a joint and thirdly the presence of an abnormality or deformity. As is the case with pain, patients vary widely in their tolerance or acceptance of deformity, which may be acceptable to one but cause great concern to another (Delamothe, 1994; Salter, 1999). While the function of acute pain can be seen as a warning signal the value if any, of chronic pain is less clear although it may serve to promote the inactivity that is sometimes necessary for successful recovery from serious injury (Pearce & McDonald, 2001).

In general the purpose of medical treatment of chronic diseases is palliative rather than curative (Linn et al., 1982) and attention is paid principally to the maintenance or improvement of function and less to recovery (Rijken & Dekker, 1998). The decision to seek treatment lies more in the hands of those with chronic rather than acute conditions, since the result of acute trauma usually requires some immediate medical intervention even if subsequently the patient

is not referred on, or decides against further treatment. Although in both conditions pain is generally the main presenting symptom (Klaber Moffett & Richardson, 1995) it is predominantly pain that motivates the patient with a *chronic* condition to seek treatment. Pain related fear has been shown to be one of the most potent predictors of observable physical performance and self-reported disability levels, so that patients with chronic pain also often present with associated non-specific physical complaints (Vlaeyen & Linton, 2000). In a study of 100 subjects attending a pain centre with chronic pain Turk et al. (1995) found that pain experienced in older subjects (≥ 70 years) was more chronic than in the younger (≤ 69 years) and that older patients may perceive their pain as a more permanent disability. As pain intensity increased, older patients felt significantly less control over their lives and depressive symptoms increased. Younger patients reported greater life interference as a result of pain, and had perceptions of little positive support and higher levels of negative responses by significant others, whereas the older age group showed more adaptive coping strategies. The intractability of chronic pain may lead patients to conclude that their treatment was inadequate (McCracken et al., 1997) and clinicians may unconsciously display negative behaviour toward sicker and more distressed patients, so that their dissatisfaction could be construed as a comment on the clinician's performance (Hall et al., 1993).

Treatment seeks to achieve a positive change in the patient(s) health status that is attributable to the (physiotherapy) intervention. Establishing treatment goals may be one way of establishing the extent to which patients' expectations of their treatment outcome can be fulfilled, although ultimately satisfaction with care rests with the patient's perception that his/her needs in seeking care, however conceptualised, have been achieved (Fitzpatrick, 1984). To enable the therapist to address these needs, the revised International Classification of Functioning, Disability and Health (ICF) (WHO, 2001) provides a framework for the description of health and health related states. The domains are described from the perspective of the body, the individual, and society as, i) Body Functions and Structures, and ii) Activities and Participation. These terms replace those of 'impairment', 'disability' and 'handicap' formerly used in the International Classification of Impairments, Disabilities, and Handicaps (ICIDH) (WHO, 1980). The focus is now on the components of health (identifying the constituents of health) rather than on the consequences and impact of disease. An individual's functioning in a specific domain is seen as arising from a complex dynamic relationship between their health condition, personal, and environmental factors. If the patient's full health experience is to be described, all aspects need to be explored. The current ICF perspective adopts a biopsychosocial approach to care by integrating both the medical model, which

directs care to address the effects of disease, trauma or other health conditions, with the social model, in which disability is seen as emanating from shortcomings in the social environment.

Physiotherapists employ a variety of techniques in the treatment of acute and chronic musculoskeletal conditions, with the principal aim of effecting pain relief and improving mobility and function. Manual techniques (mobilisation, manipulation, massage) together with the use of additional treatment modalities such as electrophysical agents (ultrasound, magnetic, thermal energy) are used separately or in combination to address the problems identified. Therapeutic exercise carried out in the department and at home, in the form of a specially tailored exercise programme, also plays a key part in promoting patient's confidence in their ability to regain their functional ability (Harding & Williams, 1995). For patients with chronic conditions, education and advice on the long term management of their condition is of particular importance as the outcome of treatment is more likely to effect alleviation of symptoms rather than a cure (Callaghan, 1994).

The physiotherapist's primary aim is to help the patient achieve the best possible outcome from treatment whether this be in terms of pain relief, functional improvement or in meeting their psychosocial needs. Many of the biological, psychological and sociological characteristics of patients alluded to earlier suggest a number of questions that could be asked of the physiotherapeutic encounter. What do patients *really* think about their physiotherapy treatment? Which aspects, if any, of the therapeutic encounter do patients regard as being particularly relevant for them? To what extent is the patient's medical condition instrumental in their expectations of physiotherapy care? Are patients satisfied with the treatment received? Is the outcome of treatment more important than other aspects of the encounter? To what extent is the relationship with the therapist a significant factor in the overall evaluation of the therapeutic experience?

This study aimed to provide some answers to these questions.

AIMS OF THE STUDY

The three main aims of the study were to:

1. Explore the factors that affect patients' satisfaction with outpatient musculoskeletal (MS) physiotherapy.
2. Establish which of the above factors are commonly identified as affecting satisfaction in patients with acute and chronic MS conditions.
3. Develop a tool with which to examine the level of satisfaction that these patients have with their physiotherapy MS outpatient care.

PLAN OF INVESTIGATION

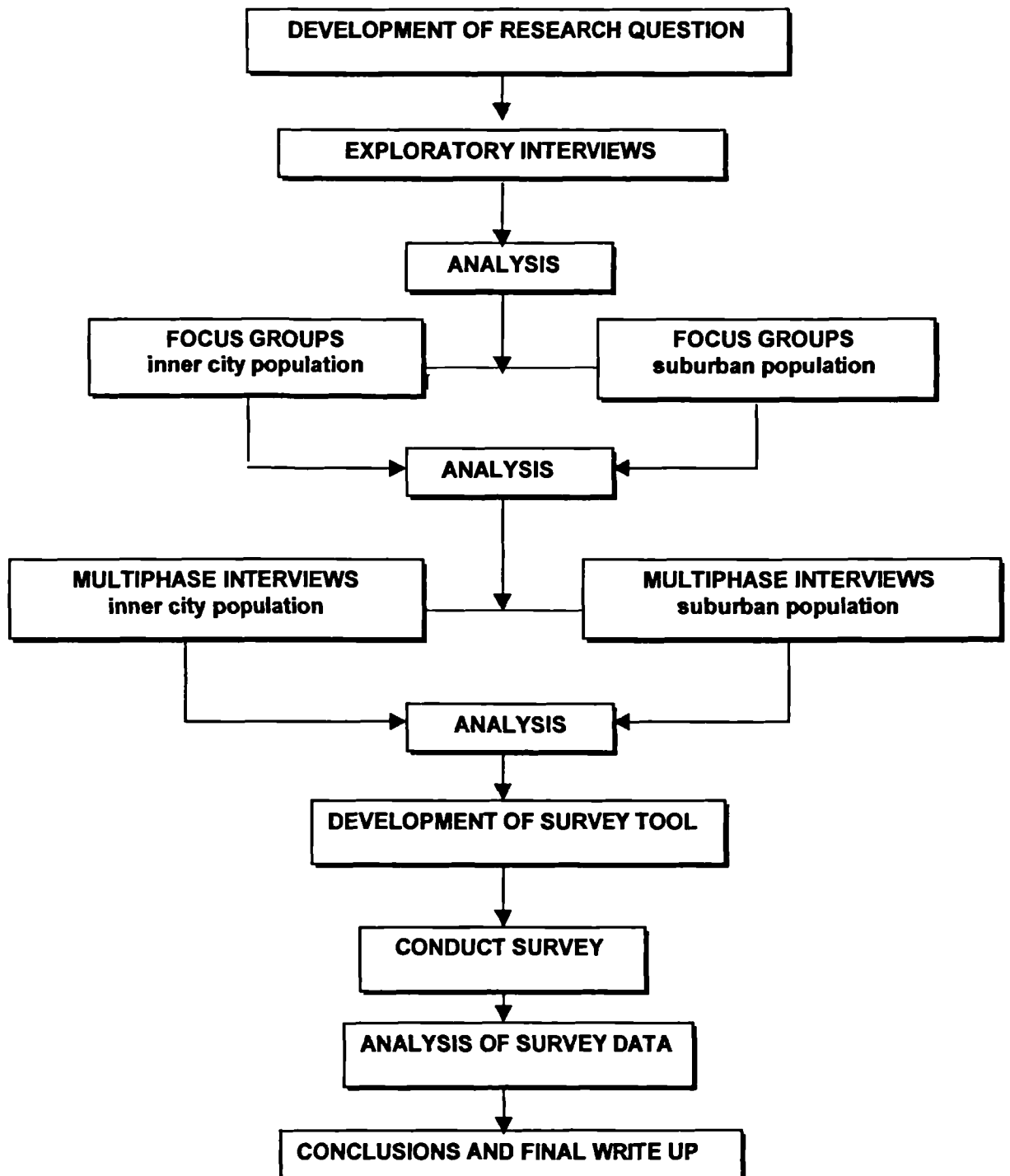
The research falls into two parts and required a mixed design incorporating both qualitative and quantitative methods.

In the first part, directed at answering the first two research aims, purposive sampling was employed in order to explore patients' perceptions of recent physiotherapy management, and to elicit aspects of care that were of particular importance or relevance to them. This was achieved using individual and group interviews.

In the second part, a survey was conducted following the development of the research tool with statistical analysis of data to address the final research aim. It was envisaged that the development of a questionnaire, specifically designed for use in an ambulatory musculoskeletal out-patient setting, would provide physiotherapists with a tool with which to evaluate their service.

Figure 1 provides an overview of the stages of the research.

Figure 1. Overview of the research method



ORGANISATION OF THE THESIS

SECTION ONE: BACKGROUND TO THE STUDY

Chapter One

The concept of satisfaction is defined and a theoretical basis for the concept is drawn from need theory. This is applied to patient satisfaction research with implications for physiotherapy.

Theories from the field of social psychology and marketing are then explored to clarify the relationship between expectations and satisfaction and to identify a model that could be applicable to patient satisfaction research.

The satisfaction literature is reviewed with particular reference to ambulatory health care. The review draws on the framework for service quality assessment proposed by Donabedian (1966). The most frequently used measures of satisfaction for ambulatory care patients are reviewed, with particular reference to the dimensions of care examined and the psychometric properties of the tools. Consideration is then given to their applicability for answering the research questions posed in this study.

SECTION TWO: METHODOLOGY AND PRELIMINARY DATA COLLECTION

Chapter Two

The methodology used in the research is described drawing on the principal research paradigms. The exploratory and developmental nature of the design allowed for flexibility in the preliminary data collection phases, which were dependent on the quality of the data collected. Both qualitative and quantitative methods were employed in order to answer the research questions with an initial phenomenological perspective being adopted within the framework of the constructivist paradigm. The later survey phases used a quantitative approach with statistical analysis of questionnaire survey data.

Finally, ethical issues relating to the various stages of the study are discussed

Chapter Three

This chapter describes the preliminary data collection phases of the research involving individual and focus group interviews in order to elicit patients' views of their physiotherapy outpatient treatment. Two theoretical models relating to the Therapeutic Encounter and Clinical Outcome of care are subsequently proposed.

Chapter Four

In this chapter patients' experiences of their outpatient physiotherapy care are further explored through conducting multiphase individual interviews. These build on the earlier data collection phases and inform the content of the survey tool that was subsequently developed to examine patients' satisfaction with outpatient physiotherapy. The chapter concludes with a proposed model of patient satisfaction with physiotherapy and four stated hypotheses providing a framework for the analysis of the main survey data.

SECTION THREE: QUESTIONNAIRE DEVELOPMENT AND SURVEY

Chapter Five

This chapter describes the development of a new tool to examine satisfaction with outpatient physiotherapy.

Chapter Six

In this chapter the psychometric properties of the new tool are examined through statistical analysis of the pilot questionnaire survey data.

Chapter Seven

This chapter describes the main questionnaire survey that was conducted using the new tool. The data were analysed within the framework of the four hypotheses stated following the preliminary qualitative data collection phases of the study with respect to the determinants of satisfaction for subjects in the acute and chronic groups.

Chapter Eight

This chapter provides a summary of the research.

Conclusions and recommendations for future research are made

SECTION ONE

CHAPTER 1

BACKGROUND TO THE STUDY

1.1 DEFINING THE CONCEPT OF SATISFACTION

In order to answer the research questions it was necessary to establish what was meant by the term 'satisfaction' and whether this would be a useful concept to apply to the physiotherapeutic encounter. Reference was made to the dictionary definition of the term where 'satisfaction' is taken from the Latin *satis* enough + *facere* to do (Concise Oxford English Dictionary, 2002). Taken literally satisfaction therefore represents a positive attitude that 'enough has been done' in any particular circumstance and thus captures the essence of the concept. The synonyms for satisfaction provided in the Thesaurus (including contentedness, gratification, well-being, achievement, fulfilment and resolution (Collins Compact English Thesaurus, 1993) support the notion that satisfaction represents a positive state associated with an accomplishment or the restoration of a state of balance. This view is exemplified by McCracken et al. (1997) in relation to the medical context, in that a patient who is satisfied with treatment returns when the need arises, experiences pleasant feelings associated with the experience and speaks in favourable terms about the treatment. Satisfaction can therefore be thought of as a response class that includes behavioural, emotional and verbal components. It can be conceptualised either as an outcome or intervening variable in terms of patients' health care evaluation (Linn, 1975).

For some researchers, satisfaction has been viewed in terms of the attitudes and values that patients hold in relation to the disparate aspects of their health care (Fitzpatrick, 1984; Linder-Pelz, 1982 a; Pascoe, 1983). These attitudes are assumed to be relatively stable and can be expressed either positively or negatively with respect to aspects of the context, process and result of service experience. For others, satisfaction represents the degree to which patients perceive their expectations as being fulfilled (Abdellah & Levine, 1957; Risser, 1975; Abramowitz, Cot & Berry, 1987; Greeneich, 1993; Bear & Bowers, 1998). Hill (1997) defines

satisfaction as 'the degree which patients perceive their needs are met', and Sheppard (1993) as 'indicating a general sense in which the clients, overall, felt positive or negative about (the) intervention'. However, satisfaction may also be influenced by societal, subcultural and idiosyncratic experiences of the individual (Greene et al., 1980).

Satisfaction is thus an emotion and as such does not admit to a strictly scientific definition. Its varied connotations are evidenced by the many synonyms offered by the dictionary and Thesaurus noted earlier and by the definitions offered by the researchers (above) who have attempted to define the term. It involves both cognitive and affective psychological processes in the formation of evaluative judgements and can be viewed as a positive attitude. The definition of satisfaction adopted for this study therefore draws on these elements and views satisfaction as a sense of contentedness, achievement or fulfilment that results from meeting patients' expectations and needs with respect to specific and general aspects of health care.

Patients attending physiotherapy have the expectation that 'something more' is being offered in terms of symptom relief/functional improvement in addition to their medical care. An expression of satisfaction in terms of 'enough has been done' would accord with a feeling of contentment not only with aspects of the treatment received, but that these 'given' expectations were fulfilled. However, while the definition of satisfaction presented above provides some general understanding of the term, this was seen to be inadequate in explaining *why* a feeling of satisfaction arises, therefore a deeper analysis of the concept was required.

1.2 SATISFACTION AS THE RESTORATION OF HOMEOSTASIS

Clearly satisfaction as a feeling of contentment does not stand alone as a self-sufficient entity but is part of a more complex activity. It could be reasoned that a feeling of contentment arises in response to the fulfilment of a deficit or need. The notion of a need or drive initiated by an upset of the organism's homeostasis, provides the motivation to restore the organism's natural balance (cf. contentment) through satiation of the need and suggests a theoretical basis for the state of satisfaction. Clarification of the concept of need was therefore undertaken with reference to early classic studies and by more recent research in seeking the application of need theory to patient satisfaction. Friedman (1980) provided an excellent introduction to the discussion of need with his theory that need and satisfier exist as a pair, with the definition of each being inextricably linked. Satisfaction can be said to have occurred when the organism re-establishes its desired state so that previously identified needs have been satisfied.

The early work of Manilowski (1944) and Montague (1957) contributed to the development of need theory later exemplified by Maslow (1970). Manilowski defined the concept of basic needs as 'the environmental and biological conditions that must be fulfilled for the survival of the individual and the group'. In the activities consequent upon need he lists three elements,

- The impulse/ need itself
- The physical performance corresponding to each impulse
- Satisfaction, the end result of physiological activities/an easing up/return to organic quiescence.

In addition Manilowski identified the presence of derived needs that operate at a higher level, viz. learning, art, religion, law that also refer directly or indirectly to the satisfaction of a bodily need.

Montague (1957) concurred with Manilowski (1944) in defining basic or biologic needs as 'any urge or need of the organism that must be satisfied if the organism or group is to survive'. These needs arise when the physiological equilibrium is disturbed and together with 'non-vital basic needs', are necessary for the development and maintenance of the organism's physical and mental health. He re-defined what Manilowski called 'impulses' as needs that arise as a result of tension. Thus acts that lead to satisfaction are themselves tension-reducing, satisfying, pleasurable and may be indulged in for their own sake. Satisfaction therefore consists in a process comprised of i) the satisfying acts and ii) the restoration to equilibrium homeostasis. However, Montague (1957) averred that while the satisfaction of basic needs results in tension-reduction and a return to equilibrium, there are occasions when satisfaction results from the maintenance or even an increase in tension, for example dangerous sports, as well as tensions created through creative work or competition.

Maslow (1970) supported the notion of the plurality of needs and proposed his own five-level classification of human needs viz. physiological, safety, belongingness, esteem and self-actualisation. Although Maslow argued that the physiologic needs are the most prepotent he did not contend that a need had to be 100% satisfied before the next need emerges. It is therefore possible to be partially satisfied and partially dissatisfied at the same time. Nevertheless, he suggested that greater value is placed on higher order needs and that satisfaction of these is closer to achieving self-actualisation. Living at a higher level means greater biological efficiency, greater longevity and generally represents a healthward trend away from psychopathology.

The thwarting of basic or derived needs, resulting in psychopathology is an indication of the value an individual places on that need, is a view generally shared by need researchers (Montague, 1957; Maslow, 1970; Lederer, 1980; Kleinberg, 1980; Rist, 1980; Doyal & Gough, 1991). It is the frustration of a need that increases an individual's motivation to seek satisfaction (Aldefer, 1969). Aldefer contended that a continuum exists from existence needs (more concrete) to growth needs (least concrete) and that individuals will tend to desire the former as a consequence of being unable to obtain the latter.

Galtung (1980) questioned the assumption that need satisfaction is inherently enjoyable as a one-off affair, and proposed rather that it is a place from which one departs again to a new state of need awareness. He further suggested that people do not see their own situation in terms of need lists and satisfiers, but express this in terms of a state of well being and a more acutely felt absence of pain or ill-being. The inclusion of pain here is interesting in linking need theory more directly to the clinical situation, where one of the primary objectives is to effect patient satisfaction through the relief of pain. In similar vein, Mallman (1980) proposed that need is a generic requirement that all human beings have in order not to be ill and that the corresponding satisfier is the element necessary to achieve this state. He defined satisfaction in terms of desires and aspiration fulfilment, but took the broader view that society acts as a satisfier in promoting the use of preventive and curing health techniques for the alleviation of physiological and psychological illness, including rapid access to health services. Rist (1980) likewise adopted an holistic view of satisfaction in linking the importance of culture to the sociocultural perception of the need, so that an object can have several meanings and should not be regarded merely as a satisfier. For Doyal and Gough (1991) health and personal autonomy constituted the most basic human needs and must be satisfied to some degree before the individual can effectively function to achieve any other valued goals in life. They contended that optimal satisfaction of these needs constitute a fundamental human right. Their approach eschews the notion of need as a drive or motivational inner force, but recognised that the biological background of human need was linked to basic genetic makeup and took a broader economic and political view by developing cross-cultural indicators and measures of need satisfaction on a world wide basis. Needs were distinguished from wants in that, while both can be described as goals, the latter derive from individual preferences and cultural background rather than being universally applicable.

In response to the question of why a state of satisfaction occurs, need theory appears to have provided some answers. It is clear that need researchers agree on two fundamental points *viz.*

self-maintenance or homeostasis as being the dominant drive of the organism and frustration of need fulfilment resulting in psychopathology. However, within this basic framework researchers have moved from the earlier and narrower focus on need satisfaction at the physiological and biological level to exploring human needs within the wider global context. Nevertheless the two fundamental elements remain and can therefore be extrapolated within the context of the current research. The notion of a 'healthward trend' (Maslow, 1970) and 'absence of ill-being' (Galtung, 1980) ground the theory within the medical domain, with the assumption that patients seek help in addressing their biopsychosocial problems which constitute a barrier to their achievement of health and autonomy. Patients' satisfaction with treatment, indicative of need fulfilment, therefore constitutes a higher adaptive level of functioning from which to enjoy greater social interaction through the pursuit of higher order needs.

Having offered some clarification of the concept of satisfaction in terms of 'to do enough' and its occurrence through satiation of a need, it is necessary to explore the importance of the concept as applied to satisfaction research in health care.

1.3 THE APPLICATION OF NEED THEORY TO SATISFACTION RESEARCH

Whenever a care provider examines a new patient for treatment (s)he must form an opinion about what the patient needs and from which treatment or other intervention that patient is likely to benefit (Jensen et al., 2000). Satisfaction with care received then represents a complex mixture of patients' perceived need and their expectations and experiences of care (Wilkin et al., 1992).

Meeting patients' caring needs is a particular concern to nurses who comprise the largest proportion of personnel providing direct patient care and who spend more time with patients than other healthcare workers (Dingman et al., 1999). Need theories have played an important part in the development of many nursing theories, for example, Orem (1971), Abdellah et al. (1960), Henderson (1966), and Yura & Walsh (1978). One of the most comprehensive applications of need theories to nursing research is that by Yura & Walsh (1978). In common with the definitions of need discussed earlier, these authors defined need as an internal tension resulting from a change in some state of affairs. This tension is manifested in goal-oriented behaviour, which will continue until the tension is relieved and the need satisfied. Thirty-five basic needs were identified thought to be typical of all people in nursing situations. These were initially classified into four main areas, i) vital functions, ii) functional health status, iii)

reactions to functional health status and iv) environment, but subsequently grouped as survival, closeness and freedom needs to facilitate use with the nursing process (Yura & Walsh, 1988).

Hallstrom & Elander (2001) adopted a more patient-centred approach and asked 20 patients undergoing medical or surgical care patients to identify the concept of 'need', to describe their own needs while in hospital and to find out how they ensured that their needs were met. 'Need' was variously defined as a goal, a means of fulfilling an aim, or as staff satisfying their needs without asking. When describing their needs 10 categories were identified; communication, basic care, contact with others, behaviour of staff, empathy, competent caregivers, continuity, integrity, participation in decision making and pain relief. Of these the first 3 categories were most frequently mentioned. In ensuring that their needs were met patients fell into two groups, the first openly sought attention until their needs were met, while the second tried to find solutions for themselves and did not want to disturb the staff. It was found that patients belonged strictly to one group or another and it was surmised that this could be due to various factors for example, differences in upbringing, personality or respect for caregivers. Nevertheless, it was felt to be important that these differences be identified by care staff so that demanding patients should not receive more and better care at the expense of other patients. In terms of the needs that were mentioned the authors raise an interesting point, as to whether they were mentioned because they were satisfied or because they were not satisfied. Unfortunately this question was not addressed by the research.

In a number of studies the caring needs of hospitalised patients have been examined in relation to patient satisfaction with nursing care. Fagerstrom et al. (1999) interviewed 75 patients, half each from medical and surgical wards and asked them to describe the bodily, psychical (need for information, emotional support, guidance) and spiritual needs they had experienced while in hospital. Seventeen perceived caring needs emerged that concerned patients' descriptions of desired nursing care activities and nurses' way of relating, although several patients found it difficult to describe discrete needs and thought of themselves as an indivisible whole. Their accounts were dominated by bodily needs, but they also identified psychical and spiritual needs, even though in many cases these were expressed in a vague manner. Nevertheless their caring needs were constituted of their problems, needs and desires, in which the human desire for life, love and meaningfulness appeared as bodily, psychical and spiritual needs. Although not all caring needs are capable of quantification the authors conclude that they should be understood in depth and satisfied as a result of the way nurses related to the patients. In this way suffering could be relieved and health processes facilitated to achieve a higher degree of health.

Dingman et al. (1999) evaluated the difference in patient satisfaction before and after the implementation of a caring model of nursing in an acute care community hospital. Four distinct groups of discharged inpatients were surveyed over four 3-monthly periods, two groups were surveyed before implementation of the model and two groups after implementation. Three comparisons of time periods were used, at 6 months prior to implementation and 3-6 months post implementation. The survey tool was developed by the Gallup Organisation and included 16 key drivers of patient satisfaction, 8 of which were chosen for the study dealing with various nurse attributes. Results provided evidence that nurse caring behaviours significantly impacted on patient satisfaction. This was particularly true in relation to the attributes 'Nurses anticipated needs' and 'Nurses responded to requests'. The greatest change occurred at 3 months post intervention of the caring model, although this improvement had reduced somewhat at 6 months. It was found that when the nurse was able to anticipate the patients' needs and respond without being asked, in addition to keeping the patient informed, this developed the patient's sense of trust in the caregiver. However the fact that the positive trend for improved patient satisfaction was not sustained at 6 months post intervention suggested that the nursing attributes identified were not an integral part of the service culture although they clearly had an impact on patients' perception of their care.

The apparent disparity between the perception of nurses' and patients' needs as alluded to by Dingman et al. (1999) above has been highlighted in a number of studies, for example those by Lauri et al. (1997), Farrell (1991) and Houstutler et al. (1999). In a study to identify the needs of patients on medical and surgical wards Lauri et al. (1997) designed a questionnaire based on the classification by Yura & Walsh (1978). It included 154 items of which 13 concerned vital functions, 66 functional health status, 60 reactions to functional health status and 15 environment. Results showed that only 27% of the 154 basic needs identified by Yura & Walsh (1978) occurred in half of the patients, but also that needs varied between the different areas of nursing and could be attributed to the patient's condition. Nurses attached more importance to environment-related needs (information, hospital procedures) whereas patients identified needs that arose from their illness and their physical and mental health. This finding highlighted the problem of using need-classification systems without a critical appraisal of the appropriateness of the need and the feasibility of addressing them in practice.

Studies by Farrell (1991) on the perceptions of patients' emotional and physical needs on medical and psychiatric wards and Houstutler et al. (1999) on patients' needs in an emergency department setting, also showed that in both cases there were significant differences between nurses' and patients' assessments of need. In Farrell's study, psychiatric nurses were better at

assessing emotional needs whereas general nurses were more successful in estimating patients' physical needs. It was suggested that these differences were related to the nurses' specialist training, so that they were presumably focussing on different aspects of patient care. Farrell (1991) affirmed that nurses could only know what their patients' needs were by establishing more than a superficial rapport that encouraged them to talk about their concerns. Patients assessed their care as being good, which might have been a reflection of a high standard of nursing care or/and the fact that patients' needs were less than the nurses thought they were.

Houstutler et al. (1999) examined the needs for patients attending an emergency department and to compare them with the needs identified by the nurse. Results showed a significant difference between the views of patients and nurses, with patients more concerned about social courtesy, compassion and good information exchange, whereas nurses identified staffing, teamwork, and competent staff as most important. The number of areas to which patients assigned great importance were those that had previously been reasons for patients complaints, suggesting that fulfilment of these needs leads to greater satisfaction with the visit. Results also highlight the importance of patient-centred care in institutions that value patient satisfaction with services.

In other studies that have examined patients' perceived care needs, researchers have used Maslow's (1970) hierarchy to interpret their study findings, for example those by Acton & Malathum (2000) and Nyden et al. (2003). Acton & Malathum (2000) investigated the relationship between basic need satisfaction and health promoting self-care behaviour in a convenience sample of 84 community dwelling adults. They found that self-actualization, physical and love belonging need satisfaction accounted for 64% of the variance in health promoting self-care behaviour. The results were therefore consistent with Maslow's theory of human motivation and suggested that persons who are more fulfilled and content within themselves and their lives have physical need satisfaction and a more positive outlook in terms of promoting self-care behaviours. Nyden et al. (2003) interpreted responses from interviews with 7 patients aged 65-88 about their experiences in emergency care environments in relation to Maslow's theory. Safety needs appeared to dominate, and were taken to indicate that the lower order physiological needs were fairly well satisfied. However all Maslow's levels of need were identified in the interviews to some extent except self-actualization, interpreted as patients apparent lack of desire/expectation of participating in the decision making process regarding their care. It was concluded that safety needs were poorly satisfied, since discussion of these dominated the interviews. However a principal limitation of this study was its very small sample size.

Researchers have also examined specific categories of need, for example patients' information needs, in relation to satisfaction with care (Larson et al., 1996; Jacobs (2000). Larson et al. (1996) surveyed patients to identify topics that patients considered important for them to know about their illness and how the communication of these topics affected their satisfaction and health status. Surveys of 167 patients with myocardial infarction (MI) were conducted at 2 and 8 weeks post discharge. Results showed that providing patients with information about their illness and recovery had a significant relationship with their perceptions of quality of life, satisfaction with hospital care and benefit from treatment. However in the top 5 areas of most importance to patients in relation to information about knowledge of the disease and its treatment, 20% of patients' needs were not met concerning how to recognize a heart attack and the chances of having another one. Other topics where patients' information needs were not met concerned psychosocial and financial issues. It was suggested that clinicians could have a positive influence on patients' perceptions of quality of life and health benefit by identifying information that was important and delivering it in a clear understandable and useful manner.

Jacobs (2000) also measured patients' perceived information needs in 61 patients following discharge from two surgical wards of an acute care teaching hospital. A 50-item previously validated questionnaire (Patient Learning Needs Scale) was used in which patients ranked each item in relation to how important it was to learn about it before discharge in order to manage at home. Satisfaction with information relating to the items was measured on the same scale. Items identified as most important related to activity, wound care, complications, pain management, elimination and personal care. Information perceived as important and identified as having been given prior to discharge was reported as satisfactory. However in many areas patients reported that they were not given the information they needed, possibly because additional information was needed once they were at home, they experienced more pain with increased activity, had difficulty applying the information or did not remember. Implications for practice that can be drawn are that instructions should be individualized according to patients' needs and lifestyle and that the use of written instructions may be important for some patients.

Although in the studies reviewed above needs have been made explicit, it was found earlier that patients defined the concept of 'need' in various ways for example, as a goal or of fulfilling an aim (Hallstrom & Elander, 2001) or as desires Fagerstrom et al. (1999). Needs have also been linked with health value (to be discussed below) in that 'values are the cognitive representations and transformations of needs' (Rokeach, 1973), although Rokeach also cautions against the inference of needs from values as values are not isomorphic with

needs. However the link between health value and need underlies the use of the terms 'worry' or 'concern' in the measurement of health and its relation to satisfaction with care (Lau et al., 1986). Studies in which needs could be interpreted as being implicit rather than explicit and defined in terms of desires, goals, or worries include those by Bell et al. (2001), Carmel (1985) and van de Kar et al. (1992)

Bell et al. (2001) examined patient, physician and health care system characteristics associated with unvoiced desires for action as well as consequences of these unspoken requests in 909 patients in practices of 45 family practice, internal medicine and cardiology physicians. Patient surveys were conducted before, immediately after and 2 weeks after an outpatient visit. Results showed that 9% of patients had 1 or more unvoiced desires, with desires for further referral and for physical therapy the least likely to be communicated. Patients with unvoiced desires evaluated the physician and the visit less positively. Holding an unvoiced desire was associated with less symptom improvement, although this did not affect post visit health care use. Patients with unexpressed desires tended to be young, under educated and unmarried, and were less likely to trust the doctor.

Carmel (1985) interviewed 476 patients from 6 wards (surgical, medical, orthopaedic) of a general hospital who had been hospitalized for at least 48 hours. In addition to a general satisfaction measure 31 items related to physicians, nurses and support services. Results indicated that satisfaction was related to the patient's perception of the service that led most to the achievement of his/her ultimate goal of an improvement in health. This was significantly positively related to general satisfaction as well as to satisfaction with the three types of service. However improvement in health explained more of satisfaction on the medical wards suggesting that a patient who feels better believes he is healthier and relates it to the medical treatment he received. Results also showed that in relation to health services, when a patient feels he is achieving his goal, he adapts to the deficiencies in the process of achieving it by attaching less importance to the process.

van de Kar et al. (1992) explored the worry and the reasons for being worried as experienced by 791 patients waiting to see their GP. Satisfaction with the discussion of the worry during the consultation was measured by two questions, 'Did you have the opportunity to discuss your uncertainty about your health with the GP?' and 'Did you have the opportunity to discuss your anxiety about your health with the GP?' Results showed that patient worry was not extremely high and that principal worries concerned the patients' perceptions of their complaint and the need for information about it. The more serious the complaint was perceived

to be and the greater the perceived chance of serious disease the more worried the patients were. Patients who had between 1-5 visits to the GP per year were more worried than those consulting more than 10 times a year, with women being more worried than men. Worry was decreased more in those patients who said that their concern was discussed satisfactorily with the GP compared to those who felt it was not. There is support for these findings from other studies have shown that greater satisfaction with the consultation results when patients' ideas, concerns or anxieties have been elicited and discussed (Arborelius & Bremberg, 1992; Webb & Lloyd, 1994). However when patients feel that the doctor has not satisfactorily addressed their needs they may engage in more proactive behaviour and change their doctor (Marquis et al., 1983; Pascoe, 1983; Ware & Davies, 1983). Cousins (1985) found that in an informal survey of 563 patients whose sympathy, medication and behavioural needs were not met had changed their doctor within the last 5 years. Various reasons accounted for this including the doctor's style or personality (poor communication, inability to inspire confidence, atmosphere of disorganization, personal characteristics).

In summary, the studies reviewed above have demonstrated that satisfaction results from need fulfilment so that when patients' perceptions of their health care needs whether explicitly or implicitly expressed, have been met/not met, this has resulted in either satisfaction or dissatisfaction with their health care experience. Researchers have consistently shown that in order to respond appropriately to patients' needs these first have to be identified which can only be achieved by asking the patients and eliciting their views at the outset of their episode of care. In relation to the concept of satisfaction adopted in this study in terms of 'to do enough' (page 29) patients' treatment and future management can then be planned with increased confidence that the subsequent intervention would be effective in meeting their health care needs.

1.4 IMPLICATIONS OF NEED THEORY FOR PATIENT SATISFACTION WITH PHYSIOTHERAPY

In relation to the current study, the notion of need arising from an upset in the body's homeostasis (degree of pathology) can be seen as the motivating factor for a person to seek medical help in order that the balance of the body (symptom reduction) can be restored. The needs that arise can be identified both at the physiological level in terms of the discrete pathology equated with the lower order needs (Cousins, 1985) and at the social and psychological level with respect to the higher order needs (Acton & Malathum, 2000). The influence of social and cultural factors will determine the extent to which satisfaction through

need fulfilment can be achieved.

Bergman (1983) identified two major categories of need, i) health-sickness needs; to stay well or, if sick, to get well quickly and suffer as little as possible, ii) person needs; to be respected, treated as an individual, have emotional support and receive relevant information for decision making. The interaction of the psychological, biophysical and sociocultural elements of these needs varied according to the characteristics of the patient, the state of illness/wellness and the health care setting in which treatment is sought. In the outpatient setting the patient will be more able to retain control over the situation in terms of waiting in the clinic, being examined and treated than when seen as an in-patient where there is greater dependency on others. Bergman (1983) suggested four strategies that can be employed to ensure that the human and health care needs of patients are met; i) knowledge about the person, ii) appropriately directed care based on recognised need, iii) knowledgeable and skilled practitioners and iv) a safe and comfortable treatment environment. It could be argued that these strategies should be generalisable across other outpatient settings and could be directly applicable to outpatient physiotherapy where they may form the basis for an evaluation of satisfaction.

For patients presenting with musculoskeletal conditions, treatment is sought principally for relief of pain and restoration of function and wellbeing although the extent to which resolution of the problem can be achieved will vary according to the character and severity of the pathology present. Recovery from acute injury is more likely to be complete than from an exacerbation of a chronic condition, in which the upset in balance has occurred from an already compromised physiological level (Kleinman, 1988). However, the degree of satisfaction obtained will be dependent on the relative ordering of the needs by the individual. The biologic needs, for example, may not necessarily be the most prepotent for the individual, whereas the satisfaction of relatedness needs, as represented by the patient/therapist relationship *may* be. Therefore by encouraging patients to identify their principal concerns and by implication their needs, at the onset of the therapeutic process realistic goals can be set defining the parameters for the intervention (Standards of Physiotherapy Practice, CSP, 2000).

However need frustration is likely to occur when an acceptable level of homeostatic balance cannot be restored, for example in chronic conditions, particularly when certain needs have not been satisfied through previous unsuccessful treatment. It is unlikely that physiotherapy will always be able to fully meet the patients' biologic needs and the feasibility of doing this should be made clear at the outset of the treatment encounter. In these cases patients may turn to other agencies in an attempt to achieve the satisfaction they seek. The effect of a patient's social and

cultural background on need satisfaction will influence the interactive approach taken in the course of the therapeutic encounter. The therapist should attempt to adopt the patient's perspective of their injury/condition in an attempt to understand their individual need values, which may differ from her/his own. This could occur particularly where the therapist and patient came from different socioeconomic groups and where therapists in the UK currently tend to be middle class, white and female. Jensen et al. (2000) somewhat disconcertingly found that expert judgement as exercised in routine practice could not be used as a basis for basis for reliable decision making concerning the patient's need and potential for rehabilitation. In considering patients with non-specific spinal pain, physicians and physiotherapists based their opinion on rehabilitation potential solely on age, so that the younger the patient the higher the potential. The experts' opinion had little to do with medical or health-related issues, which were only associated with the patient's own ratings. This finding raises the question of what was actually being assessed by the care givers and whether it was the patient's or the practitioner's perspective that was the key drive in the encounter.

1.5 ACHIEVING A SATISFACTORY OUTCOME FROM PHYSIOTHERAPY TREATMENT

Physical illness has been viewed as a serious upset to the body's steady state, particularly when this was sudden and unexpected or poses a threat to the individual's life and well being. Since a state of disequilibrium cannot be maintained for long, restoration of balance should ideally represent a healthy adaptation that promotes personal growth and maturation rather than a maladaptive response resulting in psychological deterioration and further decline (Folkman & Lazarus, 1980; Billings & Moos, 1981). In general, persistent adversity and long term threat are more closely related to dysfunction than acute life events. Chronic family and social stressors are associated with low morale and impaired adaptation in healthy individuals, and are associated with poorer adaptation and relapse in medical patients. When people are already experiencing problems in an aspect of life that is particularly important to them, more stress in that domain is likely to result in poorer health outcomes (Moos & Swindle, 1990). In attempting to deal with their illness, people use coping strategies that are directed at managing emotional states (Lazarus & Folkman, 1984). These strategies include finding a meaning for their problem, adopting a more positive reappraisal of their life situation and maintaining an effective equilibrium, which have been identified as appraisal coping, problem focussed coping and emotion focussed coping respectively. The greater the repertoire of coping responses and resources the better will be the attenuation of emotional stress. There is some

indication that peoples' coping strategies change as they get older and this has been subject to developmental and contextual interpretations (Folkman et al., 1987). The developmental interpretation supports the notion that there are inherent changes in the ways people cope as they get older, while the contextual view suggests that age differences in coping are the result of changes in what people must cope with as they age. Folkman et al. (1987) found clear differences between younger and older people in relation to their reactions to the ordinary stresses of day-to-day living and coping. Younger people reported more stress relating to their jobs, while the older group reported a much higher proportion of health encounters. There were similarities in relation to family encounters, albeit with different relationships. Younger people appraised their encounters as more changeable so that their pattern of coping was characterised by problem-focused strategies, compared with emotion focused modes in the older group. While these results support the developmental and contextual interpretations of age-related coping, it is suggested that a third possibility, the cohort interpretation might also apply, although this was not tested by Folkman et al. (1987). This interpretation suggests that people differ in the way they cope because they grew up in under different historical and cultural conditions.

In addition to coping strategies, other psychological influences can affect the extent to which individuals' react to their illness, benefit from treatment aimed to meet their clinical needs and thus achieve a satisfactory outcome. Leventhal et al. (1998) identified five attributes of illness representation as part of the individual's model of disease and of the psychological model of the individual's behaviour in the face of disease threats. These attributes are, i) disease identity (symptom and label), ii) time-line (time to develop and duration), iii) consequences, iv) causes, and v) controllability. They may be implicit and defined by inference only, so that people stop treatment because they feel cured, or explicit and identified by direct patient report. They are not seen as clusters of independent features, but are organised and function as sets. An examination of the clusters suggests that people have at least three types of disease model for; i) acute illness, ii) cyclic flareups, and iii) chronic illnesses. These models therefore assume the pattern of the five attributes identified above and vary by disease, so that protracted experience with a disease may shift one's model from one category to another. People identify with a particular disease model and make assumptions about whether the condition will be short term or long lasting, what effect treatment is likely to have, or indeed whether to seek specific treatment at all.

Health locus of control (HLC) and preventive health behaviours

According to Rotter's social learning theory (1954; 1966) individuals engage in behaviours based on the expectancy that valued reinforcements will occur. In relation to health care differences in individuals' locus of control may influence the type of action that follows symptom perception, with people either attributing the cause or control of events to themselves (internal locus) or to the external environment (external locus). However many researchers have also perceived that the level of internality/externality an individual holds may vary with the type of behaviour, so that situation-specific locus of control scales would have added validity (Weiss & Larsen, 1990). Wallston et al. (1976) developed the Health Locus of Control scale (HLC) based on Rotter's (1966) Internal/External (I-E) scale to provide more sensitive predictions of the relationship between internality and health behaviours. The HLC scale was initially a unidimensional measure with an internal locus of control at one end of the scale and an external locus at the other. Two validation studies of the scale were undertaken (Wallston et al., 1976). The first tested the proposition that subjects who held internal locus of control beliefs and who highly valued their health would seek more information about a given health condition (hypertension) than internals who valued health less than externals. Results showed that this proposition was upheld. The second study tested the hypothesis that subjects in a weight reduction programme consistent with their locus of control beliefs would be more satisfied and more successful than those in a programme inconsistent with these beliefs. It was found that programmes consistent with subjects' expectancies were evaluated more positively than were inconsistent programmes. Therefore in these studies the HLC scale in conjunction with a measure of health value predicted certain health-related behaviours (for example information seeking) better than the more generalized I-E Scale (Wallston et al., 1976).

Brown et al. (1981) used the HLC scale (Wallston et al., 1976) to examine the effects of social activity, perceived health, health locus of control and degree of disability on the life satisfaction of 51 individuals with coronary artery disease and 32 individuals with chronic obstructive pulmonary disease. Results showed that mean scores for the two groups were identical with each occupying a position midway between internality and externality whereas it had been anticipated on the basis of prior research that those subjects categorized as chronically ill would exhibit externality. Regression analysis showed that the HLC variable exerted virtually no influence on life satisfaction for cardiac patients, but was a moderate predictor for those with pulmonary disease although unexpectedly in those with an external locus. This suggested that pulmonary disease might be one of those diseases for which externality may be the more adaptive orientation, so that even with best compliance with treatment it was unlikely to produce a reversal of the disease or a great improvement in

symptoms. When the combined effects of disability, social activity, perceived health and locus of control were considered, social activity was the single most important factor in life satisfaction for both groups. Brown et al. (1981) proposed that the unexpected finding in HLC scores for the pulmonary disease group might have been due to limitations of the HLC scale itself, and the scale had been criticised by a number of researchers for conceptualising locus of control as unidimensional (Norman & Bennett, 1996).

Wallston et al. (1978) subsequently responded to criticisms of the HLC scale and developed the Multidimensional Health Locus of Control Scale (MHLC) which included not only internal and external beliefs, but also external beliefs that comprised at least two dimensions, Chance and Powerful Others. The model suggested that high scores on the Internal dimensions indicated those who were more likely to engage in health maintaining behaviours while high scores on the Chance dimension indicated those likely to engage in health damaging behaviours. In relation to the Powerful Others dimension, high scores might indicate a tendency not to engage in healthful activities because of a strong belief in the medical profession to cure them if they become ill or to believe what the professionals tell them about their health. Two almost equivalent forms (A and B) of the instrument were developed each consisting of three six-item scales with reported alpha reliabilities ranging from 0.67 to 0.77 (Wallston et al., 1978).

There have been mixed results from studies linking IHLC beliefs to the performance of preventive health behaviour. Among those in which a positive relationship was found is a study by Seeman & Seeman (1983) who examined health behaviour in three domains; i) preventive care, ii) health knowledge and perspectives and iii) physical status. Respondents were a representative metropolitan sample of 1210 that was interviewed at the beginning and close of a year with telephone call backs at 6 weekly intervals to obtain sense-of-health control scores. At the first call back respondents who reported having a health problem during the previous 6 weeks were queried in detail about their illness. Those who reported no illness answered an eleven-item locus of control scale (Wallston et al., 1978). During the course of the seven call backs sense of control scores were obtained from 1054 respondents. Factor analysis of the HLC scale yielded two factors called 'personal mastery' and 'luck denial', with a high score on each indicating a high sense of control. Additionally sociodemographic details were included in the analysis as well as an index of 'health motivation', which was the value or concern the person assigned to health. In relation to preventive care, respondents who thought that health was not a matter of fate or luck reported that they took preventive health action. For personal mastery, internality made a substantially greater difference among those

who valued their health highly, with the trend similar for luck denial. In terms of health knowledge, regression analysis showed that the relationship between knowledge and sense of control was not sustained for either personal mastery or luck denial when age, sex or education were controlled. However a clear value difference occurred in connection with the item on breast cancer, when it was only among women that the perceived efficacy of cancer treatment was significantly associated with health locus of control. For physical health status, a pattern of significant association was found between high sense of control and superior health ratings, with poorer health ratings associated with more year-long bed confinement and greater use of the physician. However the sense of control for personal mastery and luck denial for bed-days, doctor visits and sick role duration did not always conform to the more healthful model. Nevertheless, the longitudinal design of the study demonstrated that the association of health behaviour with internality was not explained by the subject's prior health status. Support for these findings in terms of positive relationships between HLC and the performance of preventive health behaviours have also been found by Weiss & Larsen (1990), Bennett et al. (1994) and Bennett et al. (1997).

However, studies in which no positive relationship was found between IHLC beliefs and the performance of preventive health behaviour include those by Brown et al. (1983); Muhlenkamp et al. (1985) and Steptoe et al. (1994). Brown et al. (1983) used the MHLC scale to determine the extent to which health value was related to a broad range of health promotion activities in a sample of healthy middle-class adults. The Chance sub-scale accounted for most of the variance in a negative direction so that individuals who believed they had little personal control over their health were found to engage in the least amount of health promotion activity. In a study of determinants of health promoting activities in patients attending a nursing clinic using the MHLC scale (Muhlenkamp et al., 1985) the Chance sub-scale again emerged as the only significant predictor of health promotion activities with a negative association. However, the authors suggested that the reason for the discrepant findings, compared with those from Wallston et al. (1978) might have been due to the relationship between intent to pursue health-centred activities in previous studies rather than actual health behaviours, as studied by Muhlenkamp et al. (1985). Steptoe et al. (1994) used form B of the MHLC scale to assess health related locus of control, together with a constructed Health Practices index, and other psychological scales (eg. optimism, neuroticism, extraversion, psychoticism and lie scales) in a sample of university students in 20 European countries. Results of the analysis of the MHLC scales produced a mixed pattern, but the principal finding was that subjects with a healthier lifestyle had lower beliefs in chance than did the others. Beliefs in powerful others emerged as predictors of the Health Practices Index, suggesting that having faith in the ability of health

professionals adds credence to health education advice and encourages more positive health habits.

An alternative measure to the MHLC scale (Wallston et al., 1978) was developed by Lau & Ware (1981). This was constructed to measure Self-Control over Health, Provider control over Health, Chance Health Outcomes and General Health Threat. The first three dimensions being similar to those of the MHLC scale (Wallston et al., 1978). However a comparison of the two scales has shown that the MHLC instrument is psychometrically superior (Norman & Bennett, 1996). Contrary to findings by Wallston et al. (1976) results from factor analysis of the scale by Lau & Ware (1981) showed that beliefs in both personal and provider control were positively associated. In a further analysis Lau & Ware (1981) found that beliefs in provider control over health were linked to measures of attitude toward quality of medical care and patient satisfaction. Findings suggested that individuals who believe that providers have control over their health tend to be the same individuals who rate the quality of the care they receive highly, and are very satisfied with their care. If, as Ware et al. (1976 a) have argued, patient satisfaction is a function of patient experiences of the process of care, the link between patient satisfaction and beliefs in provider control over health suggests these beliefs may also be a function of patient care experiences. In fact Lau (1982) found that if subjects practised self-care habits as a child they were more likely to believe in the efficacy of self-care. If their parents regularly took them to medical professionals they were more likely to believe in both the efficacy of self-care and the efficacy of doctors.

HLC and health value

However researchers have noted that inadequacies in many tests of the HLC construct have resulted from a lack of attention paid to the value that individuals' place on their health (Lau et al., 1986; Weiss & Larsen, 1990; Wallston, 1992). As noted earlier according to social learning theory (Rotter, 1954; 1966) behaviour is a function of expectancy beliefs (eg. HLC) and the values attached to certain outcomes (eg. health value). Therefore it is necessary to consider the influence of HLC beliefs in conjunction with the value placed on health (Wallston et al., 1976; Norman & Bennett, 1996). Consequently, HLC beliefs should only predict health behaviour in those people who value their health, with no theoretical reason to expect internal HLC beliefs to be related to the performance of health behaviour in those who place a less value on health (Lau et al., 1986). Researchers have adopted different methods of measuring health value. Ware & Young (1979) employed both rating and ranking tasks to examine health values in four field tests involving general population samples, and one of university students. Using a modified version of Rokeach's value survey (1973) subjects are asked to rank 18

outcomes in order of importance from 1 (most important) to 18 (least important) of which one item pertained to health (the value of physical and mental well-being). They were also asked to rate the importance of each of 22 items, 17 of which were grouped according to four health value constructs; i) physical health, ii) mental health, iii) social health and iv) value of health behaviour. The 5 remaining items were not grouped as they lacked a theoretical or empirical basis for hypothesizing the health value constructs they measured. Results from all five of the field tests supported the importance of health as a value, although high value was also consistently placed on happiness, family security and freedom. While on aggregate scores health was valued most, there was a variability in ranking assigned to health both within and between field tests. There were also differences in mean scores for the four value rating scales in two of the field trials involving white middle class and urban black populations respectively. For the former highest value was placed on mental health and for the latter both physical and mental health were highly valued. Consistent with predictions from theory, health increased in value with age and was more valued by women.

Lau et al. (1986) measured health value as an absolute value using a four item 6-point Likert scale (strongly agree-strongly disagree). The items are i) If you don't have your health you don't have anything, ii) There are many things I care about more than my health, iii) Good health is only of minor importance in a happy life, and iv) There is nothing more important than good health. Internal consistency of the scale was reported to be good, ranging from 0.63-0.72 in different populations. Results showed that health value was higher among adults than adolescents and higher among middle-aged women than middle-aged men. An examination of the interaction between health value and a variety of preventive health behaviours (eg. wearing seat belts, not smoking, eating nutritious food) in university students confirmed predictions that a combination of IHLC and high health value in general could predict the performance of preventive health behaviours. However, an underlying assumption of the findings was that maintaining health was the chief motivation underlying the performance of these behaviours although this might not necessarily be the case, for example, people might control their diet because of concerns about their appearance not their health (Lau et al., 1986). While there is positive support from other studies that have examined the interaction between IHLC and health value for example, Lau (1982) and Weiss & Larsen (1990), there are others that have failed to find an interaction (Wurtle et al., 1985; Norman, 1991). Wurtle et al. (1985) further suggest that Rotter's expectancy-value approach might be too limited a model from which to predict health related behaviours. Nevertheless the overall pattern of results supports the importance of considering health value as a moderator variable when using the HLC construct to predict health behaviour (Norman & Bennett, 1996).

Health value, health status and satisfaction

The studies reviewed above have shown that individuals with an internal locus of control who value their health are more likely to engage in health-promoting behaviours by acting on advice to improve their health. There is general support in the literature for a positive association between health status and satisfaction with care (Cleary & McNeil, 1988) with those in poorer health tending to be more dissatisfied with their medical care (Roberts et al., 1983). Health status has also been held to be a causal determinant of satisfaction with medical care (Carmel, 1985; Hall & Dornan, 1988; Hall et al., 1988) although Kane et al. (1997) found that satisfaction was related more to how patients felt at the time rather than with a change in health status. Self-reported health status was also found not to be an important factor in reported satisfaction in a study of 2249 patients' experience of their hospital care (Jenkinson et al., 2002), but rather respect for patient preferences, together with physical comfort and emotional support were the most important determinants of satisfaction. Hsieh & Doner Kagle (1991) likewise found that health status was not a strong predictor of patient satisfaction in their study of 650 university employees, although the data suggested that different subgroups might have had differing expectations and levels of satisfaction with their care. In evaluating the improvement in health that care is expected to produce therefore, the patients' preferences and circumstances need to be taken into account (Donabedian, 1988).

Patrick et al. (1983) have shown that demographic, social and utilisation factors as well as self-perception of health were important in relation to patients' satisfaction. However Weiss (1988) compared sociodemographic characteristics and predispositional factors on patient satisfaction and found that those patients who were satisfied with their health status and physical condition were only marginally more satisfied with their care. There was also little relationship found between patient satisfaction and locus of control, although patients who had high internal control expressed slightly higher levels of satisfaction but the relationship was not statistically significant.

Two groups of individuals that have been found to be satisfied with their medical care are those who are satisfied with their lives in general (Linn, 1975) and older people (Hall & Dornan, 1990). Fahey et al. (1996) examined the relationship between these variables to determine the influence of health value as a potential moderator of age and life satisfaction in undergraduate students aged between 16 and 47 years. It was found that older individuals with high health values reported the highest rating of life satisfaction, but older individuals with low health values reported lowest life satisfaction ratings. Health value was rated lower for younger individuals in affecting their satisfaction with life while the opposite was true for

older individuals. It is therefore suggested that enhancing life satisfaction among the older populations may promote higher ratings of health as a value that in turn may enhance their motivation and desire for treatment with more effective intervention.

Self-efficacy and satisfaction

However, having an IHLC orientation is a necessary but not sufficient condition for engaging in healthful behaviour. Although a person values health and feels responsible for his/her health does not mean that (s)he feels capable of controlling his/her health status, perceived health competence is necessary (Wallston, 1992). Bandura (1977 & 1997) distinguished between outcome and efficacy expectations, with the former defined as an estimate that a given behaviour will lead to a certain outcome. The latter is a conviction that one can successfully execute the behaviour required for producing the outcome. People process, weigh and integrate diverse sources of information concerning their capability and regulate their behaviour and effort accordingly. Therefore cognitive processing of efficacy information is an important component of the proposed theory. Bandura (1997) distinguished between locus of control and perceived self-efficacy as representing different phenomena, although often viewed as the same phenomenon measured at different levels. While perceived self-efficacy is a belief about whether one can produce certain actions and is a uniformly good predictor of various forms of behaviour, locus of control is concerned with beliefs about whether actions affect outcomes and is generally a weak or inconsistent predictor of the same behaviour. Beliefs that outcomes are determined by one's own behaviour can either be demoralising or empowering, depending on whether or not one believes one can produce the required behaviour (Bandura, 1997).

Management of chronic illness

The ease with which patients with chronic illness are able to make adjustment to their lifestyle by learning new behaviours or modifying their lifestyle depends on their efficacy beliefs and outcome expectations (Rapley & Fruin, 1999). Successful management of chronic illnesses, such as diabetes or rheumatoid arthritis, is dependent on the patient being able to carry out regimes for symptom control and to avoid exacerbations and complications. The significance of self-management programmes in chronic illness therefore relates to the patient's need to improve confidence in their ability to follow a self-care regimen by increasing their self-efficacy (Rapley & Fruin, 1999). Successes are more likely to enhance self-efficacy if performances are perceived as resulting from skill than from fortuitous or special external aids and vice versa (Bandura, 1977). People also display enduring interest in activities at which they feel self-efficacious and from which they derive self-satisfaction (Bandura, 1986).

Growth of intrinsic interest, fostered through self-evaluation and self-efficacy rely on standards, and standards that pose challenges sustain involvement in activities needed to build competencies. When people aim for and master valued levels of performance they experience a sense of satisfaction. Without standards against which to measure their performance people have little basis for judging how they are doing or gauging their capabilities (Bandura, 1986).

Encouraging patients to develop a sense of personal control over their problem in order to facilitate recovery and prevent the development of chronicity forms an important part of physiotherapy treatment (Partridge & Johnson, 1989). Patient education and cognitive behavioural approaches to chronic pain management are two of the main approaches that can be used to help build the patient's sense of control (Klamer Moffett & Richardson, 1995; Johansson & Lindberg, 2001). By educating patients so that they can develop new behaviours regarding their health and lifestyle the therapist aims to empower them to make informed choices (Kenn & Close, 1995). Self-empowerment involves a recognition and understanding of powerlessness, feeling strongly enough about a situation to want to change it and having the information, support and life skills to feel capable of changing it (Naidoo & Wills, 2000). The therapist should encourage the patient's sense of control over the problem particularly where management depends on long term adherence to a programme that in some way impacts on the person's lifestyle (Klamer Moffett & Richardson, 1997).

However the relationship between traditional clinical measures and health status measures have not been adequately conceptualised (Wilson & Cleary, 1995). These authors therefore proposed taxonomy with five different levels of health outcome; biological and physiological, symptoms, functioning, general health perceptions and overall quality of life. They posit that patients' preferences or values play an important role throughout the model but particularly in relation to general health perceptions and quality of life. Thus depending on the value that a patient ascribes to his/her symptoms these may or may not seriously interfere with their day to day activities of daily living. This would accord with findings from clinical practice that what is seemingly a minor residual problem in relation to an otherwise good functional outcome, from the therapist's point of view may represent a significant barrier to a satisfactory resolution to the problem from the patient's perspective (Delamothe, 1994; Ryan, 1994). Harvey (1992) measured the discrepancy between health value and health perception in 50 adults with hypertension and 51 adults with rheumatoid arthritis (RA). She proposed a model relating the discrepancy or congruence of abstract and perceived cognitions to satisfaction with self and life in people with visible and invisible illness. The hypothesis that the greater the health value-health perception discrepancy the lower would be satisfaction with self and with

life was supported. Those patients with a visible disease (RA) also demonstrated lower self-satisfaction and life satisfaction. It was suggested that health value and health perception discrepancies could be compensated for by focussing on other values for example family security, close friendship or job accomplishment that could be realized in spite of illness.

In summary, the preceding sections in this chapter have provided support for the definition of satisfaction adopted in this study as a sense of achievement or fulfilment that results from meeting patients' health care needs. The need-satisfaction link was conceived as multidimensional, incorporating diverse biopsychosocial elements that impact on patients' evaluation of a satisfactory outcome of care. The role of locus of control in predicting health behaviour as examined in the literature has been mixed and in general the amount of variance explained by the HLC construct even in conjunction with health value is low (Wallston, 1992). However self-efficacy appears to be a more generalized trait in that most people believe that their actions will produce positive outcomes and that they are capable of coping with their life demands (Schwarzer & Fuchs, 1996). In terms of physiotherapy therefore, patients should be encouraged to mobilize this trait throughout their course of treatment in order to achieve maximum clinical effectiveness from the intervention.

The next sections examine the relationship between expectations and satisfaction, which together with need theory provide the theoretical underpinning of the concept of satisfaction.

1.6 EXPECTATIONS AS DETERMINANTS OF SATISFACTION

Research suggests that although confirming or exceeding patients' expectations results in satisfaction (Lebow, 1983) it is also mediated by satisfaction with other aspects of care (Abramowitz et al., 1987). Depending on the particular focus of the study, the questions that are asked to elicit expectations will vary. Researchers have rarely provided a rationale for the expectations used although there are some exceptions. Ruggeri & Dall'Angola (1993) defined expectations as 'the importance attributed to the various aspects in order to receive satisfactory care'. This definition combines the concepts of 'ideal expectations' and the 'value' of performance (quotes in original) and draws on the work of Linder-Pelz (1982 a) discussed later. For Williams et al. (1995) expectations were, 'the individuals' stated reasons for the visit that often relate to a symptom or a concern, for which is anticipated an acknowledgement or a response from the physician'. An expectation can then be expressed in the form of a statement, question or request for a particular service. Like & Zyzanski (1987) further distinguished between patient expectations and patient requests in their examination of patients' experiences

with the clinical encounter. Patient expectations were related to what they anticipated would happen during the encounter, while requests related to how they hoped to be helped. In related studies, Brody et al. (1989) and Kenny (1995) used patients' requests to examine the extent to which they received technical and non-technical interventions before and after clinic visits. In all three cases patients were satisfied when their requests were met, although patients preferences in relation to the categories examined varied slightly in each case.

1.7 PATIENTS' EXPECTATIONS IN RELATION TO CARE

Studies into patients' expectations have varied in their methodological approach according to the types of expectations measured and the extent to which they have been involved in developing them. Greene et al. (1980) examined patients' expectations of both general and specific dimensions of care in an outpatient internal medicine clinic. Measures were developed from an existing satisfaction scale (Zyzanski et al., 1974) and by the researchers, that were thought to be important for the specific sample population. Results showed that instead of expectations relating to the dimensions of the satisfaction scale (physician competence and qualities, cost/convenience) patients had expectations of provider roles and mutual responsibilities in seeking health care and perceived a hierarchy of responsibility and authority in the caregivers. This finding may have been partly attributable to the sample population, which was lower class with health care costs paid and partly to the health care setting. Larsen & Rootman (1976) used pre-tested, fixed choice questions to study patients' expectations of physician role behaviour covering a wide variety of clinical, professional and administrative activities. Expectations were stated in terms of whether the physician *should* or *should not* engage in a certain behaviour/activity (italics in original) implying an equitable or deserved level of performance (cf. Miller, 1977). The more the physician's role performance met their expectations, the more satisfied the patient was with the physician's services and the strong statistical relationship suggested that this result could be generalisable across various sociodemographic groups.

Expectations of care have also been investigated in relation to specific diagnostic groups. Bendsten & Bjurulf (1993) used a battery of questions empirically developed by staff working with rheumatoid arthritis (RA) patients. They were asked to what extent they considered certain qualities of health workers as important. Four choices were offered; good reception by staff, professional knowledge, ability to inform about RA and ability to show empathy. The most important qualities were a good reception and professional knowledge. By asking

patients to say what they considered important, the definition of expectations used by Ruggeri & Dall'Angola (1993) although not explicitly stated in this study, was implied. Staniszewska & Ahmed (1998) developed their expectations and satisfaction questionnaires following in-depth and semi-structured interviews with cardiac patients before and after hospitalisation. Expectations concerning doctors, nurses, the patient's participation and outcome of care were completed before admission and the extent to which they were met measured before discharge. Patients did have specific expectations of care and took these into account when they evaluated care on both occasions. In a study of new and experienced patients attending for physiotherapy for acute back pain, Grimmer et al. (1999) found an expectation by both groups for symptom relief at the end of the first treatment. While experienced patients also expected some advice on their condition during the first contact, new patients decided to return for further treatment based on the relationship established with the therapist, suggesting that their expectations had not yet been informed.

Linder-Pelz (1982 b) suggested that patients' prior beliefs play a more significant role in determining satisfaction with care than perceptions of the care received, so that they were likely to express satisfaction independently of the care provided. Satisfaction can thus be a function of the independent contribution of expectations and perceived occurrences, so that expectations have both a direct and indirect effect. If patients' expectations have only an indirect effect on satisfaction, it is possible that satisfaction levels are more influenced by psychosocial variables like health beliefs and health status (Calnan, 1983). It could be argued however, that confounding expectations and satisfaction is only likely to occur when they are not measured as separate concepts.

Williams et al. (1998) suggested that there is little empirical evidence to support the assumption that expressions of satisfaction result from the fulfilment of expectations but that the perception of 'duty' and 'culpability' provides a better explanation of users evaluations of a service. They proposed that a belief about what a service 'should' and 'should not' do is equated with 'duty', and whether or not a service is to 'blame' for failing to do what it should or doing what it should not is 'culpability' (quotations in original). These two concepts may help to explain why some patients are seemingly satisfied with a service that did not help them and are prepared to attribute mitigating circumstance to occasions when service delivery was seemingly below *par*. However it could be argued that this alternative explanation has more to do with semantics than substance and that a belief about what should/should not happen is *an expectation* and is a view that is supported in the marketing literature. Expectations in terms of

service quality are defined as consumers' desires or wants, i.e. what they feel a service provider *should* offer rather than *would* offer (Parasuraman et al., 1988) and is an indication of the class of expectation that is used as the standard (italics in original).

When expectations have been shown to exist there is some doubt as to whether it is their fulfilment, *per se*, that results in satisfaction, although research suggests that this could depend on *when* they are formed. Fitzpatrick & Hopkins (1983) interviewed patients prior to attendance at a neurology outpatient clinic to assess views on their symptoms and expectations from the consultation and 2-3 weeks afterwards. It was found that expectations were generally tentative at the beginning and often emerged in the course of the consultation, so that patients were able to make judgements on more aspects of the consultation than just the doctor's affective behaviour. Owens & Batchelor (1996) similarly found a temporal relationship between patients' expectations and their familiarity with service usage. They interviewed elderly patients about satisfaction with District Nursing Services and the data were examined in the context of Williams's (1994) proposal that three assumptions underpin qualitative research studies. The first assumption was that expressions of satisfaction result from meeting the clients' values and expectations. The second was that satisfaction implies approval of certain attributes of a particular aspect of care and the third that values and expectations exist. Owens & Batchelor (1996) found that in the link between satisfaction and the fulfilment of expectations, patients' responses fell into three categories. Firstly there were those who had been told what to expect by the GP or medical staff, or had previous direct or indirect experience of District Nurse care. Secondly, those who had been referred but not been told what to and thirdly those who had misconceptions about the care they would receive. Although the high levels of satisfaction shown were not directly related to the fulfilment of prior expectations, those expectations that were developed over the course of time with experience of the service were always met and often exceeded.

The findings from Fitzpatrick & Hopkins (1983) and Owens & Batchelor (1996) in particular, appear to address the question as to whether patients' expectations form the basis for satisfaction judgements or not. The key issue appears to be whether the expectations are *unformed* or *informed*. Background expectations can be seen as general (unformed) rather than specific (informed) expectations and therefore inadequate upon which to base subsequent satisfaction judgements. It has been found that when patients are given specific expectations (Levesque et al., 2000), or when their expectations have been specifically elicited (Korsch et al., 1968; Staniszewska & Ahmed, 1998), then expectations can be used as the standard against

which to judge the extent to which they have been met. The notion of *informed* expectations can be applied to patients involved in the current study. Not all patients attending for physiotherapy have had previous experience of the service, although they had probably been to see a doctor or have attended a hospital clinic. While it would be understandable that they could have little knowledge of specific physiotherapy procedures or techniques, it is unlikely that will have no expectations at all. Even though initial expectations may be tentative, these would become increasingly informed as they become familiar with the service. By assisting patients to form *achievable* goals and expectations at the start of their treatment program, satisfaction with the therapeutic experience could be enhanced by directing treatment input towards meeting their *informed* expectations.

1.8 THEORETICAL BASIS FOR THE RELATIONSHIP BETWEEN EXPECTATION AND SATISFACTION

Although there is empirical evidence that meeting patients' expectations results in greater patient satisfaction, a theoretical basis for the relationship between the two concepts has rarely been explored in the literature. The work of Linder-Pelz (1982 a) has been an exception in attempting to develop a theory of patient satisfaction in health care with reference to the psychology literature. She defined patient satisfaction as 'positive evaluations of distinct dimensions of health care' and drew on the expectancy-value theory of Fishbein & Ajzen (1975) in conceptualising satisfaction/dissatisfaction as 'attitudes' and expectations as 'beliefs'. These were subsequently linked according to Fishbein & Ajzen's (1975) formulation so that attitude towards the clinic (satisfaction) resulted from summing the multiplication of belief strength and attribute evaluations for each clinic attribute identified. However, Linder-Pelz (1982 b) subsequently found that using this theory as a basis for the theoretical underpinning patient satisfaction was not sustained. Five hypotheses derived from Fishbein & Ajzen's theory and fulfilment and discrepancy theories were also tested, using four antecedent social psychological variables (expectations, values, entitlement, and perceived occurrences) and three dimensions of satisfaction (doctor conduct, convenience and general satisfaction). Values did not directly explain much of the variation in satisfaction and expectations explained only 8% of the variance, although they were the most important social psychological antecedents to patient satisfaction. Satisfaction was found to be greater among patients with both favourable expectations and outcomes. She concluded that satisfaction is not so much a function of the interaction of expectations, values and occurrences as it is of the independent contribution of expectations and perceived occurrences. Expectations were found to have both a direct and indirect effect. The expectancy-value formulation of Fishbein & Ajzen (1975)

therefore did not appear to provide an adequate theoretical basis for relating expectations and satisfaction. However much work has been done to develop theories of expectation in the field of consumer and marketing research. Reference was made to the marketing literature for a model that could explain the relationship between expectation and satisfaction and be applicable to the health care setting.

The expectancy disconfirmation theory (Oliver, 1980) developed in the field of marketing research, suggested a more attractive solution in explaining the relationship between expectations and satisfaction outcomes. While acknowledging that there are differences, it was hypothesised that patients could be compared with consumers in terms of having expectations and forming satisfaction judgements about discrete aspects of their care. Expectations in each case would be also influenced and modified by a number of personal and social factors e.g. needs, values, experience, knowledge and social norms.

A distinction is made between the way expectations have been defined and conceptualised in the customer satisfaction and service quality literature, although expectations and perceptions play an important role in both (Parasuraman et al., 1988). In the satisfaction literature expectations are viewed as *predictions* while in the service quality literature they are viewed as desires or wants. (italics in original) Four standards relating to expectations about the purchase/consumption situation originally proposed by Miller (1977) are; i) the ideal/desirable, ii) the expected, iii) the minimum tolerable, and iv) the equitable/deserved. This set of expectations is not fixed, but modified through the processes of dissonance reduction, rationalisation or selective information gathering. When actual performance appears to be above the ideal standard, (s)he will probably be very well satisfied and may well raise the expectancy scale for future performance. When performance falls below expected and deserved levels, but above minimal tolerable expectation level (s)he experiences dissatisfaction. The 'expected' standard is the most used pre-consumption comparison standard in consumer satisfaction research, while in the service quality literature the standard represents a normative expectation of future events, operationalised as either the ideal or desired performance (Boulding et al., 1993). Although these literatures use different expectation standards, expectations and perceptions in both are usually linked via the disconfirmation of expectations paradigm.

Oliver (1980) developed earlier work by Day (1977) on the expectation disconfirmation paradigm and initially proposed a predominantly cognitive model. According to this model

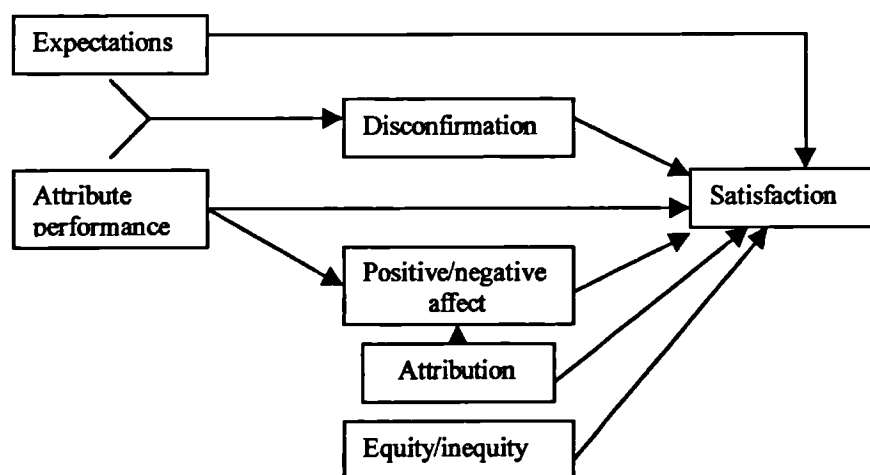
post-usage ratings of satisfaction appeared to be a function of a linear combination of expectations or prior attitude (adaptation level) and disconfirmation (comparison between prior expectations and perception of actual product/service attributes). The link with Helson's (1964) adaptation level theory provided a sound basis from which to explain the existence of expectations as the frame of reference from which one makes comparative judgements in the expectation disconfirmation paradigm. According to Helson's theory, adaptive responses are a function of the incoming stimulus and the adaptive level. The adaptation level is made up of the pooled effect of three classes of stimuli (focal, contextual, and residual) acting on the organism and affecting behaviour. Helson distinguished between adaptation level and concepts such as homeostasis and equilibrium states, in being an active process with its reference in continua rather than in fixed values. Since adaptation tends to approximate a weighted mean of all stimuli, it never corresponds to zero or complete absence of stimulation. Therefore behaviour is not directed toward the attainment of equilibrium or fixed states, which would imply feelings of neutrality or indifference, but toward greater variety and intensity of satisfactions which come from activities and objects associated with higher levels of adjustment. Adaptation is thus a process of responding positively to environmental change. The level of expectation (cf adaptation level) in relation to purchasing goods and services can be influenced by such factors as the product itself (one's prior experience, brand connotations and symbolic elements), the context (communications from salespeople) and individual characteristics (persuadability and perceptual distortion) (Oliver, 1980). Satisfaction is therefore an additive combination of the expectation level and the resulting disconfirmation. Positive, zero or negative disconfirmation occurs when the product exceeds, meets or falls short of expectations.

While the disconfirmation paradigm proved pivotal in explaining the cognitive component of the post-purchase evaluative process and was supported by empirical studies in which disconfirmation and satisfaction have been found to be significantly positively related (Oliver & DeSarbo, 1988; Tse & Wilton, 1988), the affective component of satisfaction has been less developed. Westbrook (1987) identified the existence of independent dimensions of both positive and negative affective responses in post-purchase processes that were directly related to product satisfaction. These dual unipolar affective dimensions imply that the presence of pleasant effects following consumption (joy, interest, and excitement), are not necessarily associated with the absence of unpleasant feelings (anger, disgust or contempt). The relationship of these affective responses to satisfaction was not mediated by expectation and disconfirmation beliefs, suggesting that product satisfaction judgements were determined not

only through the cognitive disconfirmation paradigm but also by additional product related affective experiences.

Oliver (1993) extended Westbrook's (1987) work to include the related concepts of equity and attribution to the disconfirmation paradigm. Equity is concerned with equalising the relationship between inputs and outputs (Adams, 1965). Oliver & Swan (1989) found that fairness (in terms of input/outcome comparison) was highly related to satisfaction, suggesting that satisfaction in both interpersonal and institutional exchange is sensitive of fairness as an equity process. A relationship has also been shown to exist between external attributions and satisfaction where according to attribution theory (Weiner, 1985), the perceived causes of success and failure share three common properties; locus of causality (internal/external), stability/variability (enduring/transitory) and controllability (within/without the perceiver's control). Folkes (1990) in particular has shown that the dominant attribution dimension for satisfaction is locus of causality so that satisfaction would be higher when people attribute favourable outcomes to themselves and unfavourable ones to others (cf. the increase in NHS complaints in recent years). The addition of affect, equity and attribution elements result in a composite cognitive and affect augmented satisfaction/dissatisfaction model that provided a comprehensive rationalisation of the relationship between the various components of affect, attribution, equity, disconfirmation and satisfaction (Oliver, 1993). (Fig.2)

Figure 2. Cognitive –Affect model of satisfaction



From Oliver (1993)

Anderson (1973) found that the most dominant psychological theory used to explain the effect of the expectancy disconfirmation paradigm was assimilation contrast theory (Hovland et al., 1957). According to this theory, when product performance differed only slightly from an individual's expectations it tended to result in displacement of product perceptions towards the expectation level (assimilation). However when the difference between expectations and the actual product performance was large this difference was exaggerated (contrast). This theory helps to explain why there can be little variation in measures of satisfaction, with most surveys indicating patients are satisfied with their care except in circumstances where a significant discrepancy between expectations and perceptions occurs.

1.9 THE APPLICATION OF THE EXPECTANCY DISCONFIRMATION PARADIGM TO HEALTH CARE

The composite expectancy disconfirmation model appears to provide a more complete understanding of the relationships between expectations and satisfaction judgements in relation to the current study than Fishbein's (1975) expectancy value model. In Oliver's (1993) model (Fig.2) three concepts play a central role; expectations, performance, and disconfirmation. Parallels can be drawn between the consumer and patient that permits the application of the theory to the field of health care. In both cases expectations can be said to form the frame of reference or standard against which satisfaction judgements of service consumption are subsequently made. In the health care context it could be hypothesised that the affective component of the model may have greater significance in relation to the interpersonal aspects of care that are central to the treatment situation and where people are often in pain in unfamiliar and sometimes frightening situations. Staff/patient relationships and a feeling of being cared about and cared for might hold greater sway in these circumstances than the cognitive appraisal of discrete service attributes.

In relating the model (Fig. 2) to physiotherapy, the pathology of the patients' condition impacts on their expectations of care in terms of what it might involve as well as what the clinical outcome is likely to be. The physiotherapeutic episode can be equated in the model with 'Attribute Performance', which can be evaluated either positively or negatively resulting in satisfaction or dissatisfaction with care provision. Patients may attribute either the success or failure of their treatment in accordance with attribution theory and compare their outcome with that achieved by others perceived to be comparable (in relation to their condition) in terms of equity of treatment received.

In terms of the definition of satisfaction adopted for this study, the relationship between needs, expectations and satisfaction have been examined and provide a theoretical basis for the concept that has general applicability. For patients attending physiotherapy an expression of satisfaction with their care would therefore accord with a feeling of contentment not only that their biopsychosocial needs have been met, but also that expectations of the therapeutic intervention have been fulfilled.

1.10 STUDIES OF PATIENT SATISFACTION WITH HEALTH CARE

As noted in the Introduction, there has been a steady increase in the number of studies examining patients' satisfaction with health care over the last 30 years. However it was apparent that the physiotherapy literature in this field was comparatively sparse. In physiotherapy, the work being done to date has tended to draw on the medical satisfaction literature. This has in turn been informed by the seminal work of key researchers in the 1970s, notably Ware et al. (1972) and Hulka et al. (1970). Dimensions of patients' attitudes towards service provision identified at that time have subsequently been widely studied to compare patient satisfaction with the medical consultation in primary care and outpatient settings. However it is also evident from the literature that studies are being conducted by other disciplines e.g. pharmaceutical (Holdford & Schulz, 1999; Larson et al., 2002), dental (Williams & Calnan, 1991; Mascarenhas, 2001), chiropractic (Sawyer & Kassak, 1993; Gemmell & Hayes, 2001) and osteopathy (Licciardone et al., 2002) to examine patient satisfaction that is specific to the intended intervention.

Satisfaction with inpatient care has been examined in studies reported principally in the nursing literature and dates from the late 1950s. Abdallah & Levine (1957) were the first to report on the positive link between the provision of professional nursing care and patient satisfaction, and since then measuring patient satisfaction with nursing has formed an integral part of nursing quality assurance initiatives (Moores & Thompson, 1986). Studies exploring quality of nursing care over the last 10 years have examined the meaning of quality care from the nurses' perspective, or focussed on patient and family perceptions, or compared perceptions of nurses and patients (Williams, 1998). While the predominant focus for nursing research has concerned inpatient care (Hinshaw & Atwood, 1981; Ventura et al., 1982; La Monica et al., 1986; McColl et al., 1996) the role of the nurse in outpatient services has generally been under researched (Lorentzon et al., 1996). However recent studies have reported on tools specially developed to examine satisfaction with nursing in outpatient and

primary care settings (Hill, 1997; Bear & Bowers, 1998). Dimensions similar to those in the medical literature (technical competence, interpersonal competence, caring) have been identified reflecting the changing role of the nurse as a more advanced practitioner (Marsh, 1999).

In reviewing studies of patient satisfaction from this extensive and diverse literature no attempt will be made to present a systematic review. Instead the intention is to convey an understanding of the scope of the research as it applies to the current study. This approach depends on the selective presentation of work that will help to exemplify major lines of inquiry. The current study focuses on an examination of patient satisfaction with outpatient physiotherapy, therefore the review will draw predominantly although not exclusively on findings from the literature pertaining to the ambulatory care setting rather than those dealing with inpatient care.

1.11 RATIONALE FOR CONDUCTING PATIENT SATISFACTION RESEARCH IN HEALTHCARE

Patient satisfaction research indicates that it does have a role in evaluating primary health care and explaining health-related behaviour (Pascoe, 1983). The results from satisfaction surveys are important because they may be useful in forecasting how patients will behave in the future. Researchers have identified various reasons for undertaking satisfaction studies in health care (Table 1.1). It can be seen from Table 1.1 that the reasons identified by researchers accord with Donabedian's (1966, 1988) framework for health care evaluation in considering the related components of structure, process and outcome. Structure denotes the attributes of the settings in which care occurs (facilities, equipment, staffing levels, and organisation). Process denotes what is actually done in giving and receiving care (patients'/practitioners' activities) and outcome denotes the effects of health status of patients and populations. Eliciting the patients' perspective of service provision is central to all these initiatives in terms of quality assurance programmes of which satisfaction/dissatisfaction is a necessary component (Donabedian, 1992). In terms of assessing quality care by providers Donabedian (1988) distinguished between the technical and interpersonal elements. The quality of technical performance is judged in comparison with best practice and therefore can be equated with effectiveness. Since the interpersonal process is the means through which the technical care is implemented and on which its success depends, it can be judged in relation to the results achieved by the technical care. Nevertheless the patient also has some responsibility for the success or failure of care, so poor outcomes may not necessarily be a reflection of inferior

technical or interpersonal care (Donabedian, 1988).

Table 1.1 Rationale for undertaking satisfaction studies in health care

Researcher	Reasons for undertaking satisfaction studies
Lebow (1974)	Structure (organisation of care) Care Process Result of care Impact (effect of care on the community setting) Patients' perceptions of care
Ware et al. (1976 a)	Patients' perceptions of care Care system (current status) Prediction of patient behaviour
Locker & Dunt (1978)	Quality care evaluation Outcome of care Service improvement indicators
Patrick et al. (1983)	Prediction of patient behaviour Quality care indicator Provider accountability
Donabedian (1992)	Quality care indicator Outcome of care Contribution to further care
Fitzpatrick (1993)	'Hotel' aspects of care Organisation & delivery of care Clinical care
Avis et al. (1995)	Patients' perceptions of care Quality care evaluation Accountability Outcome
Elliott-Burke & Pothast (1997)	Patients' perceptions of care Outcome Prediction of patient behaviour Care quality evaluation Culture change (service orientated)

The choice of quality measures clearly reflects the relative needs of the organisation with the tendency for medical professionals to focus on the technical dimensions of care, whilst providers of hospital and health care services choose indicators relating to service amenities (Fitzpatrick, 1993; Carman, 2000). Some evidence of a shift in emphasis in the reasons for

undertaking satisfaction studies since the 1980's can be seen in Table 1.1. The need for greater accountability by health care providers reflects the development of the internal market in health care at that time. Incorporating patients' views of services received not only gives health care providers valuable insight into the current state of service provision and areas for improvement, but ultimately contributes towards the delivery of quality services by meeting patients' needs and contributing towards satisfactory outcomes of care.

This trend is beginning to be seen within the physiotherapy profession, with the recognition that patients' views of the service should augment research into the efficacy and benefits of physiotherapy. The further development of this trend will provide the central focus for the current study. The approaches taken toward service evaluation in other areas of health care as identified above, viz. structure, process, and outcome, can usefully inform the design for the current research by grounding it within the framework of the physiotherapy outpatient setting. The lack of emphasis in satisfaction studies on evaluating the *clinical* aspect of care identified by Fitzpatrick (1993) can be addressed by asking patients to evaluate what is hypothesised to be the *raison d'être* for attending physiotherapy, i.e. the effect of the treatment intervention on their health status.

It would therefore appear that there is a clear rationale for conducting patient satisfaction studies within physiotherapy and that Donabedian's (1966, 1988) framework provides a useful starting point from which to investigate the elements that make up the three underlying components of service quality. Attention will now be directed towards examining the dimensions of care identified in the satisfaction literature as being integral components of the framework in relation to their relevance to the physiotherapeutic service setting.

1.12 OVERVIEW OF DIMENSIONS OF CARE EXAMINED IN SATISFACTION STUDIES

Due to the volume of material that resulted from the numerous studies of patient satisfaction conducted over the last 30 years, this section will include reviews and a meta-analysis in order to provide an overview of the principal dimensions of care that have been examined.

In a review of the early literature on patient satisfaction covering the 25 years prior to 1976, Ware et al. (1976 a) found 71 out of 101 theoretical and empirical articles included previously unreported analyses of satisfaction data. In relation to content of the satisfaction

questionnaires, the major content groupings were humanness: quality/competence: accessibility/convenience: information giving: finances: efficacy/outcomes of care: continuity of care: information gathering: pleasantness of surroundings (included principally in studies of in-patient care): and availability of resources. The most frequently studied dimensions were humaneness, quality/competence and access to care, which relate these to process and structure.

Ware et al. (1976 a) also concluded that, although a wide range of different health care phenomenon have been studied, comprehensive batteries of measures had only rarely been included in the same investigation, so that little was known about the relationship among satisfaction constructs. Different investigators also applied a range of different labels to items or groups of items that were essentially the same. Following extensive field work over a number of years since 1972, the dimensions of care identified by Ware et al. (1976 a) were ultimately refined and incorporated into the Patient Satisfaction Questionnaire (PSQ) (Ware et al., 1983). The PSQ, which will be discussed more fully later, comprises eight dimensions *viz*, access, availability, finance, humaneness, quality, continuity, facility and general satisfaction, with versions including 68 and 55 items as well as two short forms of 37 and 43 items respectively. The questionnaire was designed to measure satisfaction with health care in general, as well as specific features of care and the dimensions identified have since formed the basis for a number of satisfaction studies in diverse areas of health care. For example, Rodney et al. (1986) used the PSQ-43 to assess patient satisfaction with resident and faculty physicians working in three medical health centres. Questionnaires were given out consecutively to patients attending the centre on a specified day who had seen the same doctor consistently on at least five occasions over the past two years, as well as to the two groups of doctors. The internal validity of the scale was found to be high with correlations between 71%-100%, indicating its suitability for measuring various aspects of health care delivery. However the scale was found to show little discrimination between measures of physician humaneness and quality/competence of care.

Cherkin et al. (1987) used a subset of 18 questions from the PSQ-43 covering four dimensions, access, humaneness, quality/competence and general satisfaction to assess patients satisfaction with family and general internists. No significant difference was found between patients' ratings of the two physician groups and in contrast to Rodney et al. (1986), the variability of satisfaction measures suggested that the scale was sensitive enough to detect real differences. Ross et al. (1993) used 29 items from the PSQ-55 to investigate whether patients would be

more satisfied with care services that are delivered to meet their preferences. Although the original PSQ was developed using a five point Likert response scale indicating agreement/disagreement with statements of quality of care, these authors used a five point evaluation rating response format of excellent to poor which had been shown by Ware & Hayes (1988) to produce better results. The excellent/poor ratings yielded mean scores closer to the midpoint of the scale range and were more highly correlated with behavioural intentions (Ware & Hayes, 1988). More recently, Johnson et al. (1998) evaluated the dimensional structure of pharmacy services, using items from the Satisfaction with Pharmacy Services Questionnaire that had been adapted from the PSQ scale (Ware et al., 1983) with modifications to reflect specific aspects of pharmacy services. Although the results supported the notion that satisfaction with pharmacy services, like satisfaction with medical care comprised a multidimensional construct, they also suggested that further revisions to the scale structure would be needed to improve internal consistency either by increasing the number of items or modifying the item content.

The PSQ has also been the basis for tools developed in non-English speaking countries. For example, in a Swedish study by Bendsten & Bjurulf (1993) a postal questionnaire was developed to examine rheumatoid (RA) patients' satisfaction with health services based on the dimensions of care identified in the PSQ (Ware et al., 1976 a). A battery of 55 questions were developed by staff experienced in working with RA patients, covering six areas; technical quality, art of care, availability, accessibility, self-efficacy and outcome, the last two of which were not those identified in the original PSQ. In Switzerland, Etter & Perneger (1997) examined the validity of a survey instrument that included the translation of 20 items from the PSQ-55 questionnaire, plus two researcher devised items to measure users' satisfaction with health services. However, results provided only partial evidence for the validity and reliability of the new tool and highlighted the need for especial attention to clear and unequivocal wording when subjects are required to respond in their second language.

Although the eight dimensions of care identified by Ware et al. (1983) have been widely adopted as the basis for satisfaction studies, researchers have continued to identify additional discrete dimensions of care in relation to the specific focus of their study. Dimensions of care identified by other key researchers are presented in Table 1.2.

Table 1.2 Dimensions of care examined by other key researchers in satisfaction studies

Researcher	Dimensions of care identified
Hulka et al. (1970)	Professional competence of physician, personal qualities of physician, cost/convenience of care. (process/structure)
Wolf et al. (1978)	Doctor's explanation/information giving, treatment relationship, doctor's behaviour. (process)
Nguyen et al. (1983)	Physical surroundings: support staff: kind/type of service: treatment staff: quality of service: amount/length/quantity of service: outcome: general satisfaction and procedures (structure/process/outcome)
Pascoe & Attkisson (1983)	Clinic location & appointments: clinic building/offices/waiting time: clinic assistants/helpers: nurses/doctors: needs vs. clinic services: service results. (structure/process/outcome)

Certain dimensions of care have been examined more frequently than others. In a meta-analysis of 221 studies from 1966-1986 Hall & Dornan (1988) identified and ranked 11 core aspects of care; overall quality, humaneness, competence, outcome, facilities, continuity, access, informativeness, cost, bureaucracy and attention to psychosocial problems. The most frequently measured aspects of satisfaction were humaneness (65%) and informativeness (50%) with the least measured being outcome (6%), continuity (4%) and psychosocial problems (3%). Two possible interpretations were offered for this. The first suggested that satisfaction with different aspects of care were evidence of the actual performance of the system, in which case health care systems emphasise the technical (biomedical), rather than the non-medical aspects of care. Alternatively, patients may give higher ratings to the technical aspects of care by default because they cannot judge it, but are more discriminating about the other aspects of care. The less frequently studied aspects of care relating to structure (cost, access, and facilities), might either have been considered by investigators less amenable to change or as contributing less to overall satisfaction (Hall & Dornan, 1988).

In another review of 41 studies of the correlates of provider behaviour in medical encounters Hall et al. (1988) found that patient satisfaction was specifically related to information seeking, provider's competence, provider's partnership building and socioemotional

behaviours (ie. non-verbal cues), social talk and positive/negative talk. Of these, satisfaction was most dramatically predicted by the amount of information provided, with greater compliance being associated with more information, which in turn was significantly predictive of greater recall and understanding. Patients of higher social class received more information and communication overall, suggesting that it can be less frustrating dealing with patients of higher social status. Women were found to receive more information and total communication than men and it was suggested that this might be due to their asking more questions, receiving more services and eliciting a warmer response. However since the majority of studies were correlational in design, further research would be needed to identify causal relationships.

Wensing et al. (1994) also noted that the literature presented an ambiguous picture with regard to which aspects of health care were presented to patients for judgement. These authors were specifically interested in patients' evaluations of general practice care; i) which aspects of care were identified, ii) if and how the patients were involved in selecting these aspects and iii) whether the aspects occurring in general practice were different from those occurring in health care in general. In a literature review of 280 relevant publications from 1980-1991, 40 studies investigating care provided by general practitioners were identified and the results compared to Hall & Dornan's (1988) meta-analysis, which dealt with patient report in health care in general. A large number of aspects of care identified in Wensing's (1994) review were not included in the review by Hall & Dornan although overall there was reasonable consistency between the two reviews. The dimensions of humaneness, informativeness, accuracy, and availability were frequently included, whereas professional competence and empathy were less so and effectiveness hardly investigated. However it could be argued that the latter two dimensions are more difficult to operationalize and measure. Of particular note was that in only five of the 40 studies reviewed by Wensing et al. (1994) were patients involved in selecting the aspects of care that were to be examined and all the other studies were management led. Nevertheless these five studies were found to deal with the same aspects of care, as did the total collection of the 40 studies. Wensing et al. (1994) also identified a number of other issues that have relevance to the current research. For example, it was apparent that the sample size between the studies varied considerably both in terms of the number of patients (29 - 3887) as well as of practices (1-75) and practitioners (2 - 257). In multi-practice studies fewer patients and physicians per practice were involved than in single practices. In terms of data collection the most frequent method used was the self-completion questionnaire, filled in either before or after the visit, followed by the interview and mailed questionnaire, with only 15% of studies using an extant instrument. There was therefore little

standardisation of measurement instruments although consistent features were noted. For example, questionnaires tended to be very short, with a median of 8 items and mailed questionnaires produced higher non-response rates and highest maximum dissatisfaction levels, with statements requiring an agree/disagree response being the most discriminatory.

The majority of satisfaction studies with medical care have typically examined a single encounter due to pressures to assess and enhance individual performance (Sitzia & Wood, 1997). Most instruments measuring patient satisfaction or quality of care are based on the perspective of the researcher, as noted above by Wensing et al. (1994) and focus on generic care, rather than disease-related factors that refer to specific categories of patients (Sixma et al, 1998 a). An exception is a study by Patrick et al. (1983) involving a large scale, 3-phase longitudinal study of 1245 respondents in Lambeth from 1978-1981. It was hypothesised that as patients with functional limitations are heavy users of health care, their views of doctors and medical services might differ from those of other patients. This hypothesis was confirmed only for satisfaction with specific providers and for those with higher levels of psychosocial disability. Respondents with a higher level of psychosocial disability were more likely to be dissatisfied with their own doctor and with three specific aspects of satisfaction; access, quality and recent experience. It was suggested that dissatisfaction with their own doctor stemmed from the patient's dependence on the doctor for medical care and maintenance and also with the amount of information given. Respondents with higher levels of physical disability were less likely to be dissatisfied with their recent experience of provider care, although those with more than one medical condition were more likely to be dissatisfied. The occurrence of an adverse life event in the previous year was correlated with dissatisfaction with access to services and with recent experience. Both disabled and non-disabled patients expressed more dissatisfaction with health education and information about their disease or illness than with other aspects of the doctor role. The study replicated that by Roughman et al. (1979) and confirmed that both general and specific dimensions of satisfaction were distinct. Patrick et al. (1983) therefore suggested that, as disability can influence satisfaction, measures should distinguish between patient groups and different physical and psychosocial disabilities. Knowledge of the social contextualisation of the research is also important in relation to the interpretation of results and may explain the differences found between studies (Like & Zyzanski, 1987).

Therefore while evaluating all three elements of service provision (structure, process and outcome) is necessary to equate quality, elements of process appear to have received the most

attention in satisfaction literature. As Donadedian (1992) stated, 'the interpersonal exchange is, after all, the vehicle by which technical care is dispensed and acquired' and it could be argued that patients are more concerned with the medical rather than with the hotel aspects of care. Nevertheless, Carman (2000) suggested that while patients are able to compartmentalise the affective (hotel aspects) and technical (clinical care/outcome) aspects, there is also some union between the two. Patients will use proxy measures of quality in forming their opinions of the service, so for example, 'if the food arrives cold then probably x-rays are not being read accurately' (Carman, 2000)

In summary, it is apparent that although there is a diversity of dimensions chosen for examination by researchers, certain dimensions of care have been more consistently examined than have others. Those identified by Ware (1976 a) provide a framework in similar fashion to Donadedian's (1966, 1988) service structure that has endured and continues to inform the content of tools in current research. However, while some of these dimensions could be pertinent to the provision of health care in a variety of settings, caution is needed in translating them wholesale to studies carried out in different countries. Other limitations of these studies relate to the predominance of researcher-led tool development for the measurement of patient satisfaction and also that most satisfaction research has focused on generic care, rather than referring to specific diagnostic patient groups.

The opportunity was presented to address these shortcomings through the current study, at the same time drawing on the extensive work of previous researchers. In the exploratory and developmental stages of the research, patients were involved in identifying the dimensions of care pertinent to their physiotherapeutic experience of the health care system within the NHS. The structural aspects of the service (staffing, material resources, facilities) might have been less appropriate for consideration in the present study since these factors are less amenable to change at the practitioner level. In addressing the issue of satisfaction research that had predominantly focused on generic care, subjects recruited into the current study were chosen to represent contrasting clinical conditions. This permitted an exploration of whether a different perspective of the service was evident between the groups in their evaluation of care, as suggested by Patrick et al. (1983).

1.13 PATIENT SATISFACTION WITHIN THE CONTEXT OF THE MEDICAL CONSULTATION

Following the overview of patient satisfaction studies in relation to the dimensions of care that have been examined within the framework of the structure, process and outcome of service provision, attention now turns to the specific context of the medical consultation. Similarities can be drawn between the medical and physiotherapeutic encounters in the primary care setting in terms of the general process of care for example, history taking, physical examination, treatment and advice.

These studies have typically focused on communication skills and the characteristics of the doctor/patient relationship as when these break down, dissatisfaction results (Carr-Hill, 1992). Patients attending the surgery/clinic generally do so because they need medical help. They want to know what is wrong with them, what can be done about it and what the outcome of care is likely to be (Fitzpatrick & Hopkins, 1983). The amount of information provided to patients has been found to be significantly predictive of satisfaction with the encounter and subsequently associated with greater compliance (Hall et al., 1988), particularly when providers have received special training in communication skills (Bowling, 1992). However, Steptoe et al. (1991) argued that satisfaction with communication is not just a matter of communication skills and the provision of information, but that the patient's coping skills in terms of seeking or avoiding information must also be taken into account. Patients who were completely satisfied with the information provided were found to be less anxious, had a more avoidant coping style and although they did not have greater factual knowledge about their condition were less predisposed to information seeking. Those who did have more factual knowledge were less satisfied with the information provided. For some patients the desire for information may be so great that no amount of factual information is sufficient. Although this study dealt with inpatients diagnosed with metastatic cancer, the link between coping style and satisfaction was not related to age, education, or socioeconomic status. It was therefore suggested that an avoidant coping style could be found in a wide range of patients and may account for some of the problems in communication found. The notion of information seeking or avoidant coping styles could easily be extrapolated to the physiotherapeutic setting where information giving is a key element of the treatment process. When patients have had little or no previous experience of physiotherapy it might therefore be assumed that the provision of information would enable them to participate more effectively in the therapeutic process. However the findings from Steptoe et al. (1991) suggested that this may not be the case and

highlighted the necessity of eliciting the patient's perspective of information needs so that clarification rather than confusion ensues.

In studies of physician behaviours and recall of information (Roter et al., 1987) correlates of provider behaviour (Hall et al., 1988) and doctor-patient interaction (Roter & Hall, 1989), patient outcomes and provider behaviours were conceptualised in terms of a task-socioemotional distinction. This suggested a mechanism based on the concept of reciprocity to predict the association between provider and patient behaviours in which task behaviours by providers (information giving, question asking, technical competence) triggered socioemotional attributions (affective impressions, satisfaction, non-verbal behaviour) in the patient, although not vice versa. The patient needed to feel that the doctor was technically competent in order to be satisfied and that just being nice and caring was not enough (Hall et al., 1988). In an analogue study of patients with chronic pulmonary disease, Roter et al. (1987) found that satisfaction with the task dimension was positively correlated with recall of information. Although this study used role-play it was suggested that the results accorded with findings from other satisfaction studies in which real patients were involved. The mechanism through which information achieved its therapeutic effect was through both the information content itself and the interpreted message of interest and caring. This had implications for teaching specific techniques to enhance the provider's communication skills e.g. the use of direct questions, clarification, reading verbal and non-verbal cues, summing up, and of changing patient behaviour to become more verbally active by using a health educator before a clinic visit (Roter & Hall, 1989). Physiotherapists employ similar techniques during the treatment sessions to ensure patients' understanding of advice and instructions, often relating to home exercise programmes. However the current study permitted an exploration of the degree to which these strategies had been perceived by patients as being employed in the course of treatment, as well as in evaluating their effectiveness.

The interaction between the art and technical aspects of care inherent in the studies of Roter et al. (1987) and Roter & Hall (1989) was found elsewhere in the satisfaction literature. In an early classic study involving mothers of children in paediatric emergency care, Korsch et al. (1968) found that those who felt that the doctor was sympathetic, friendly, and showed concern in relation to addressing their needs for information and explanation were significantly more satisfied. This study is important in establishing a direct link between patients' various expectations of the clinic encounter and satisfaction with the outcome of care. Although concerned with paediatric care, parallels can be drawn with patients' expectations and

information needs found in the later satisfaction literature. Ben-Sira (1976) suggested that patients who are unable to judge the doctor's degree of technical skill base their judgements of the clinic visit on the doctor's affective qualities. Devotion was found to be the most salient expression of affective behaviour and when patients did not feel that their doctor was able to provide this support they would change the kind of provider and seek either an outpatient or private clinic. Nevertheless, both the affective and technical aspects of care have been shown to be important. In a later study Ben-Sira (1980) extended his previous work to include hospital doctors as well as general practitioners. Greater satisfaction with both the instrumental and affective skills was found in those patients who were more concerned about their health. Showing an interest in the patient was associated with the technical activities of the intervention and contributed to patients' perceptions of the efficacy of the treatment given. More educated patients were less dependent on the doctor's emotional support and were better able to judge the contribution of the doctor towards meeting their treatment goals. However, both the solution to the illness problem and to the associated anxiety problem were found to be interrelated, so that the greater one's medical needs, the greater the need for emotional support.

The notion that both the art and technical aspects of care combine, albeit to varying degrees, in the course of the medical encounter is supported by the patient satisfaction literature. For example DiMatteo (1980) examined non-verbal communication skills in relation to satisfaction with the technical and socioemotional aspects of medical care in patients attending an internal medicine clinic. Doctors who were more adept at recognising dissatisfaction and discomfort in patients who were unable to express this verbally, were more able to satisfy their patients' socioemotional needs, as were doctors who could communicate cues of emotion. However, these results were not evidence of causality and doctors may have varied on other characteristics in addition to the non-verbal skills that were instrumental in predicting patient satisfaction. It was suggested that non-verbal skills can be taught and furthermore doctors could be selected to work in primary care settings on the basis of exhibiting these skills. One could argue that clinicians (therapists) self-select to work in specialties that accord with their personal characteristics, in addition to their practical clinical skills and therefore possibly derive greater job satisfaction. Therapists working in outpatient departments perhaps more than in other clinical areas, can be seen to parallel the doctor's role in their need to identify both the patients' physical and socioemotional concerns and to employ both the art and technical aspects of care in the course of the therapeutic encounter.

In findings similar to Korsch et al. (1968) and Ben-Sira (1980), Blanchard et al. (1990) found that the strongest predictor of patient satisfaction with the medical encounter was the patients' perception of emotional support and that their needs had been addressed on that day. Satisfaction was primarily found to represent the affective evaluation of the cognitive aspects of the doctor/patient interaction and was more a function of the patients' perception rather than of specific physician behaviours. Although this study was concerned with inpatient cancer patients, the essential message can again be extrapolated to other areas of care i.e. 'its not what you do, its the way that you do it'.

Patients expect the doctor to address their needs by responding to requests for information and explanation in a concerned and sympathetic manner, taking account of their worries and concerns. Nevertheless Roter & Hall (1989) suggested that as patients become more consumer orientated they are more likely to challenge the existing doctor/patient relationship towards one of greater patient participation in decision making based on more meaningful communication exchanges. However, the extent to which patients' concerns can be addressed during the consultation are dependent on the amount of time that the doctor is able to allocate to each patient. This is often necessarily constrained by the system and a number of studies have investigated these issues in relation to the effects on patients' satisfaction. Howie et al. (1991) classified general practitioners in terms of the speed of their consultations as being fast (7 minutes or less), intermediate (7-9minutes) or slow (more than 9 minutes). They found that the content of long and short consultations varied in relation to whether psychosocial problems and health promotion issues were identified and dealt with, in addition to the initial presenting problem whether this was long-term. Longer consultations were associated with greater patient satisfaction, which appeared to support the notion that a larger proportion of patients' needs were recognised and followed up when more time was allocated to the patient. However the data did not permit examination of the relationship between patients' expectations of consultations, their perception of the relevance of the questions asked and their satisfaction. Nevertheless the main findings from this study have implications for therapy practice particularly in the outpatient setting, in relation to amount of time that can be devoted to patient education and advice in addition to the specific treatment. Although, as noted earlier (Steptoe et al., 1991; Howie et al., 1991) patients vary in the amount of information they require. It therefore behoves the practitioner to elicit the patient's perspective on this issue. Patients' opinions about the length and content of their treatment sessions will be one of the aspects that will be explored in the current study, since like doctors, therapists' outpatient treatment sessions are time-constrained.

Within the doctor patient relationship, the style of consultation as well as the health care provided, has also been shown to be predictive of satisfaction. Two principal consulting styles have been identified in the literature, one doctor-centred and the other patient-centred. In relation to the first approach, Thomas (1987) experimentally manipulated the consulting style adopted towards 200 patients, with symptoms but no abnormal physical signs, attending a general practice surgery. Subjects were randomly allocated to one of 4 consultations. Two consultations were conducted in a positive manner (with and without treatment) and two in a non-positive manner (with and without treatment). The negative consultation introduced an element of doubt by including two statements, 'I cannot be certain what is the matter with you' and 'I am not sure that the treatment will have an effect'. It was found that two weeks following the consultation there was a significant difference in patient satisfaction between the positive and negative groups (64% compared to 39%), but not between those who had or had not received treatment (53% compared to 50%). The researcher's subjective assessment of the consultation, which correlated with patient satisfaction but not with recovery from illness, suggested that a good doctor patient relationship alone, was not sufficient to ensure recovery from illness. Savage & Armstrong (1990) adopted a similar methodological strategy in which the doctor adopted either a directing or shared style of consultation. It was found that a directing style of consultation, engendered greater patient satisfaction in terms of communication during the visit and subsequent subjective improvement afterwards. However, this effect was less successful in patients with chronic or psychological problems where the consultation was long, or the main reason for the visit was for advice. The directing style had clearer benefit for patients that the doctor identified as presenting principally with physical problems, suggesting a congruence between two broad types of illness presentation (biomedical/psychosocial) and consulting styles (directive/shared). Nevertheless in relation to patients' satisfaction, the evaluations of the doctor's performance declined after one week, suggesting that patient's longer term attitudes and opinions of the doctor had more lasting effects than those developed following a single encounter. Butler & Butler (1987) described two general styles displayed by physicians during the medical consultation. The first, affiliation, comprised communication behaviours designed to establish and maintain a positive relationship between doctor and patient, such as friendliness, interest, empathy, a non-judgemental attitude and a social orientation. The second, control, included behaviours that established and maintained the doctor's power status, authority and professional distance. In their survey of 219 patients, satisfaction was significantly higher with the affiliative communication style, and the positive impression gained as a result of this type of consultation translated into positive evaluations of the care delivered by the doctor. This was particularly the case with infrequent attenders who did not know the doctor well.

While the studies discussed above had artificially manipulated the consultation style, it is evident that patients' satisfaction is increased with a consultation in which they have the opportunity to express their needs and concerns in an atmosphere devoid of doctor domination (Treadway, 1983; Stewart, 1984; Bertakis et al., 1991; Kinnersley et al., 1999). Henbest & Stewart (1990) affirmed that the patient-centred approach does make a difference and is associated with the doctor having established the patient's reason for coming and with the successful resolution of the patient's concerns. Doctors are then more likely to help their patients if they can facilitate the expression of their thoughts, feelings and expectations relating to their problem. It is further suggested that the patient-centred approach is not just a matter of behaving in a patient-centred way during the consultation but also in a way the doctor conducts his overall medical practice.

Patients therefore appear to hold specific ideas about what they expect from a clinic visit, and this has been shown to be age related. Al-Bashir & Armstrong (1990) studied patients from two generations (16-44 years and >65 years age) in relation to the criteria they would use in selecting a general practitioner. In both groups there was an indication that patients generally valued traditional qualities with statements such as, 'is easy to talk to', 'kind and attentive', and 'gives personal attention not drugs'. However, while younger patients in good health preferred preventive measures and check ups, older people and those in poorer health placed greater emphasis on having a doctor who was kind and attentive, had friendly staff and provided home visits. Patients presenting for physiotherapy with acute and chronic conditions, of varying ages and from different sociodemographic backgrounds, could therefore be hypothesised to have different expectations of their care, not only in terms of health status but also in relation to their previous experiences of the health care system. The patients to be recruited into the current study were purposely selected in relation to these characteristics so that this hypothesis could be tested.

It has been shown that sociodemographic variables such as age, gender, race, education and income *per se*, have been inconsistently related to patient satisfaction (Weiss, 1988). In a meta-analysis (Hall & Dornan, 1990) found trends indicating that greater satisfaction is associated with being older, having less education, higher social status and being married. There were inconclusive findings in relation to gender. Results from the USA satisfaction literature that have shown a relationship with age may have been confounded by the inclusion of cost, and therefore not directly applicable to health care in the NHS. Sitzia & Wood (1997) suggested that the significant association with age could be attributed in the UK health care

system to older patients' remembrance of pre-NHS health care. In response to earlier contradictory findings concerning the relationship between sociodemographic variables and satisfaction with health care reported in the literature, Fox & Storms (1981) conducted a telephone survey with 2061 respondents who had received medical care over the previous year. Results found gender and particularly age were the only two sociodemographic variables that were significantly correlated with medical care satisfaction. It was suggested that as age and gender strongly correspond to utilisation they may either create differing orientations to health care or invite different provider behaviour, even when other sociodemographic variables (income, education, race) are controlled. Therefore an individual's level of satisfaction can be predicted by the congruence between the conditions of care and orientations towards care.

Support for this view was found by Linn et al. (1982) who examined the predictors of satisfaction with care and compliance in a sample of 878 male patients in older (65-98) and younger (23-65) age ranges attending ambulatory clinics at a medical centre. Satisfaction was measured in relation to the professional competence of the physician, personal qualities of the physician and cost/convenience of care. Younger patients with more severe impairment and who lived further from the hospital were less satisfied with their care. For the older patients more frequent clinic visits, less expectation by the doctor of improvement and more severity, predicted dissatisfaction. However it was found that the elderly rated their health better than did the doctor, thus calling into question whose measure was the more valid and how much the doctor's estimate was influenced by his/her own views on ageing. Older patients were more satisfied and were also more compliant in relation to all three dimensions of care, particularly with respect to the personal qualities of the physician and the cost/convenience of care. It was suggested that the caring role of the doctor was of particular importance for the elderly patient and that although frequent clinic visits may be necessary, possibly a source of dissatisfaction, these can sometimes also be seen as a social event. The results from Linn's (1982) study accord with the experience of physiotherapy practice, not only in relation to the social role that treatment attendance can play particularly in the elderly, but also in relation to elderly patients' expectations of care in terms of clinical improvement. The lack of congruence between the doctor and patient's assessment of health status is also interesting and highlights the clinicians' (cf. therapist) possible preconceptions in terms of prognosis and outcome of care in more elderly patients.

In summary, information and good communication have been shown to be key elements in the clinical consultation, although the amount of information that individual patients need can also

be dependent on whether they adopt an information seeking or avoidant coping style. The mechanism through which information achieved its therapeutic effect is through both the information content itself and the interpreted message of interest and caring. When patients are particularly concerned about their health the need for emotional support can be greater than with the technical aspects of care. However, showing an interest in the patient has been associated with a perception of technical competence and the subsequent effectiveness of treatment. Non-verbal communication skills are no less important and some clinicians may choose to work in settings that are more congruent with their ability to demonstrate these skills in addition to their clinical aptitude. The ability of the clinician to address all the patient's specific concerns can be limited by the time constraints of the consultation, although it has been shown that greater satisfaction results when this has been achieved. Patients with acute and chronic conditions and those of varying age groups have different expectations of their clinic visit and may respond to either a directive or more shared consulting style depending on the nature of the presenting problem. The difference in management between those with acute and chronic conditions in relation to their care noted earlier, supports the distinction being made between these groups in the current study

1.14 PATIENT SATISFACTION WITH THE ORGANISATIONAL ASPECTS OF CARE

In terms of the organisational aspects of care, patient satisfaction has been related to accessibility, availability and convenience. Having a regular place of care, taking less time to get there and having a personal physician were all significantly related to satisfaction (Fox & Storms, 1981; Linn et al., 1982; Pascoe, 1983; Zastowny et al., 1983). In a sample of 17,671 out-patients with chronic medical conditions Rubin et al. (1993) compared patients' ratings of specific outpatient visits across five systems of care (combinations of multiple and single practices) in 3 USA cities. Problems of access in terms of waiting times at the clinic, waiting for an appointment, or in trying to get through by telephone were among the most problematic areas. However, organisational size was significant and while office waits were least likely to be rated as excellent in all systems, this was less so for solo or single speciality small groups, which were found to provide superior care. The short 8-item questionnaire used was able to produce useful comparisons across diverse practice settings and on the basis of patients' global ratings, could predict those likely to change doctors within the next 6 months. The problems of access identified in this study could also be applied to UK hospitals.

Among studies that have investigated the effects of clinic waiting times on patient satisfaction

are those by Thompson et al. (1996) and Levesque et al. (2000). In a telephone survey of 1,631 patients views of waiting times in an emergency department, Thompson et al. (1996) found that it was the *perception* rather than the *actual* time waiting that was of greater concern. Patients who perceived that their wait was shorter than expected were more satisfied. This suggests that rather than being a predictor of satisfaction, actual waiting time may be an outcome variable. In a related study, Levesque et al. (2000) showed that by altering patients' expectations about the organisation of the clinic and the length of time they would have to spend, improved their satisfaction with the visit. In a four-phased study, 708 patients were tracked through an orthopaedic outpatient clinic from time of arrival to discharge and classified according to case type. By clarifying that their appointment time started when they first accessed the system and not when they would see the doctor, satisfaction ratings increased even though patients might still have had to spend a long time in the clinic. Although these two studies by Thompson (1996) and Levesque (2000) were concerned with emergency departments, Levesque (2000) suggested that it is reasonable to assume that the results were applicable to other types of outpatient clinics. The system operating in physiotherapy outpatient departments provides the opportunity to see patients at their allocated time. Not only are patient numbers much smaller in physiotherapy clinics, but the regular system of timed slots that generally operates in the UK, helps to ensure that waiting times are kept to the minimum. Nevertheless the extent to which this operates in practice and the degree of patient satisfaction with the system was one aspect of care that was investigated in the current study.

A major aspect of the quality of primary health care is continuity and it has been generally accepted that the doctor/patient link can be influential in assuring continuity (Steinwachs, 1979). Continuity can be viewed as an attitudinal contract between patient and doctor, where the patient perceives a dependency on the doctor for medical care and the doctor perceives a responsibility for the patient's medical care. Continuity ends when either of these attitudes ceases to exist (Banahan & Banahan, 1981). Shortell (1976) operationalized continuity in terms of the number of different sources of care seen by an individual for a given episode of illness, taking into account the quality of care i.e. an appropriate number of sources or appropriateness of receiving one's care from a usual source. The underlying assumption was that a patient is better off from a continuity point of view the fewer number of sources seen. He measured the number of sources of care and categories of referral in a study of reported utilization during an episode of care involving at least five visits. Analysis suggested a weak but positive relationship between continuity and self-reported satisfaction with the overall quality of care. Becker et al. (1974), Breslau & Mortimer (1981) and Breslau (1982) in studies

of mothers of children with disability all found that mothers were more satisfaction with the quality of the children's treatment when they received care from the same doctor. However the technical benefits of having an array of specialists at the clinic had to be weighed against the costs of discontinuity. Becker et al. (1974) also found that continuity resulted in shorter waiting time, longer time with the doctor, greater satisfaction with the doctor and better appointment keeping.

Several studies have shown that those patients who have a regular doctor are more satisfied with their care (Linn, 1975; Woolley et al., 1978; Fox & Storms, 1981; Weiss, 1988). The length of time that the patient had been seeing the same doctor has also been shown to have a significant effect on their satisfaction (Hulka et al., 1975). Patients who had been attending the same doctor for more than five years reported greater satisfaction than when the relationship had lasted less than a year. This suggested that either the long relationship ultimately generates a favourable attitude towards the doctor, or that when the doctor and patient get on well they are likely to stay together. In a study involving 3044 patients of all ages attending the practices of 133 general practitioners, Hjortahl & Laerum (1992) recorded patients' perception of continuity along two dimensions: longitudinal care (the duration of the relationship with the doctor): intensity (number of encounters with the doctor in the previous 12 months). Results showed that an overall personal patient/doctor relationship increased the odds of being satisfied with the consultation sevenfold compared with a consultation where no such relationship existed. In a finding similar to that by Hulka et al. (1975), the duration of the relationship showed a weak but significant association with patient satisfaction taking as much as 5 years to develop, however there was a non-significant association between the number of encounters and patient satisfaction.

In the physiotherapeutic context, once a patient has been referred for treatment the physiotherapy department normally becomes the single source of care for that patient. (S)he is then allocated to a specific therapist or trainee (the provider) who then takes responsibility for the patient's course of treatment. Although it may not always be possible to ensure continuity of provider, due to staff rotation or ending of trainees' clinical placements, system continuity is maintained through the information contained in the patient's medical records. No studies of continuity in physiotherapy have been identified but it may be possible that the findings from the medical literature, of the relationship between continuity of provider and patient satisfaction with care, could be extrapolated to the physiotherapy situation. The developing relationship between therapist and patient, particularly when treatment is likely to be prolonged as in recovery from serious trauma, could become a contributory factor in the

evaluation of the care given. For this reason patients recruited into the current would have attended for at least three sessions of treatment to allow for the possible development of such a relationship.

In summary, aspects of accessibility, availability, continuity and convenience of care have been studied in relation to outpatient services. Of these, waiting times and problems with access appear to be the main causes of dissatisfaction. Dissatisfaction can be alleviated to some extent by modifying patient's expectations through more effective communication and strategies for improving the organisational aspects of care in large outpatient clinics have been proposed. Continuity of care with the same provider has been shown to improve patients' satisfaction with doctor visits, particularly when the relationship is long term.

1.15 PATIENT SATISFACTION WITH THE OUTCOME OF CARE

Outcome is a complex issue of which satisfaction is one element of an overall process with little agreed standardisation (Elliott-Burke & Pothast, 1997). However, satisfaction as an outcome measure has been shown to be predictive of patients' compliance with medical regimes, their intention to re-attend for treatment, or to change their health care provider (Ware & Davies, 1983; Fitzpatrick, 1991). Outcome denotes the effect of care on the health status of patients and includes improvements in knowledge and changes in behaviour (clinical outcome) in addition to the degree of patients' satisfaction with their care (process outcome). However, because a number of contributory factors can influence the clinical outcome it may not be possible to know for certain the extent to which this is attributable to a particular antecedent process of care, except through conducting a controlled clinical trial. In quality assessment therefore, outcome reflects all contributions of care, so that structure, process, and outcome allow for the supplementation of findings from each approach, and can thus serve to highlight areas of apparent shortcomings in the system as a whole (Donabedian, 1988).

In the literature, outcome has usually been examined in relation to the process of care in general, with comparatively few studies investigating satisfaction as a result of specific intervention. It could be argued that patients would be satisfied with their medical care when it resulted in a positive change, although a number of studies have shown that this is not necessarily the case. Woolley et al. (1978) explored the chain of relationships between patient expectations, doctor-patient communication, compliance, outcome of care, and satisfaction in a sample of 1761 patients attending with an episode of acute primary care. He distinguished

between patients' satisfaction with care (process outcome) and satisfaction with the medical intervention (clinical outcome). Clinical outcome as a variable was derived from the relationship between the patient's usual functional status and that at follow-up. It was found that, while satisfaction with clinical outcome was best predicted by the outcome and satisfaction with care, satisfaction with care (process) was predicted by outcome, continuity, patient's expectations and communication of expectation. A key finding was that although significantly more patients with good clinical outcomes were satisfied, 65% expressed satisfaction even though the outcome was bad. Patients may therefore base their assessment on the doctor's effort to help rather than on assessing the clinical outcome *per se*, suggesting that the quality of the relationship rather than the effects of the medical intervention may be the greater predictor of satisfaction with health care received.

Symptom improvement was likewise found to be of less importance than other aspects of care by Orth-Gomer et al. (1979). They investigated the quality of care in an outpatient department of internal medicine by following 55 of 100 new cases, one year after treatment. A questionnaire was designed to answer two principal issues; i) the effectiveness of the treatment in alleviating symptoms and ii) the quality of information given about their condition. Results showed that 'medically irrelevant factors' seemed to play an important role in satisfaction. Less than 29% of patients were satisfied because of symptom relief, but 25% were satisfied because of the doctor's friendliness and reassuring thoroughness. Actual improvement in symptoms was of less importance for these patients and 26% of them revealed 'an almost superstitious belief' in the value of laboratory tests and X-rays. Avis et al. (1997) similarly found that patient satisfaction appeared to be a response to other psychosocial aspects of the health care encounter, such as relief, gratitude, fear of wasting the provider's time or confidence in the provider, rather than related to the actual care provided. However, perception of satisfaction also changed over time, so that while early visits were characterised by a 'wait and see' attitude, later ones were judged more by the results from the care provided.

When researchers have examined satisfaction with a specific intervention, this has often combined discrete subjective and objective measures together with global satisfaction scores, in an attempt to attribute the outcome of care to specific aspects of the process. For example, Hazard et al. (1994) examined the relationship between satisfaction and the treatment of chronic low back pain. Using the Oswestry pain questionnaire, a visual analogue scale for pain, spinal flexibility and lifting capacity, and a global satisfaction rating (0-10, most/least satisfied), 70 patients were assessed before and after a 3-week program of intensive functional

restoration and behavioural support. Patients combined treatment content and outcomes when assessing satisfaction. After 1 and 5 years satisfaction was higher in those patients who were working 1 year after the study regardless of the specific treatment although this was not significant after 5 years. Long term satisfaction with the treatment program did not relate closely to the patients' immediate pain, impairment or disability responses. If patient satisfaction depends to some extent on meeting patients' pre-treatment expectations (Linder-Pelz, 1982 b) then it is suggested that by mutually setting individual pain and functional treatment goals, discrete outcome measures could be subsequently identified reflecting these components by recognising individual treatment needs.

McCracken et al. (1997) combined a battery of extant measures to assess satisfaction with the treatment of chronic pain (Depression Scale; Pain Disability Index; Marlow-Crowne Social Desirability Scale; Client Satisfaction Questionnaire) in addition to developing The Pain Service Satisfaction Test (PSST). In developing the PSST McCracken et al. (1997) included behavioural, emotional and verbal aspects of satisfaction without including items that reflected aspects of the clinic context directly, so that item content included patients' responses to treatment but not descriptions of the treatment *per se*. Reduction in pain and improvements of daily activity were both positively correlated with treatment. Satisfaction with treatment was also associated with trust and confidence in the provider, less pain during procedures and following treatment and less waiting for appointments/check-ins/results, which together accounted for 60% of satisfaction. The results supported the importance of satisfaction with treatment as a predictor and possible determinant of later health, function and service utilisation. Sawyer & Kassak (1993) likewise reported a direct association between clinical input and satisfaction with treatment outcome. In conjunction with a 32-item questionnaire which examined patients' attitudes towards disparate aspects of their chiropractic care, clinical outcome was assessed by a single question 'Did your health problem improve while you were a patient of this doctor?', using a 4-point scale (no improvement - substantial/complete). Patient assessment of treatment outcome was the most important factor influencing satisfaction. Those who indicated that there was substantial or complete improvement expressed the highest degree of overall satisfaction as well as satisfaction with other aspects of care. Although it was not possible to establish whether the highly satisfied patients actually had less pain after treatment, it was assumed that a decrease in physical discomfort would result in a higher level of satisfaction.

These studies by Hazard (1994), McCracken (1997) and Sawyer & Kassak (1993) highlight

the interaction of factors within the 'process' dimension of service provision that can affect patients' evaluation of the clinical outcome of care, and the need for specificity of measures linked to pre-treatment goals. Nevertheless the link between patients' assessment of outcome, their actual functional status and the influence on their overall satisfaction with care received remains elusive.

Although patients with better health status have often been shown to be more satisfied with their medical care, the causal factors for this relationship were first studied by Hall et al. (1993). In a longitudinal study of 526 elderly patients receiving continuous care for chronic conditions, multiple baseline measures were taken of patients' emotional health, social activity, functional ability, overall self-perceived health and satisfaction with medical care and repeated after one year. Results showed that the predominant direction of causality went from self-perceived health status and functional ability to later satisfaction, but not in the other direction. This suggested that health status was a causal determinant of satisfaction with medical care and that it was the psychological experience of ill health rather than the presence of disease or disability *per se*, that influenced a patient's opinion of the medical care received. However the authors did not rule out the possibility that in other settings and circumstances, low levels of satisfaction can lead to changes in health status e.g. in new patient interactions or with acute problems. Although the study did not address the effect of satisfaction with specific providers or of medical outcomes *per se*, the evidence suggested that the predominant causal effect ran from health to satisfaction.

In summary, it is apparent that clinical outcome and process outcome need to be distinguished if causal links of treatment effectiveness with satisfaction are to be demonstrated. However, it has also been shown that patients do not necessarily distinguish between content and outcome when making their overall satisfaction judgements and that their psychological experiences of illness as well as the impact of the clinician have a significant effect on their evaluation of care. The main aim of therapists is to achieve the best clinical outcome possible for their patients in terms of symptom relief and functional improvement. The extent to which this had been achieved was therefore examined in the current study, through patients' evaluation of their health status on completion of the episode of care and addressed a limitation in the satisfaction literature that found only 6% of studies examined satisfaction with the outcome.

1.16 PATIENT SATISFACTION WITH PHYSIOTHERAPY

In many respects the dimensions of care that have been identified in the satisfaction literature relating to the doctor/patient relationship parallel those found in the physiotherapy encounter, particularly with respect to the initial assessment of the patient. This is crucial to the development of an appropriate treatment plan, with effective communication between therapist and patient being of fundamental importance. While there may be occasions when physiotherapy is delivered as a single intervention, as with the medical consultation, it generally comprises a course of treatment that is less frequently examined in the literature. Some findings from the literature in relation to the medical encounter have implications for physiotherapy practice. The link between patient satisfaction and appointment keeping (Frankel et al., 1989; Bigby et al., 1984) and compliance with recommended medical regimes (Willson & McNamara, 1982; Kinsey et al., 1975) are particularly relevant to physiotherapy outpatient services. Patients who comply with treatment and complete their course of therapy might therefore be expected to achieve a more satisfactory outcome of their care. In addition, therapists' time will be more effectively utilised, the efficiency of the department improved with greater throughput of patients, and waiting times reduced if patients keep their appointments.

Studies into patient satisfaction with physiotherapy have broadly fallen into three main groups; i) qualitative studies using interviews to elicit views, ii) those in which existing tools have been modified for physiotherapy use and iii) those in which new tools have been developed. The qualitative studies are reviewed here and those dealing with tools will be examined in the next section within the context of the measurement of satisfaction in ambulatory care settings.

i) Qualitative studies to elicit patients' views of their physiotherapy care

Johnson (1993) used informal interviews with a small sample of four patients with various neurological conditions (chosen to reflect the scale of the research, an undergraduate study) who were prepared to express opinions of their recent physiotherapy experience. Unstructured interviews using a topic guide explored three main areas; level of independence, experiences of physiotherapy and the role of the physiotherapist with disabled people. It was found that the experience was dependent on the relationship with the therapist, so that good experiences were associated with a personal approach in which the patient felt that his/her needs as a person were being met. Bad experiences were associated with an impersonal approach in which the patient felt little involvement in the treatment process. The relationship with the therapist

coloured the impression of the treatment given and none of the patients mentioned having had good treatment from a therapist they did not like. Nevertheless the patients were critical of the appropriateness of applying the same model of care used in the acute sector (perceived as being therapy centred and following the medical model with prescriptive labelling and treatment related to impairment) to patients outside the acute setting. This approach was felt no longer appropriate for patients with chronic conditions and did not help them manage day to day problems. Although a severe limitation of this study in relation to the current research was in its population characteristics and small sample size, the patients' perceptions of physiotherapy highlight the importance of patient centred care and of the therapist/patient relationship, irrespective of the physiotherapy setting. The results therefore have relevance to the current study.

Thomas & Parry (1996) used in-depth interviews to investigate the views of stroke patients about the services they experienced 4-12 months following their stroke. As with Johnson's study (1993) this involved a small sample (7 patients) which the authors believed to be typical of the group. The interviews adopted a conversational and flexible style to facilitate the expression of user's views on four main areas of management; the stroke event, admission and discharge from hospital and life at home. Most respondents were generally satisfied or very satisfied with the care they had received and felt that their care needs had been met. Therapists were particularly highly regarded. Principal sources of dissatisfaction concerned various aspects of in-patient care and delays in initiating further rehabilitation following discharge from hospital. In a finding similar to that of Johnson (1993) there is an indication that care is being delivered at the convenience of the provider rather than the user and an implicit critique of the medical model of care is again evident.

Using a sample more directly applicable to the current study, May (2001) explored patients' satisfaction with physiotherapy treatment for back pain. Semi-structured interviews were conducted with a sample of 34 patients who agreed to participate from a randomly selected list of 125 patients referred for treatment in the previous year. A topic guide, derived from the literature, explored 8 main areas; expectations of treatment and prognosis, efficacy, self-management, understanding (information given), interaction with the therapist, overall satisfaction and other treatments received. Patients were able to make clear qualitative judgements about what they considered to be good standards of physiotherapy care and 6 key dimensions emerged that encapsulated their views. These were personal and professional manner, explanation/teaching during the episode, degree of consultation, access and time with

the therapist and outcome. Patients were also appreciative of being listened to and of feeling that the therapist understood their problem, so that they could be involved in the decision making process regarding treatment. There was some criticism of waiting times and the lack of open access, but patients valued flexible appointment times and being seen reasonably punctually. Although patients did not always achieve symptom relief following treatment, they were generally satisfied with their care, particularly with the information they received with respect to self-management. Limitations of the study concerned the self-selection of participants, with only 25% volunteering. Those patients who come for interview may therefore have held a particular perspective and been most satisfied. A second limitation concerned the length of the interviews (15-25 minutes), which raised the question of whether the topic was dealt with in sufficient depth.

In the USA, Payton & Nelson (1996) and Payton et al. (1998) examined patients' understanding of their role in therapy in relation to goal setting, treatment planning and evaluation of outcomes. Using semi-structured interviews, 20 patients from four clinical sites were recruited (Payton & Nelson, 1996). The patients comprised those principally with neurological and orthopaedic conditions, but also cardiopulmonary, amputee and burns. Interview transcripts were coded in relation to either positive or negative responses in terms of the research questions, with a view to either supporting or refuting the construct of patient participation in the treatment process. Results showed weak support for the extent to which patients perceived that they were involved in goal setting and treatment planning, but stronger support for assessing the outcomes of their treatment program. It appeared that goal setting was tacitly understood and obvious from the patients' perspective and this might be more important at different stages of the treatment process. The longer the patient was in therapy, the more knowledgeable and confident (s)he became in participating in treatment planning and evaluation. While all patients acknowledged a sense of personal gain from physiotherapy, 30% did not comment spontaneously on their interpersonal relationship with the therapist. Those who did mainly expressed this in moderate terms of the therapist being 'nice and friendly'.

In a related study of patient participation in their care involving 109 patients with a variety of conditions attending for therapy in three health care facilities, Payton et al. (1998) found that the pattern of care described by patients supported the medical model. The extent to which patients wanted a co-operative model of care depended on their employment and financial status. The more affluent saw the therapeutic process as co-operative, while the lower income

group saw the doctor as principally concerned with decision making. Half of the sample was unclear about the role of the therapist, suggesting the need for better patient education and emphasising the need to establish the extent to which the patient wants to participate in the decision making process. These results again highlight the importance of patient centred care and eliciting the patient's perspective.

The underlying medical model of care is evident in all of these qualitative studies apart from that by May (2001). This could be a reflection of the way questions were asked in the interviews and the focus of the study, but could also be an indication of the more recent emphasis on patient centred care and the move away from the medical model to the holistic approach. It could also reflect the sample populations in these studies, which comprised patients with chronic long-term conditions having input from a number of care agencies, not exclusively physiotherapy. Their overall perceptions of care would therefore be coloured by a multiplicity of factors. For these reasons the patients chosen for inclusion in the current study were generally well apart from their presenting problem so that the treatment input was limited as far as practicable, to the physiotherapy intervention.

In the next section the principal tools that have been developed to examine satisfaction in the primary care and outpatient setting research are reviewed.

1.17 TOOLS FOR EXAMINING SATISFACTION WITH AMBULATORY CARE

Patient satisfaction research in the field of ambulatory health care has progressed on the basis of seminal work by a number of researchers working in the USA, particularly Ware et al. (1972; 1976a & b; 1983) and Hulka et al. (1970). These authors developed scales for use in population surveys to assess attitudes towards medical care in general rather than satisfaction with a specific episode of care (macro domain). By contrast, measures using direct questions (micro domain) to assess attitudes towards a specific programme of care or provider were developed by Risser (1975), Larsen et al. (1979), Pascoe & Attkisson (1983), Wolf et al. (1978), Baker (1990) and Hill et al. (1992). Researchers advocating the indirect approach believe that the impersonal style of questions or statements enables patients to express negative views more readily, and this approach has been found to produce lower levels of reported satisfaction. Evidence from the literature supports the distinction between these two approaches as assessing different domains of patient satisfaction (Pascoe et al., 1983).

Table 1.3 presents an overview of scales specifically designed for measuring patient satisfaction with ambulatory care and identifies the content and format of the tools and provides a useful reference from which to inform the design of the instrument to be developed in the current study. Measures that were designed for in-patient use or for specialist populations that have not had a more general applicability have not been included. It can be seen that apart from the scales developed by Baker (1990; 1991) and Hill et al. (1992) all the other measures emanate from the USA and are therefore associated with a different health system. It is also apparent that different researchers have not always identified the same elements or grouped them under the same dimensions of care. The majority use Likert scales and the responses are summed to produce scores for each dimension. High scores indicate greater satisfaction on the scales used by Ware et al. (1976), Wolf et al. (1978), Larsen et al.(1979) and Hill et al.(1992), but lower satisfaction on the scoring used by Risser (1975) and Baker (1990;1991). Hulka (1974) used a hybrid of the Thurstone (1928) and Likert (1932) methods in which item weights (positive/negative) were multiplied by scores ranging from 2 (strongly agree) to -2 (strongly disagree) for positive items and reversed for negative ones. Pascoe & Attkisson (1983) adopted a method in which patients were first asked to rank cards describing discrete aspects of the service from 1 (least important) to 6 (most important), and then rated the absolute and relative quality of the service on a 0 (worst possible) to 100 (best possible) scale. Each item score (out of 100) is multiplied by the rank it was accorded in the first stage, so weighted scores could be calculated for each item and for the scale as a whole.

The SERVQUAL tool (Parasuraman et al., 1988) has been included as, although originally designed for evaluating the quality of consumer and marketing services, the researchers conceived it as a generic instrument that could be adapted for use in other service settings. With minor modifications it has been used in nursing (Scardina, 1994) and physiotherapy (McIntosh, 1994). Of particular interest is that SERVQUAL combines both individuals' expectations and perceptions of service quality and permits managers/care givers to see the gaps between the two thereby indicating areas in need of improvement.

Table 1.3 Scales for the Measurement of Patient Satisfaction

<i>Author</i>	<i>Questionnaire/Scale</i>	<i>Dimensions</i>	<i>Scaling</i>	<i>Source</i>
Ware et al. (1976 a)	Patient Satisfaction Questionnaire PSQ II (68 and 55 items). 2 short forms of PSQ II (37 & 43 items)	Access Financial Availability Continuity Quality Interpersonal manner Overall satisfaction	5-point Likert scale Strongly agree/disagree	USA
Hulka et al. (1970)	Scale for the Measurement of Satisfaction with Medical Care (41 items) Revised 1974	Professional competence of physician Personal qualities of Physician Cost/convenience	Thurstone method 5-point Likert scale Strongly agree/disagree	USA
Risser (1975)	Patient Satisfaction Scale (PSS) (25 items)	Technical-professional Educational relationship Trusting relationship	5-point Likert scale Strongly agree/disagree	USA

Table 1.3 Scales for the Measurement of Patient Satisfaction (cont.)

<i>Author</i>	<i>Questionnaire/Scale</i>	<i>Dimensions</i>	<i>Scaling</i>	<i>Source</i>
Larsen et al. (1979)	Client Satisfaction Questionnaire CSQ (31 items) Short form CSQ (8-item)	Physical surroundings Support staff Kind/type service Treatment staff Quality of service Amount/length service Outcome General satisfaction Procedures	4-point Likert scale (question specific)	USA
Wolf et al. (1978)	Medical Interview Satisfaction Scale (MISS) (26 items) MISS Revised 1981, (29 items)	Cognitive Affective Behavioural Distress relief Communication Rapport Compliance	5-point Likert scale Strongly agree/disagree 7-Point Likert scale V.strongly agree/disagree	USA
Pascoe & Attkisson (1983)	Evaluation Ranking Scale ERS	Clinic location and appointments Clinic buildings/offices/ waiting time Clinic assistants/helpers Nurses/doctors Health services offered Service results	Card sort format VAS	USA

Table 1.3 Scales for the Measurement of Patient Satisfaction (cont.)

<i>Author</i>	<i>Questionnaire/Scale</i>	<i>Dimensions</i>	<i>Scaling</i>	<i>Source</i>
Parasuraman et al. (1988)	SERVQUAL (22-item)	Tangibles Reliability Responsiveness Assurance Empathy	7-point Likert scale Strongly agree/disagree	USA
Baker (1990)	Consultant Satisfaction Questionnaire CSQ (18-item)	Professional Care Depth of relationship Perceived length of Consultation General satisfaction	5-point Likert scale Strongly agree/disagree	UK
Baker (1991)	Surgery Satisfaction Questionnaire SSQ (26-item)	Accessibility Availability Continuity Medical care Premises General satisfaction	5-point Likert scale Strongly agree/disagree	UK
Hill et al. (1992)	The Leeds Satisfaction Questionnaire LSQ (45-item)	Information Empathy Technical competence Attitude Access and continuity Overall satisfaction	5-point Likert scale Strongly agree/disagree	UK

a) The Patient Satisfaction Questionnaire (PSQ) Ware et al. (1976 a)

In 1972 preliminary work on the development of the PSQ began based on literature reviews and empirical studies and resulted in a number of versions of the tool. From an initial item pool of 1,825 usable statements, 548 items were used. These were then sorted into ten categories hypothesised to be characteristic of health services; accessibility, availability, continuity, convenience, cost, general satisfaction, humanness, perceived quality, problems of poor patients and miscellaneous items. Following further studies and fieldwork, factor analytic techniques were used to refine and identify the content of these dimensions. This resulted in an 80-item Patient Satisfaction Questionnaire PSQ Form I (Snyder & Ware, 1974), comprising six major dimensions with twenty-two hypothesised sub-groupings. The dimensions were accessibility, availability, continuity, financial, humanness, quality and general satisfaction. Subsequent revision and elaboration of the PSQ Form I was made to address problems of item specificity and ambiguity (Ware et al., 1976 a) resulting in Form II containing 68 items, as well as two short-forms, 37-items and 43-items respectively. Items were grouped under seven dimensions (access, financial, availability, continuity, quality, interpersonal manner, overall satisfaction) with 18 sub-scales to measure attitudes towards the more salient characteristics of doctors and medical care services, and satisfaction in general (Ware et al., 1976a & 1983).

The questionnaires were designed to measure satisfaction in general as well as specific features of care and reflected the authors' view that patient satisfaction with medical care is a multi-dimensional concept with dimensions corresponding to the major characteristics of providers and services. From the results of four field trials using the 18 subscales, 68 of the 72 estimates of internal consistency exceeded 0.50. Content validity of the PSQ tested against other satisfaction measures and also factor analysis supported the construct validity of the sub-scales in appearing to measure distinct dimensions of satisfaction (Ware et al., 1983). The authors also cited a number of studies supporting the convergent and discriminant validity of the PSQ, although it has been suggested that the indirect measurement approach of the PSQ11 may produce a different pattern of responses from more direct measures (Pascoe et al., 1983).

Cherkin et al. (1988) modified the wording of a subset of 18 items drawn from 43 of the PSQ II so that it referred to care from a particular physician rather than from physicians in general, in their study comparing satisfaction with different physician types. Items were included in the four sub-scales (access, humaneness, quality/competence and general satisfaction) and rated on a 5-point scale (strongly agree/strongly disagree). Questionnaire returns were received from 68% of patients visiting family physicians and 74% from those seeing general internists and

results showed that patients rated the care received from the two specialities equally highly on the four dimensions of care. Internal reliability of the scale showed alphas ranging from 0.47 (Access) to 0.84 (General Satisfaction) with the low alpha for the Access sub-scale attributed to the inclusion of only 2 items. Empirical evidence in support of the validity of the PSQ have been reported by Ware et al. (1983) as described above.

**b) Scale for the measurement of attitudes towards physicians and primary medical care
Hulka et al. (1970)**

One of the most extensively investigated satisfaction questionnaires was developed by Hulka et al. (1970) to assess satisfaction as an outcome measure. It was extensively tested in the USA and internal consistency scores were good for total and component scores of 0.68 and 0.90 respectively, (Roberts & Tugwell, 1987). Scales were developed to measure attitudes toward physicians and primary medical care by identifying three content areas; i) professional competence of physicians, ii) personal qualities of physicians and iii) cost/convenience of care, comprising 41 items in total. The scales were constructed according to the Thurstone Method of Equal Appearing Intervals (Thurstone, 1928) to overcome the problems commonly associated with direct questioning in which respondents infrequently express negative attitudes towards physicians and medical care.

The 41-item scale was subsequently administered to 254 residents in a probability sample of working class and lower class residents (Hulka et al., 1971). It became apparent that some scale items designated to reflect attitudes in a particular content area may not have been interpreted as such by respondents and a revision of the scale items using public health nurses as judges was conducted. The response options were also changed from 'agree/disagree' offered in the original scale to a 5-point Likert method of scoring ranging from 'strongly disagree' to 'strongly agree' which placed greater emphasis on the strength of belief in relation to each item (Zyzanski et al., 1974). The scoring method was modified so as to incorporate both the item scale values derived from the Thurstone approach and the specific weightings determined by the response alternatives selected by the respondents. The revised method of scoring, based on a linear model from positive to negative effect, gave higher reliability coefficients than the corresponding Thurstone method.

c) Patient Satisfaction Scale (PSS) Risser (1975)

Risser (1975) developed an instrument to evaluate patient attitudes toward nurses and nursing care in a primary care setting. She conceptualised satisfaction with nursing care as 'the degree

of congruency between a patient's expectations of ideal nursing care and his perceptions of the real nursing care he receives'. The PSS initially consisted of 58 items subdivided into four subscales, i) technical-professional, ii) intra-Interpersonal iii) trusting relationship, and iv) educational relationship. Patients' opinions of nursing characteristics and behaviours informed the item development and an attempt was made to use the terminology the patients themselves used. Scoring used a 5-point Likert scale with low scores indicating satisfaction. Field-testing resulted in a 25-item instrument with three sub-scales showing reliability values of 0.64 (professional-technical), 0.83 (educational relationship) and 0.82 (trusting relationship) respectively. Respondents indicated greater satisfaction with nurses and nursing behaviour in the professional-technical area, with most dissatisfaction expressed in the educational relationship dimension. It was suggested either that, i) nurses did not function as teachers in the primary care setting or ii) patients did not receive enough information. This psychometrically sound scale was subsequently revised by Hinshaw & Atwood (1981) Ventura et al. (1982) and La Monica et al. (1986) for in-patient use.

d) Client Satisfaction Questionnaire (CSQ) Larsen et al. (1979)

Nguyen et al. (1983) described a series of studies of patient satisfaction carried out at the University of California over a period of 6 years in which the Client Satisfaction Questionnaire (CSQ) (Larsen et al., 1979) was developed and refined. The authors identified existing problems in the satisfaction literature which they aimed to address with the new tool. This included high reported levels of satisfaction, lack of meaningful comparison bases, lack of a standardised scale, and difficulties in obtaining unbiased samples.

Following a literature review, 9 dimensions of service delivery judged to be primary targets of satisfaction ratings by patients were identified and nine items were created for each category. An initial 81-item pool was subsequently reduced to 31 items, following submission to two panels of judges, with a minimum of three items in each category. The nine content categories comprised; physical surroundings, support staff, kind/type of service, treatment staff, quality of service, amount/length/quantity of service, outcome, general satisfaction and procedures. A shorter scale, the CSQ-8, constructed from the eight items that loaded most highly on factor analysis, provided a brief global measure of general satisfaction with services. Both the CSQ-31 and the CSQ-8 had high levels of internal consistency. Evidence of construct and predictive validity was provided from a number of studies comparing the CSQ with the PSQ (Ware & Snyder, 1975; Ware et al., 1976 a) and the ERS (Pascoe & Attkisson, 1983).

e) The Medical Interview Satisfaction Scale (MISS) Wolf et al. (1978)

Wolf et al. (1978) designed a scale to measure satisfaction with a specific provider or consultation. The Medical Interview Satisfaction Scale (MISS) was developed following interviews with patients, observations of consultations and a review of the literature. Sixty-three items were initially generated within three clinical dimensions of satisfaction with the patient-provider interaction (cognitive, affective and behavioural) that were subsequently reduced to 26 items following three field trials. Cognitive items referred to the doctor's explanation and information giving and the patient's understanding. Affective items represented the patient's perception of the treatment relationship and behavioural items referred to the patient's evaluation of the doctor's behaviour.

Results confirmed that the cognitive and affective scales appeared specifically sensitive to the mutual exchange of information between patient and doctor in different phases of the interview, thus providing some evidence of validity. Items in the behavioural scale however, did not significantly correlate with identified verbal exchanges either in the initial or closing stages of the interview and the behavioural sub-scale items appeared to be less coherent than the other two sub-scales. Internal consistency for all three sub-scales was high (alpha 0.87, 0.86 and 0.87 for the cognitive, affective and behavioural sub-scales respectively) and although the inter-scale correlation was lower, it indicated a substantial overlap between the dimensions. The MISS has subsequently been modified to produce a 29-item measure. This comprises four different sub-scales (distress relief, communication and comfort, rapport and compliance intent) scored on a 7-point Likert scale (Wilkin et al., 1992).

Meakin & Weinman (2002) examined the psychometric properties of the revised 29-item MISS for use in British general practice populations by examining satisfaction of 150 patients recruited sequentially to a large practice in suburban north London. This resulted in a 21-item scale (MISS-21) with the same four sub-scales as the MISS-29. A subsequent study was conducted with 159 patients consulting 18 GPs in north London, Essex and Suffolk. Alpha values for the MISS-21 were between 0.67 and 0.92 suggesting internal consistency under the conditions of the study. Six additional items, added to measure patient satisfaction with previous consultations with the doctor, correlated highly with scores on the MISS-21 thereby providing support for the construct validity of the new tool. Results suggested that patients had less difficulty completing the MISS-21 and that it was applicable for assessing patient satisfaction with consultation in different practice types and populations in the UK.

f) The Evaluation Ranking Scale (ERS) Pascoe & Attkisson (1983)

The Evaluation Ranking Scale (ERS) developed by Pascoe & Attkisson (1983) was a visual card sort procedure and provided a departure from the paper and pencil instruments used in previous studies. It was designed to measure specific program dimensions and discriminate between relative satisfaction and dissatisfaction to a greater extent than a global measure.

From a review of the literature on evaluation theory and dimensions of health care, 8 service dimensions were initially identified (accessibility, availability, physical environment, technical skills of providers, interpersonal qualities of staff, informational resources, service relevance and the outcome of services). These were subsequently reduced to 6 following review with public health clinicians, administrators and patients and their sub-points were refined. The 6 dimensions were; clinic location & appointments, clinic building/offices/waiting time, clinic assistants/helpers, nurses/doctors, needs vs. services received and service results. A study with 299 patients to compare the ERS and the CSQ-8 (Larsen et al., 1979) showed that the mean scores for the ERS were lower than for the CSQ, thereby confirming its greater discriminative ability. Although both scales were able to discriminate between race (whites more satisfied than non-whites) and socioeconomic status (higher status more satisfied) the ERS also detected that frequent consumers were the most dissatisfied group. While the ERS has offered a different approach to the measurement of patient satisfaction, doubts have been raised about the validity of the scoring procedure and whether patients differentiate between ranking of importance and rating of their own health centre (Wilkin et al., 1992).

Pascoe et al. (1983) subsequently compared the CSQ, ERS and PSQ, and found that the CSQ and ERS were more appropriate tools for service planning and evaluation, being direct measures of satisfaction, compared with the indirect measure of the PSQ. Direct and indirect measures were shown to tap different satisfaction domains; the former reflecting opinions about the specific service setting and the latter assessing more generalised attitudes about health services.

g) SERVQUAL Parasuraman et al. (1985)

Parasuraman et al. (1985) identified three characteristics of services; intangibility, heterogeneity and inseparability that must be acknowledged for a full understanding of service quality. Services are intangible because they are performances rather than objects. Consumers have fewer cues with which to judge service quality unlike those of products which can be measured objectively by indicators such as durability and number of defects, and is often

limited to the service provider's physical facilities, equipment and personnel. Services are heterogeneous because their performance can vary from day to day and consistency of behaviour from service personnel is difficult to assure. Finally, services are inseparable in that production and consumption often occur together usually in an interaction between the client and the contact person from the service firm.

In order to investigate the quality of service provision, Parasuraman et al. (1985) conducted (a) in-depth interviews with service executives to gain insight into service quality from the management perspective and (b) focus groups with consumers for their perceptions of four service categories; banking, credit cards, securities and product repair/maintenance. Results from the in-depth interviews revealed gaps between executive perceptions of service quality and the tasks associated with service delivery to consumers. The focus groups unanimously supported the notion that the key to ensuring good quality service is meeting or exceeding expectations regardless of the type of service.

The SERVQUAL tool was subject to rigorous reliability and validity testing during development and resulted in a 22-item scale within the original ten identified service dimensions reduced to five following factor analysis comprising tangibles, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1988). Each item was reworded into two statements, one to measure expectations of services in general and the other to measure perceptions about the particular firm whose quality of service is being assessed. The tool was designed to measure perceived quality (defined as the consumers' judgement of the entities' overall excellence) and was distinguished from satisfaction as being a global judgement or attitude relating to the superiority of the service. Satisfaction was seen as relating to a specific transaction and therefore as less enduring than the perception of quality. Results from the exploratory research using focus groups (Parasuraman et al., 1985) provided instances in which respondents were satisfied with a specific service but did not feel the service was of high quality indicating that the two constructs are related. However the direction of the relationship between satisfaction and quality has been the subject of some debate, as has the appropriateness of the expectation component of the SERVQUAL tool (Teas, 1993).

Scardina (1994) adapted the SERVQUAL questionnaire to evaluate patient satisfaction with in-patient nursing care. Results showed that the assurance dimension (ability to demonstrate knowledge and courtesy, and convey trust and confidence) was the only one to meet

expectations indicating that it was easier to achieve. The most important dimensions in terms of rank were reliability (ability to perform the promised service dependable and accurately) and empathy (ability to provide caring, individualised attention). Tangibles (appearance of physical facilities, personnel and materials) were least important. Negative scores on the other rankings indicated areas for improvement. Although the SERVQUAL tool appeared to perform reasonably well in this service setting the principal limitation to this study was the very small sample size ($n=10$).

SERVQUAL has also been modified for use with physiotherapy services and this will be discussed below.

h) Consultant satisfaction questionnaire (CSQ) Baker (1990)

The lack of suitable instruments with proven validity and reliability to measure patient satisfaction in general practice in the UK prompted the development of the CSQ by Baker (1990). The questionnaire was designed to be brief, understandable and to be self-administered by adults over 16 years. An important element in the development of the item pool was that patients' opinions of service were taken into account, thereby addressing the main limitation of a number of instruments in being managerially led. Items were chosen for inclusion with the aim of producing a more generic instrument with multidimensional scaling that could be used in different locations. The tool was rigorously tested for reliability and validity using psychometric methods and extensively field-tested in the South-West Region. The final version comprised an 18-item consultant satisfaction scale that tapped elements of professional care, depth of relationship, perceived length of consultation and general satisfaction. It was concluded that further studies were indicated to confirm reliability and validity of the tool.

Poulton (1996) adapted the consultation satisfaction questionnaire devised by Baker (1990; 1991) and further tested by Baker & Whitfield (1992) for assessment of patient satisfaction with district and practice nurses and health visitors by re-wording the statements substituting 'nurse' or 'health visitor' for 'doctor'. Three general practices took part in the survey of 1575 patients with a 46% return rate. The same three principal factors of professional care, depth of relationship and perceived time, emerged as on the original instrument (Baker, 1990) although a separate factor of 'general satisfaction' did not emerge. Two items relating to general satisfaction loaded instead on the 'professional care' and 'perceived time' factors, respectively. Results showed that the questionnaire retained its validity and reliability and was sufficiently sensitive to discriminate between groups of health professionals. It therefore appeared that this

tool succeeded in achieving acceptability in different general practice settings and that slight modifications to the wording did not significantly affect its psychometric properties.

Kinnersley et al. (1996) compared the Medical Interview Satisfaction Scale (MISS) (Wolf et al., 1978) with the Consultant Satisfaction Questionnaire (CSQ) (Baker, 1990) in terms of acceptability, distribution of responses, reliability and validity. Three hundred and sixteen UK patients were asked to complete the combined questionnaires, half of them after the consultation before leaving the surgery and half at home afterwards. The overall response rate was 63%, with fewer returns from those who completed the questionnaire at home (54%) compared with those in the surgery (67%). Although the sub-scales of the two questionnaires initially appeared to be testing different dimensions of satisfaction, results showed relatively high correlation between the overall scores (0.82) suggesting that they were both measuring a relatively unified content domain and the distribution of scores was markedly similar. Both scales and sub-scales showed fair to good internal consistency (0.78-0.96 for the MISS and 0.73-0.94 for the CSQ) suggesting that they were sufficiently reliable to differentiate between groups of patients. It was concluded that one scale was not superior to the other either in psychometric terms or in the range of responses, therefore either would be suitable for measuring patient satisfaction with consultations in primary care.

i) Surgery satisfaction questionnaire (SSQ) Baker (1991)

This tool was designed to determine patients' satisfaction with services offered by their general practitioners. The content of the tool was informed by patients' spontaneous comments to practice staff about their surgeries, together with the views of colleagues and a review of other pertinent satisfaction studies. A 26-item scale was developed with items on accessibility, availability, continuity, medical care, premises and general satisfaction. Following a number of field trials the SSQ showed reasonable reliability for most of the 6 sub-scales with alphas ranging from 0.51 (availability) to 0.85 (continuity). There was support for content and criterion validity, but as with the CSQ (Baker, 1990) further studies were indicated to confirm the reliability and validity of both instruments.

j) The Leeds satisfaction questionnaire (LSQ) Hill et al. (1992)

The content of the LSQ draws on the taxonomy of Ware et al. (1983) with respect to five subject groups; information, empathy, attitude, access/continuity and technical competence. It was developed to examine satisfaction in patients with rheumatoid arthritis (RA) attending a rheumatology outpatient clinic. Preliminary tests of the instrument resulted in a 45-item scale

that was completed by 70 randomly selected patients who had attended the clinic on at least three previous occasions. Alphas for the sub-scales ranged from 0.71 (attitude) to 0.93 (information) with alpha 0.96 for the total scale. Test reliability after one month showed that the scale was stable. The questionnaire has subsequently been used to examine satisfaction in a nurse-led rheumatology clinic (Hill, 1997) with a randomised sample of 70 patients with RA. After six clinic visits the nurses' patients were shown to be significantly more satisfied than those of the rheumatologist, particularly in relation to the provision of information and empathy with the patient. However the nurse was able to spend about twice the amount of time with the patient. Although the tool was designed for use by patients with arthritis, it was suggested that with minor changes it could be applicable to patients with other chronic diseases.

In summary, it can be seen from the satisfaction measures presented in Table 1.3 that the areas researched typically include the providers' personal qualities, the nature of the interpersonal relationship, the provider's professional competence, quality of care, cost and convenience. The only instrument that measured outcome was that of Larsen et al. (1979). This was designed for use with patients receiving mental health services and therefore had a more clinical bias. The ERS (Pascoe & Attkisson, 1983) provided an alternative method of measurement to the more usual questionnaire format and the SERVQUAL instrument (Parasuraman et al., 1985) was the only tool to include expectations as well as perceptions of service provision in its battery of statements. Of the instruments reviewed only those by Ware (1976 a), Risser (1975), Wolf (1978), Parasuraman (1985) and Baker (1990) involved patients in the process of item generation.

1.18 TOOLS FOR EXAMINING SATISFACTION WITH OUTPATIENT PHYSIOTHERAPY

In addition to the qualitative studies that have explored patient satisfaction with physiotherapy discussed earlier (page, 83) physiotherapists have also i) modified existing tools or ii) developed new ones to examine satisfaction in different outpatient settings.

i) Studies in which existing tools have been modified to examine satisfaction with physiotherapy

Tools that have been modified for use in physiotherapy have tended to draw on instruments developed in the USA. For example, Taylor & May (1995) modified the Medical Interview

Satisfaction Scale (MISS) (Wolf et al., 1978) for use in sports clinics in the UK. The original MISS with 26 items categorised into three dimensions of the patient-provider interaction (cognitive, affective and behavioural) was modified following three focus groups to elicit the criteria athletes use for evaluating medical treatment of sports injuries resulting in a 16-item scale. A sample of 262 new patients with a variety of injuries attending 5 private sports clinics in England were given the questionnaire immediately following their first appointment and resulted in a 61% response rate. Three factors were identified (perceived empathy, information given and competence) reflecting the original three scales identified by Wolf et al. (1978). Empathy explained 41% of the variance and was the largest factor. Internal reliability of the scale was good (alpha 0.73 for information and competence and 0.87 for empathy). The heterogeneity of the sample and type of clinic attended provided good external validity of the results. However the tool was designed to evaluate a single encounter with the therapist in the sports clinic, rather than an evaluation of a course of treatment intervention therefore no measures of outcome were included. The study also involved non-NHS care where cost and convenience in relation to attendance may have been of more important consideration than the specific care received.

McIntosh et al. (1994) evaluated the quality of service delivery in a Canadian back pain clinic using a tool based on SERVQUAL (Parasuraman et al., 1988). The five dimensions of service quality (reliability, responsiveness, empathy, assurance and tangibles) identified by Parasuraman (1988) were examined in terms of three aspects of clinic performance; access, treatment and results. Five hundred and thirty two questionnaires were used for analysis from 14 participating clinics. Different aspects of service delivery were identified as being the most important. Although in non-health care environments 'reliability' is the most important factor, this was not necessarily found to be the case. 'Reliability' scores for the 'Results' dimension were likely to be low when the patient had a chronic condition, since treatment was less likely to restore these patients to a pain free situation compared to a patient with an acute problem. It was therefore suggested that thoroughly assessing the patient's problem and setting realistic expectations improves the patient's perception of the service and provides an indicator of the optimum length of treatment input.

There are obvious advantages in using established tools with proven reliability and validity in terms of the time taken to develop new ones, however this assumes that the service dimensions originally identified in other settings are those that patients attending for physiotherapy would find most salient. Although in Taylor & May's study (1995) there was some patient

involvement prior to changing the wording of the statements in the MISS, this was not the case in McIntosh's (1994) modification of SERVQUAL. The trend of recent research into patient satisfaction with physiotherapy has therefore been to develop tools that are service specific, although these have not necessarily involved patients in the item pool generation.

Taylor et al. (2002) adapted the Patient Satisfaction with Healthcare Provider Scale (PSHCPS) based on the PSQ (Ware et al., 1976a) to examine satisfaction with physiotherapy telephone advice in addition to standard management for back pain. The PSHCPS was the result of two modifications of the PSQ, by Cherkin et al. (1988) and Marsh (1999). This resulted in an 18-item unidimensional satisfaction scale in which the term 'doctor' was replaced with 'health care provider' for comparing satisfaction across disciplines. Taylor et al. (2002) subsequently substituted 'physiotherapist' for 'health care provider' and by excluding two items as inappropriate to physiotherapy care produced a 16-item scale. In a randomised controlled trial 295 subjects with back pain referred to physiotherapy OP by their GP were allocated to a control group who received usual care and an experimental group who received physiotherapy telephone advice before their usual care. A 76% response rate was obtained and results showed that subjects who received the telephone advice were more satisfied. Raw data were sent to the author of the tool (Marsh, 1999) for reliability and validity testing and this apparently demonstrated high reliability and construct validity by discriminating between the control and experimental groups in the study. However no details of the psychometric tests were published.

ii) Tools specifically designed for evaluating physiotherapy services

Marks (1994) developed a questionnaire designed for use in outpatient physiotherapy setting in Canada. The proposed taxonomy of patient satisfaction was derived from a content analysis of satisfaction questionnaire items, a survey of patients previously treated in physiotherapy, and from therapists and administrators. Three distinct dimensions of care were subsequently identified; i) access/accessibility, ii) the physical environment and iii) care quality, with an additional subscale of 'efficacy of treatment' added as an outcome measure. Dimensions of finance and availability of services were omitted from the taxonomy as being inappropriate to the Canadian health care system. The psychometric properties of the instrument had not been tested at the time of publication, so that validity and reliability measures were unavailable. Nevertheless the taxonomy was presented as a basis for individual questionnaire development appropriate to a physiotherapy outpatient setting and the sections on Care Quality and Efficacy in particular could be appropriate to NHS physiotherapy in the UK. Issues relating to 'Physical

Environment' (lighting, ventilation, space, seating, privacy) and 'Access' (location, parking, public transport) might be outside the remit of the physiotherapist in some NHS settings, although they could prove to be a sources of dissatisfaction with the service.

In an American study involving 19,834 patients over four-years, patient satisfaction was measured in 120 outpatient orthopaedic rehabilitation centres mostly providing physiotherapy services (Elliott-Burke & Pothast, 1997). The study was undertaken to support a service initiative on standard setting and outcome management and was subsequently conducted by the Gallup Organisation. An external agency was employed in order to eliminate internal bias and to give greater credibility to all participating customers. A survey tool was developed as a result of patient responses from 5 focus groups and 5 service dimensions were subsequently identified (overall satisfaction, therapist interaction, centre operations, facility and billing). The original tool (32 questions encompassing 26 aspects of the 5 service dimensions) was modified and several questions to do with billing, parking, centre equipment and questions requiring a factual response were removed. This resulted in a 17-item questionnaire with a 5-point response scale ranging from 'very satisfied' to 'very dissatisfied'. One open-ended question was added ('What one thing could the centre have done to better satisfy you?') recognising that each centre was likely to generate its own expectations and potential problems of care provision. Results showed that the key drivers of overall satisfaction were; i) explanation of treatment, ii) personal attention, iii) number of treating clinicians, iv) clinician's knowledge of patient's case, and v) patient input, which were all part of the 'therapist interaction' dimension. This supports the findings in the satisfaction literature that having an explanation for treatment was the patients' main priority. The responses to open-ended questions also supported the positive correlation between interpersonal skills and communications with patient satisfaction, but additionally highlighted two specific operational issues; continuity and waiting times. The key drivers identified had implications for the way physiotherapy services were delivered in an outpatient setting and could become part of the centre's quality initiative. However, while large surveys of this kind provide an internal benchmarking mechanism that can assist in evaluating multiple sites, from a logistical point of view they probably need an external agency to carry them out.

On a smaller scale and more in keeping with the tool envisaged in the current study, is the report of the multiphase development of a new instrument for evaluating out-patient physiotherapy services in the USA by Roush & Sonstroem (1999). Item pool development drew on dimensions of health care that were reported most frequently in the satisfaction

literature (provider conduct, accessibility/convenience, cost, physical environment, and expectations) and survey items were written and validated by therapists. These 5 dimensions were considered hypothetical components of outpatient satisfaction with physiotherapy and an assumption was made that the dimensions of care identified in the satisfaction literature parallel those found in the physiotherapy encounter. Although an 'expectation' dimension had been initially suggested this was later discounted on the basis that it failed to identify as a stable component during analysis. The authors concluded that patient expectations might not be well defined in physiotherapy and those patients unfamiliar with the service could have few, if any, clearly defined expectations when they initially attended. Following three phases of development the resulting 34-item questionnaire comprised four component scales (enhancers, detractors, location and cost). Reliability alphas ranged from 0.71-0.85 and the questionnaire was able to discriminate between satisfied and dissatisfied groups, as well as between patients with high and low attendance rates, thus supporting the structure and external validity of the scale. One of the main limitations in the applicability of this tool for use in the UK was the lack of patient involvement in item pool generation. In drawing solely on the medical satisfaction literature, dimensions of care were only hypothesised to be applicable to the physiotherapy situation. Therefore, although aspects of cost and location (14 out of the 34 questionnaire statements) might be applicable to private health care systems these components would not be appropriate for inclusion in a tool used in the NHS. Also the lack of a component on clinical outcome does not allow for the evaluation of the actual care received and could be seen as a significant deficit in the overall composition of the tool. Therefore although the tool was subject to multiphase psychometric testing and appeared to show good reliability and validity, the resulting item content appears somewhat restricted in scope.

Goldstein et al. (2000) in the USA developed an outpatient physiotherapy questionnaire with 5 principal dimensions (access, administrative management, clinical management, interpersonal management and continuity) as well as drawing on tools compiled by the American Physical Therapy Association. The questionnaire contained 20 satisfaction items within 11 dimensions, but with 6 dimensions represented only by a single item (privacy, billing, scheduling of appointment, wait time, courtesy of staff and therapist) and used a 5-point Likert-type scale. The survey, to test the psychometric properties of the tool, was conducted across 12 diverse practice settings that treated patients with predominantly, but not exclusively, orthopaedic conditions. Patients were asked to complete the questionnaire before leaving the clinic. A total of 289 questionnaires were returned from a convenience sample although there was no indication of the response rate. Tests of internal consistency and validity were conducted on

the questionnaire data that showed reliability alphas of 0.99 for the whole scale, concurrent validity with correlations >0.95 between satisfaction and summary scores, and inter item correlations ranging from 0.49 - 0.97.

Although the new tool appeared to show high reliability and validity, concerns related to the representation of certain domains by a single item only, the absence of any negatively worded items in the questionnaire and the appearance of satisfaction as a single factor. With only a single item it is not possible to develop any intra-domain variance, as variance is a reflection of the extent to which scores in a set differ among themselves. The use of positively worded items only can result in an acquiescence response set when respondents consistently check the same/similar scores throughout the questionnaire without necessarily reading the question carefully. If only positively worded items are included there is a tendency for high overall scoring and this may have contributed to the emergence of a single factor. Although the authors suggest that a single dimension underlies satisfaction, this does not accord with the literature in which satisfaction has been conceptualised as multidimensional. As with Roush & Sonstroem's (1999) study there was no patient involvement in the generation of the item pool and items concerned with aspects of the treatment process and outcomes were not included.

Variation in the content of the instruments produced by Roush & Sonstroem (1999) and Goldstein et al. (2000) prompted the development of an OP satisfaction questionnaire by Beattie et al. (2002) in the USA. This instrument was designed to assess satisfaction in patients with occupation-related musculoskeletal conditions and involved patients in initial item pool development. Following a pilot test the resulting tool comprised 18 items reflecting two broad variables (patient/therapist interaction, clinical environment), with 2 additional global measures of satisfaction. Scoring used a 5-point scale (strongly disagree-strongly agree). A survey was conducted on a sample of 9,315 with 1,868 returns, giving a 20% response rate. The resulting 10-item scale with 2 global measures of satisfaction yielded alphas of 0.9 and 0.7 for the patient/therapist interaction and clinical environment sub-scales respectively, with an overall alpha of 0.9. Patient interaction with the therapist was found to be more important than the ancillary aspects of care, in contrast to Roush & Sonstroem (1999) who found satisfaction was strongly influenced by location and cost. This tool examined satisfaction in patients with musculoskeletal conditions who had received at least 3 treatments and thus resembles the sample identified in the current study. However a distinction was not drawn between the responses from the acute and chronic groups and neither was the tool designed to measure satisfaction with the outcome of care. Concerns could also be expressed at the small number of

scale items, with only 7 dealing with the patient/therapist interaction, as well as with the low response rate.

Monin & Perneger (2002) developed a questionnaire to assess satisfaction with physiotherapy in both inpatients and outpatients in Geneva. The initial tool comprised 25 statements on the characteristics of the service, rated on a 5-point scale (poor – excellent), 2 items on future intentions and 3 open questions (reasons for return/not, strengths/weaknesses of the centre). A cross-sectional mail survey was conducted on a consecutive sample of 1,024 patients on completion of their treatment, with a 52% response. The 14-item scale with 4 sub-scales (treatment, admission, logistics, global assessment) showed good reliability with alphas ranging from 0.90 to 0.77 respectively. The final version of the questionnaire contained items that address general issues of interest in any clinical encounter, being devised by the researcher from a review of extant satisfaction instruments. However the inclusion of an item on feeling secure at all times during treatment, suggested by staff, was an exception to items commonly found in satisfaction questionnaires. As this questionnaire was designed for inpatients and outpatients not all items had equal applicability and raises the issue of using the tool in an outpatient setting only. The scale is also brief which, although desirable, could indicate that aspects of care of particular concern to patients have not been included. The tool was also developed in Geneva for a French speaking population and the English version would need to be revalidated for use in other situations.

In contrast to the tools described above that were developed outside of the UK, the Chartered Society of Physiotherapy has produced a patient feedback questionnaire as part of a set of audit tools in its revised Standards of Practice pack (CSP, 2000). This comprises 38 items relating to the waiting/appointment times, aspects of the treatment session, discharge plans and general impressions of care. It combines statements and questions and uses a variety of response categories from tick box and yes/no, to 5-point strongly agree/disagree scales. Two questions also ask whether the care received sensitively addressed patients' expectations as well as their fears and anxieties, which invite open comments if the response is negative. The content of the tool references the core standards of physiotherapy practice (CSP, 2000) with questionnaire items being a re-wording of the criteria relating to specific standard statements. As an audit tool it was designed for use with patients receiving physiotherapy care in general rather than from specific clinical areas and as such some items would not be applicable in all circumstances. In terms of answering the research questions, the content of the tool lacked the specific focus that had emerged through interviews with patients in the preliminary data

collection phases of the current study.

In conclusion, this review of the questionnaires developed to examine satisfaction with outpatient physiotherapy has highlighted the different perspectives adopted by researchers in relation to the systems of health care for which they were designed. With the exception of the CSP audit tool (CSP, 2000) none of the instruments were designed for use within the NHS system of care in the UK. Only three of them involved patients in the item pool development (Marks, 1994; Elliott-Burke & Pothast, 1997; Beattie, 2002) but content items dealt principally with aspects of process and logistics of accessing the service. Clinical outcome was not assessed by any of them, although aspects of efficacy appeared in Marks's (1994) taxonomy. Satisfaction was used as the outcome measure instead in terms of willingness to recommend the facility by Elliott-Burke & Pothast (1997), Goldstein (2000), and Monnin & Perneger (2002). Although broad patient groups were identified; orthopaedic (Goldstein; Elliott-Burke), musculoskeletal (Beattie), 'outpatients' (Roush), 'inpatients' and 'outpatients' (Monnin), these did not form part of the analysis in terms of comparison of satisfaction levels between discrete groups. Expectations were not included in any of the scales.

The lack of a suitable instrument, informed by patients, designed for use in the UK, to examine the needs and expectations of acute and chronic musculoskeletal patients with outpatient physiotherapy, therefore indicated a need for the development of a new tool.

1.19 CONCLUSIONS FROM THE LITERATURE REVIEW

Satisfaction has been shown to be a multidimensional concept and Donabedian (1966) provided the essential framework of service provision in terms of structure, process and outcome against which researchers can focus research questions. Specific, rather than global, evaluations provide more meaningful indicators both of the current state of affairs and targets for improvement or change. Due to the multidimensionality of services, individuals will tend to evaluate those aspects of particular salience to them at any particular time in terms of whether their expectations, however formed, were met or not.

The burgeoning satisfaction literature attests to the ongoing process of trying to identify the key determinants of satisfaction for different service users with the development of a variety of tools and proposed theoretical explanations. However after over 30 years, it has failed to account for an overarching 'macro' theoretical explanation for the concept of satisfaction. It is

proposed here that a theoretical explanation can be found in need theory and can provide the link in explaining the diverse aspects of an individual's satisfaction-seeking behaviour evident in the patient satisfaction literature. Patients' expectations about a service will depend on their familiarity and experience. The view taken in this thesis is that satisfaction can result from the fulfilment of patients' expectations when these expectations are informed. It is nevertheless assumed that there cannot be a single expectation/satisfaction link that would take account of the vagaries associated with an individual's attitudes, beliefs and perceptions when making an evaluative judgement. The expectancy disconfirmation paradigm has been found to provide the best fit in explaining the relationship between expectations and satisfaction by using expectations as the standard against which satisfaction judgements are subsequently made.

Whilst it has been found that similar broad dimensions of ambulatory care have been examined across disciplines, the service provided by musculoskeletal OP physiotherapists has unique features that distinguish it from other hospital clinics. Patients generally attend for a course of treatment rather than a single visit and spend more time with the therapist than in other hospital OP clinics. Service attributes can therefore be expected to vary both in relation to situational differences as well as with the therapeutic intervention being given. The literature has shown that while there were satisfaction instruments that had been rigorously tested and that formed the basis for much research in this field, these had been developed to measure satisfaction with care principally in the fields of medicine or nursing. Instruments developed for physiotherapy originated in the main from the USA where aspects of cost and access are more pertinent to that system of care. The extrapolation of these findings to physiotherapy provision in the UK should therefore be treated with caution. A gap in the research was identified and suggested the need for a new tool to examine satisfaction with outpatient physiotherapy in patients with acute and chronic musculoskeletal conditions within the NHS system of care in the UK.

As an indicator for service improvement discrete elements of care need to be identified by the service users themselves, so that the development of tools reflect patients' rather than management's views. Patients should therefore be instrumental in the developmental phases of any new satisfaction tool. By adopting a multi-stage approach in this study, factors affecting patients' satisfaction with outpatient physiotherapy were identified and informed the development of a tool to examine physiotherapy outpatient services to those with acute and chronic musculoskeletal conditions.

SECTION TWO

CHAPTER 2

METHODOLOGICAL ISSUES IN THE DEVELOPMENT OF THE STUDY

2.1 INTRODUCTION

The literature review has raised issues concerning the extrapolation of findings to the physiotherapy setting. This chapter details and justifies the methods used in the current study to answer the research questions.

The relatively small satisfaction literature in physiotherapy, the paucity of theory development in the field of satisfaction research and inconsistency in involving subjects in the development of new tools, suggested an initial exploratory and descriptive approach to the study. By stressing the context, setting and frames of reference, the subjects' views of their physiotherapy care within the NHS setting would be grounded within their experiences of service use. Following preliminary qualitative phases, quantitative techniques using statistical analysis were needed to deal with data from a larger sample in order to examine the differences between the acute and chronic groups. The methodology for the various stages of the study therefore reflected the research paradigms within which it was grounded and judged to be appropriate for answering the research questions.

2.1.1 Research paradigms

Traditionally, the two predominant philosophical approaches to research, represented by the positivist (hypothetico-deductive) paradigm of the natural sciences and the constructivist (naturalistic) paradigm of the social and behavioural sciences, have been characterised by the way their proponents respond to three basic questions (Guba,1990). These ontological, epistemological, and methodological questions deal, respectively, with the nature of reality, the nature of the relationship between knower and what can be known, and the ways in which knowledge can be found. In the positivist approach, the social world is regarded as hard external objective reality and research is likely to focus on an analysis of relationships and

regularities between its various elements. This perspective is a search for universal laws, and the importance lies in the concepts themselves, their measurement and in the identification of underlying themes. On the other hand, in stressing the importance of subjective experience in the creation of the social world, as in the constructivist paradigm, the principal concern is with understanding the way individuals create, modify and interpret the world in which they find themselves. This approach questions the existence of an external reality worthy of study and emphasises the relativist nature of the social world.

2.1.2 Philosophical approaches to the study

The first part of the study adopted the constructive approach, which aimed to elicit patients' perspective of physiotherapy within the context of their own experience with the system of care. The acknowledgement of multiple realities that were socially and experientially based and accessed through subjective interaction would accord with the notion of exploring the patients' descriptions and explanations of their experiences in a field that has been relatively little researched. The processes and occurrences were grounded within the context of the physiotherapy outpatient setting and permitted a framework within which patients' descriptions and explanations of the different events were developed. A phenomenological *perspective* guided the inquiry into the physiotherapy experience, although this was not concerned with the philosophical arguments as to the nature of phenomenology. In adopting this perspective it was incumbent on the researcher to 'bracket' any preconceptions about the nature of the phenomenon from her clinical experience of work in this area, in order to more fully understand the interpretations the subjects ascribe to in the light of their own experiences. The study therefore developed from an initial broad focus, adding knowledge and understanding of the factors affecting patients' satisfaction with their care, through a series of confirmatory and validatory stages that built on that knowledge. This methodological approach encapsulated the research topic by grounding it in the experiences of the users of physiotherapy outpatient services.

The second part of the study adopted a hypothetico-deductive approach to answer the third research question, through the development of a tool and the use of a survey design. The stating of four hypotheses that followed the earlier constructivist phases of the study permitted a framework within which the survey data were analysed to examine the differences between the acute and chronic groups in their responses to physiotherapy treatment.

2.2 STUDY DESIGN: AN OVERVIEW

It will be recalled that the principal aims of the research were to;

1. Explore the factors that affect patients' satisfaction with physiotherapy.
2. Establish which of the above factors are commonly identified by patients with acute and chronic musculoskeletal conditions.
3. Develop a tool with which to examine the level of satisfaction that these patients have with their physiotherapy outpatient care.

The study therefore has an essentially bipartite objective. Firstly to add knowledge and understanding of the phenomenon (aims 1 and 2), and secondly to assess the degree to which patients' experiences of the phenomenon exist in the study population (aim 3). The methodology chosen for the study therefore reflected these objectives and, an overview of the design is presented in Table 2.1.

Table 2.1 Overview of research method

Phase	Objective	Sample Size	Method	
Part 1	1.	Exploration of factors affecting patients' satisfaction with OP physiotherapy	8	Semi-structured interviews
	2.	Identification of principal topic categories	30	Focus groups
	3.	Development and confirmation of factors within the identified category groups	66	Multiphase interviews
Part 2	4.	Development of a tool to examine factors affecting patients' satisfaction/dissatisfaction with OP physiotherapy	420	Mailed questionnaire survey

For clarity, the study design will be dealt with in two parts. The first part deals with the strategies involved in relation to the preliminary data collection phases (Table 2.1, phases 1-3) and the second part with the survey (Table 2.1, phase 4).

2.3 RESEARCH STRATEGY: PART ONE

In the first part of the study the goal was to collect the richest possible data to inform the content of the survey instrument that was to be developed to examine the level of patients' satisfaction with physiotherapy in the acute and chronic groups. Methods of data collection appropriate to addressing the first two aims of the study identified in Table 2.1 were therefore explored.

2.3.1 Design

The two principal means of collecting qualitative data in the social sciences are participant observation, and in-depth interviews (Marshall & Rossman, 1989).

i) Participant observation.

Through participant observation the researcher becomes immersed in the setting and aims to experience the reality as the participants do, whereas in the interview the aim is to uncover the participant's perspective of the topic of interest and obtain valid and reliable information. The major advantages of naturalistic observations are an ability to collect data on a large range of behaviours, greater variety of interaction with the study participants and more open discussion on the topic. If the goal is to explore the nature of particular social phenomena with explicit interpretation of the meaning and functions of human actions, other than verbal behaviour and self-reported data, then participant observation is the necessary strategy (Atkinson & Hammersley, 1994). The main limitations of participant observation are in locating and gaining access to settings in which a substantial set of observations can be collected on the topic of interest (Lofland & Lofland, 1984) and in studying processes such as attitudes and decision-making that are inherently unobservable (Morgan, 1997). The current research was specifically concerned with the subjects' perceptions and attitudes towards their physiotherapy care, rather than with their behaviours and interaction and as such those psychological processes were not amenable to direct observation. Participant observation was therefore discounted as an appropriate strategy for the current study.

ii) Interviews.

Interviews have been categorised by Denzin (1989) into three main categories *viz.* standardized (structured), non-schedule standardized (semi-structured) and non-standardized (unstructured), and by Oppenheim (2000) into exploratory or standardized interviews.

In the standardized interview the wording and order of the questions are exactly the same for every respondent and is typical of the large-scale survey. The exploratory type incorporates the two categories identified by Denzin (1989) *viz.* the non-schedule standardized; in which a list of information is required from each respondent, and the non-standardized interviews; in which no pre-specified set of questions is employed. The main purpose of the exploratory interview is to develop ideas and research hypotheses, rather than to gather facts and statistics, and to understand how people think and feel about the topic of concern. They are therefore best suited for the early stages of research process (Oppenheim, 2000). The strengths of the individual interview are that it is a useful way to get large amounts of data quickly and allows for immediate follow-up on questions. However, limitations of the technique concern the willingness of the interviewee to share all the information that is needed by the interviewer, the level of expertise of the interviewer in framing the questions appropriately and in their personal interaction with the interviewee (Marshall & Rossman, 1989).

The exploratory interview (Oppenheim, 2000) appeared to be the most appropriate method for the preliminary data collection stages in the current study, where the aim was to gain an understanding of the research topic from the patients' perspective. Both unstructured and semi-structured formats were therefore employed and their relative success was dependent on the subsequent quality of data collected. Since little was known about patients' attitudes towards physiotherapy the unstructured format of the first pilot interviews allowed for the generation of patients' views within a very broad framework of satisfactory and unsatisfactory elements of care. When it became apparent that further structure was needed to guide the discussion a semi-structured format was used. That still allowed the free flow of ideas from the respondent but without imposing a rigid framework as would be the case with the standardised interview. Semi-structured developmental interviews were therefore conducted to develop principal topic categories relating to the physiotherapeutic encounter that could inform the detailed topic guide for subsequent in-depth interviews.

Eight semi-structured developmental interviews were conducted. Although some useful codes and categories began to emerge from analysis of the data, the researcher was not certain that the topics discussed had covered a wide enough spectrum of views. The group interview was therefore considered as an adjunct to further data collection at this stage of the study.

iii) Group interviews (Focus groups)

Although the main advantages of the individual interview lies in the amount of interviewer control and the greater amount of information that each interviewee has time to share, focus groups have high face validity for the participants and result in data expressed in lay terminology (Krueger, 1994). Group interviews or focus groups are conceptualised as a semi-structured group session, moderated by a group leader, held in an informal setting, with the purpose of collecting information on a designated topic. They are well suited for health care research, where complex clinical issues are often best explored through a qualitative approach (Carey, 1994).

Morgan (1997) suggested three basic uses for focus groups as;

- i) self-contained methods in studies as principal sources of data collection
- ii) a supplementary data source
- iii) part of a multi-method approach combining two or more means of gathering data

The strengths and weaknesses of the method relate to the two defining features of the focus group i.e. the reliance on the researcher's focus and the group's interaction (Morgan, 1997). For the researcher the method is perceived as quick and efficient compared with individual interviews. However the researcher's role may influence the group's interaction and the quality of the data. The comparisons that participants make among each others' experiences and opinions provide valuable insights into complex behaviours and motivations, but there may be variable levels of participant involvement and a tendency towards conformity and polarisation of views (Morgan 1997). Principal limitations concern the degree of control over the participants exhibited by the researcher and the logistical difficulties involved in setting up the groups (Krueger, 1994). In physiotherapy, focus groups have been shown to be appropriate for exploring patients' understanding and experience of and attitudes towards, health and health care (Sim & Snell, 1996). The method is useful in examining not only what people think, but how they think and why they think that way (Kitzinger, 1995).

Alternative qualitative methods involving group interactions, for example the Delphi technique (Reid, 1989) or brainstorming techniques (Krueger, 1994) which aim to reach consensus or decision making, were not appropriate to the addressing the research aims of the current study, where the goal was for diversity of views. The focus group was therefore judged to an appropriate additional method of data collection during the developmental stages of the study. The social interaction of the group situation helped patients to explore and clarify their views in ways that were less easily accessible in an individual interview. Four focus groups were

therefore incorporated into the study design, two comprising subjects with acute conditions and two with chronic conditions, involving a total of 30 subjects. Two of the groups were drawn from subjects at the inner city hospital site and two from the suburban site for reasons to be discussed later.

Analysis of the exploratory interviews and focus group data showed that the aims of the initial stages of the study (Table 2.1 phases 1-2) had been achieved. Consistent broad categories had emerged to guide the multiphase interviews in the main data collection phase of the first part of the study. Analysis also permitted a tentative model to be developed. Experience in conducting the exploratory interviews and focus groups had shown that using a more detailed topic guide increased the range of issues discussed. This led to the consideration of alternative ways in which the respondents could be prompted to discuss the topics of interest in depth, while at the same time encouraging the spontaneous generation of issues perceived to be of particular salience to them. Individual interviews were again chosen but using a multiphase format incorporating three phases. These are described in detail on pages 175/6 but briefly here. In an initial unstructured phase subjects were asked to recall and discuss the most salient aspects of their recent course of treatment. A card ranking phase followed in which subjects ranked 6 topic cards representing discrete dimensions of the physiotherapy process from most to least important. They were then asked to explain their choices. In the concluding section the cards were turned over to reveal descriptor statements of the principal dimensions and subjects given the opportunity to add any further comments. This section acted as a member check by validating subjects' discussions in the earlier part of the interview. Multiphase interviews were conducted until it was apparent that no new or relevant data were emerging in relation to the categories identified and that saturation had occurred (Strauss & Corbin, 1990). Sixty-six interviews were conducted in all.

2.3.2 Selection of subjects

As discussed in the Introduction to the study (see page, 18) evidence from the literature suggests that there could be differences in the way acute and chronic subjects perceive their care and evaluate the clinical outcome of treatment (Condie,1991;Walker, 1995). Subjects with chronic conditions and symptoms present for longer than 6 months (Geisser et al, 1994) were those in whom degenerative changes had occurred in their joints such that treatment intervention would at best result in alleviation of symptoms, rather than a cure. Acute conditions on the other hand resulting from recent trauma have been shown to benefit from

immediate treatment intervention which augments the natural process of healing (Kesson & Atkins, 1998) and may be expected to result in a 'cure'. Subjects with acute and chronic musculoskeletal conditions were recruited into the study on the basis of the following criteria,

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Certain groups of subjects were excluded from the study;

Subjects under 18 years of age

Non-English speaking patients

Subjects with a diagnosis of cognitive impairment

These exclusion criteria were used for the following reasons. Subjects attending for adult physiotherapy are over 18 years of age. It was recognised that the exclusion of non-English speaking subjects, due to financial constraints (interpreters, translators), would lead to some limitations in the degree of extrapolation of the results. While recognising that there are issues concerning the perception of physiotherapy services by the ethnic minorities, these were not being addressed by this research. Finally, patients with a medical diagnosis of cognitive impairment were excluded, as it was important that subjects should be able to fully understand the purpose and nature of the study. For the interview stages subjects needed to be able to recall and discuss their recent physiotherapy experiences and for the survey to be able to understand and fill in the self-completion questionnaire.

In adopting a phenomenological approach to the developmental stages of the study, the sample population comprised respondents who had an intimate knowledge of the phenomenon under investigation in order to provide the researcher with understanding, insight and comprehension about the experience from the participant's perspective (Morse, 1994 a). It was important not only to recruit subjects who had had recent experiences of physiotherapy, but also those who were illustrative of the particular subgroups of interest, in order to facilitate comparisons between the two. Purposeful stratified sampling, in which 'information-rich cases' were selected for in-depth study (Patton, 1990) was chosen as the appropriate strategy with respect to subjects from the acute and chronic groups. Approximately equal numbers of acute and chronic cases were selected representing a range of age groups in both genders.

2.3.3 Recruitment of subjects

The researcher drew up discharge lists of potential subjects from the outpatient files in the participating outpatient physiotherapy departments. Subjects who had been discharged from treatment within the previous four months were chosen for interview to allow for recall of the recent physiotherapy experience. It has been shown that the more important the event, the easier it is for the respondent to remember. Sudeman & Bradburn (1982) identify three dimensions that distinguish between events that are more or less salient;

1. The unusualness of the event
2. The economic and social costs/ benefits associated with the event
3. The continuing consequences

Within this framework, memory for highly salient events is satisfactory for periods of a year or possibly more, even up to 2/3 years. For low salient events, periods of between 2 weeks to a month are appropriate, while for intermediate saliency periods of 1-3 months are most widely used (Sudeman & Bradburn, 1982). It was reasoned that a course of physiotherapy would be regarded as being of intermediate salience to the sample, particularly if it was associated with a specific event e.g. an accident, or a period of specific pain and/or reduction in function. However, a longer time frame was deemed justifiable for the methodology used at this stage of the study, since individual and group interviews were going to be employed with the opportunity to prompt subjects to recall recent events. When events are irregular or are more difficult to recall they can be aided by the use of boundaries, e.g. linking them to notable dates or recreating the mood or situation in which events took place (Mangione, 1995). The longer time frame also permitted an extension of the search for subjects meeting the entry criteria to be made, should the available list of appropriate discharges prove to be inadequate within the shorter term.

Following the selection of potential subjects from the physiotherapy outpatient discharge lists, the researcher contacted each of the subjects by 'phone, gave them an outline of the study and asked if they would be willing to participate. For those who agreed and who were to be seen for individual interview, an appointment was made immediately for about a week in advance. Subjects were given the researcher's contact number in case they subsequently decided not to participate. When they came for interview/focus group a week later they were asked to give their written consent to involvement in the study and were also advised that they could change their mind and withdraw from the study at any time. Subjects were given the choice of day (M-F), time (within working hours) and location (home or hospital). Subjects consenting to attend

for a focus group were, following the 'phone call, additionally sent written details of the study together with a map of the venue. These letters were sent out approximately 10 days before the date of the focus group. All focus groups were held on hospital premises but away from the main physiotherapy department. Subjects attending for individual as well as group interviews were advised that the session would last about an hour.

In order that a range of views on the research topic should be obtained, the sample was drawn from hospital sites in contrasting geographical locations. Individual interviews and focus groups were conducted within an inner city and suburban Hospital Trust, which were shown to differ with respect to the Department of Environment, Transport and the Regions (DETR) Index of Local Deprivation (ONS, 2000). This allowed for the views of patients receiving physiotherapy treatment under different hospital regimes, as well as drawing on populations of contrasting sociodemographic characteristics

2.3.4 Sample size

Sample sizes for the developmental stages of the research were specified provisionally at the beginning of the study based on numbers that were expected to give reasonable coverage of the phenomenon (Patton, 1990). However because of the exploratory nature of the research, the design remained flexible so that further subjects and additional methodology could be incorporated into the design in order to maximise the quality of data collected to answer the research questions (Marshall & Rossman, 1989). Qualitative studies usually involve small samples grounded in the context of the research topic and studied in depth, rather than large numbers that are context free and seek statistical significance, as in the case of quantitative research (Miles & Huberman, 1994). Following four pilot interviews, eight subjects were recruited for interview from which the data were expected to inform the topic guide for 40 subsequent in-depth multi-phase interviews. In the event, an additional phase of data collection (focus groups) involving 30 subjects became necessary between the two initially planned stages in order to provide further illumination of the research topic. Twenty-six additional subjects were also involved in the in-depth multi-phase interviews, resulting in a total of 108 subjects recruited for the developmental stages of the study.

2.3.5 Reliability and validity of the methodology

The first part of the study adopted a constructivist approach using qualitative methods, to explore the experiences of subjects with their physiotherapy care, rather than in the verification of *a priori* conceptions of those experiences. Guba and Lincoln (1989) have proposed that the criteria for judging research within the conventional (positivist) paradigm of internal and external validity, reliability and objectivity, are inappropriate in relation to research that adopts a constructivist perspective. Instead they suggest four criteria of 'trustworthiness', that parallel the rigor of the criteria used in the positivist paradigm as being more appropriate for judging studies using qualitative designs, *viz.* credibility, transferability, dependability, and confirmability.

i) Credibility.

In the positivist paradigm, internal validity defines the extent to which variations in an outcome or dependent variable can be attributed to controlled variation in an independent variable. However from a constructivist stance, the 'credibility' criterion (truth-value) parallels internal validity by focussing on establishing a match between the constructed realities of respondents and the realities as represented by the evaluator (Guba & Lincoln, 1989). In the current study, credibility of the interview data was enhanced through faithful description and interpretation of the data, aided by tape recording and full transcription of all individual and group interviews. Accuracy of interview transcripts was checked against the tape recordings, particularly those transcribed by clerical assistants, and amendments made as necessary in areas where the tape was indistinct and gaps had occurred in the transcript. The use of multiple methods of data collection and data sources provided the opportunity for member checking (clarification, explanation, elaboration and validation) of the issues at each of the developmental stages. In the preliminary interviews the conversational style permitted the researcher to directly ask for clarification and elaboration of topics raised by the subjects as necessary. The structure of the focus groups allowed for a final summing up phase by the researcher providing subjects with the opportunity to correct any misinterpretations she had made of the proceedings. In the third phase of the multiphase interviews descriptors of the principal dimensions of care on the reverse of the topic cards cued respondents to validate their earlier views as well as stimulating additional comments on each of the topics. The use of verbatim accounts and direct quotes also aided the interpretation of results and permitted the examination of negative cases and divergent findings. While the researcher-subject relationship both enhances and threatens the credibility of a qualitative study (Sandelowski,

1986), the researcher aimed to 'bracket' her own experiences and knowledge in adopting a phenomenological perspective and to recognise the interpretation of the subjects' perceived reality rooted in the historical context of their experiences.

ii) Transferability.

Transferability is thought to parallel external validity (Guba & Lincoln, 1989) which in the positivist paradigm refers to the generalisation of results and the representativeness of subjects, tests and testing situations. In the constructivist approach, the major technique for establishing the degree of transferability is to provide an extensive and careful description of the time, place, context, and culture, in which the hypotheses for the study were found to be salient (Guba & Lincoln, 1989). The subjects for the developmental stages of the current study were selected because they could illuminate the phenomenon being studied and were of relatively small number compared with the statistically determined samples needed for quantitative studies. The samples were therefore not representative in the quantitative sense but each subject was considered to represent the group from which he was drawn. Although it was possible that those who agreed to participate might have had different characteristics to those who refused, each respondent's contribution to the research topic was considered appropriate to the study (Sandelowski, 1986). The theoretical models that were subsequently derived from the extensive interview data permitted a 'fit' into contexts outside of the study setting, and were grounded in the typical and atypical experiences of all the respondents.

iii) Dependability (auditability).

In relation to the positivist criterion of reliability that is concerned with the stability of data over time, dependability in the constructivist paradigm allows for methodological changes and shifts in constructions, as expected products of an emergent design, which are hallmarks of a maturing inquiry (Guba & Lincoln, 1989). For each stage of the interview data collection phases, details of the exact method of data gathering, analysis and interpretation were made explicit. The use of illustrative accounts and verbatim quotes highlighted the variations in the respondents' experience, so that further illumination of the topic rather than replication was achieved. Colleagues were additionally used to check the analysis and interpretation of the data at different stages of the study (peer review) to further enhance its dependability.

iv) Confirmability.

Confirmability may be thought of as parallel to the positivist criterion of objectivity and is concerned with ensuring that the data, interpretations and outcomes of the inquiry are rooted in the contexts and persons, apart from the researcher, involved in the study (Guba &

Lincoln, 1989). This requires that the data can be tracked to their sources and the logic used to assemble the interpretations into structurally coherent and corroborating wholes is both explicit and implicit in the narrative of a case study (op.cit. p. 243). In the current study this criterion was met through an explicit audit trail that accompanied each stage of the data collection phases. The influence of the researcher on the data and its interpretation was, nevertheless, also recognised because of the interactive nature of this qualitative phase of the study.

2.4 RESEARCH STRATEGY: PART TWO

This section describes the development of the survey tool that was used to address the third research aim to examine the level of satisfaction that patients with acute and chronic musculoskeletal conditions have with their physiotherapy outpatient care. The purpose of the preliminary data collection phases, involving individual and group interviews was to inform the item pool development of the tool through the identification of principal category headings and representative item statements.

2.4.1 Design

While the preliminary individual and group interviews offered the opportunity to correct misunderstandings, control for incompleteness and did not disadvantage those with reading or language difficulties, they were too expensive and time consuming to reach a large and widely dispersed sample (Oppenheim, 2000). Since the third research aim was to examine the level of satisfaction with physiotherapy in a larger population of patients in the acute and chronic groups a survey was deemed a more appropriate method for this stage of data collection. Surveys involve *systematic* observation or *systematic* interviewing. They ask the questions the researcher wants answered and often dictate the range of answers that may be given (Sapsford, 1999) (*italics in original*). Standardisation lies at the heart of survey research and may take the form of the telephone survey, a self-administered questionnaire or mailed questionnaire survey.

i) Telephone survey.

The advantages of telephone surveys are that, with appropriate resources, it is possible to conduct a survey in a very short space of time and to cover a wide geographical area. However, principal limitations concern the representativeness of the sample that might be

obtained, as not all of the sample population may have access to a telephone. Additionally those who were not at home, or whose line was engaged when the survey was conducted would have no chance of being in the sample, particularly if the survey was carried out on a single occasion with little or no call backs. (Bourque & Fielder, 1995). These principal limitations precluded the telephone survey from consideration as the method of choice in the present study.

ii) Self-administered questionnaire

The self-administered questionnaire is usually presented to the respondents by the researcher or research assistant(s) who then collects it following completion, while in the group-administered questionnaire all the respondents are assembled together. Although the former would ensure a high response rate, accurate sampling and minimum interviewer bias (Oppenheim, 2000) the time taken to accrue the desired sample size with respect to the entry criteria could have been prohibitive. It would also have necessitated extra time to identify subjects meeting the study's entry criteria on the day they were being discharged from treatment thus increasing the burden for the individual outpatient therapy staff. Administering a group-administered questionnaire would have presented logistical difficulties and required the training of research assistants to help with the administration of the questionnaires in the diverse geographical sites.

iii) Mailed questionnaire survey.

The mailed questionnaire survey therefore offered the most practical solution for the study and Mangione (1995) identifies the advantages of the mailed survey as follows. It allows,

- A large number of respondents to be surveyed in a relatively short period
- Relatively inexpensive to conduct
- Respondents time in answering and at times that are convenient
- Respondents privacy in responding
- For visual and not just auditory input
- Respondents to see the context of the series of questions
- Insulation of the respondent from the expectations of the interviewer

However disadvantages of mailed surveys have also been identified (Oppenheim, 2000) as,

- Resulting in generally low response rates and consequent biases
- Unsuitable for respondents of poor literacy, the visually handicapped, the very old and people with language difficulties

- Providing no opportunity to correct misunderstandings, probe or offer explanations
- No check on incomplete responses/questionnaires or the passing on of questionnaires to others

The disadvantages of the mailed questionnaire had been anticipated in planning the study and steps taken where possible to address them in terms of the survey design. Problems of literacy and language were largely dealt with by reference to the exclusion criteria. Misunderstandings and explanations were addressed by the clarity of question wording derived and validated through the interviews from a similar population of respondents. Bounding of the topic within the subject's personal treatment experience could preclude the passing on of the questionnaire to another, although this could not be guaranteed. In terms of the anticipated low response rate of postal surveys over-recruitment was employed (discussed below). The principal advantages the mailed self-completion survey (low costs for data collection and processing and the ability to survey respondents in a wide range of geographical locations) suggested this to be the method of choice for the final data collection phase of the study. The survey was conducted in a cross-sectional design with a single administration of the questionnaire to canvass subjects' views of their recent physiotherapeutic experience.

2.4.2 Selection of subjects

Subjects eligible to participate in the survey were subject to the same inclusion and exclusion criteria as those in the preliminary stages of the study being drawn from acute and chronic musculoskeletal groups (see page, 114).

2.4.3 Recruitment of subjects

Subjects were recruited for the pilot survey from a convenience sample of physiotherapy outpatient departments in five Health Districts from the North Thames Region. They were chosen to provide contrasting areas from which to draw the patient population compared with the earlier phases of the study. Each site was required to identify subjects from their discharge lists meeting the entry requirements of the study. Thirty subjects were recruited from departments with more than 4 whole time equivalent (WTE) and 20 from departments with less than 4WTE to produce a total sample size of 120 (see section 6.2 page 233). Self-completion mailed questionnaires were sent from each participating site with instructions to respondents to return them directly to the researcher.

Three Health Regions in England were chosen in which to conduct the main survey (Northern & Yorkshire, West Midlands and the South & West) representing populations of differing socioeconomic groups (ONS, 2000). Since health behaviours have been linked to social class and areas of affluence/deprivation (Social Trends, 2001) it was hypothesised that this would provide a mix of respondents in terms of their experiences of health care.

As the sampling frame within these Regions was unknown, it was not possible to draw a straightforward random sample and thus control for random sampling errors. However, two strategies of sample selection were employed that permitted a reasonable approximation to a random sample i) cluster sampling, and ii) stratification (Sapsford, 1999).

j) Cluster sampling

In cluster sampling the geographical location and distribution of the sample is known although their identities are not. It is therefore possible to sample first the geographical units, and subsequently as many sub-units as necessary until a random sample of individuals can be drawn from the smallest unit (Sapsford, 1999). Multistage cluster sampling was chosen for the survey and the initial stage involved sampling the geographical regions chosen with respect to hospitals identified from the Medical Index that had Orthopaedic, Accident & Emergency and Rheumatology outpatient clinics. The inclusion of these clinics was particularly relevant to the study since in-house referrals for physiotherapy outpatient treatment come principally from these sources, in addition to referrals from local General Practitioner practices. In the next stage, a simple random selection was made of all physiotherapy outpatient departments within these hospitals with more than 4 (WTE) members of OP staff. The size of the physiotherapy outpatient departments was important in ensuring that a large enough caseload was being carried, otherwise the time taken to gather an adequate sampling frame from which randomisation of subjects was to be made could have been prohibitive. The number of departments chosen in each Region reflected their total geographical populations. Of the fifteen sites estimated to produce the required sample size (see below) six were chosen from Northern & Yorkshire (pop. 6,359,305), five from the West Midlands (pop. 5,338,367) and four from the South & West (pop. 4,923,171). In the final stage of cluster sampling, a simple random selection of subjects meeting the criteria for the study was made by the researcher from the discharge lists supplied by the participating physiotherapy outpatient departments, with each sampling area yielding 30 respondents following randomisation.

ii) Stratification

The principal of stratification, maximum distinction *between* groups with maximum homogeneity *within* groups (Sapsford, 1999) (italics in original) was used in the final stage of the cluster sampling to improve the representation of the sample in relation to the acute and chronic sub-groups. This process is described in more detail in section 7.2 (pages 250/1) but briefly here. Eligible subjects (identified by initials, gender and age) were entered on coding sheets in two columns representing the acute and chronic sub groups respectively and each entry was numbered in sequence from 1 to x (depending on the number of subjects returned from each physiotherapy department). Using a table of random numbers 15 acute subjects and 15 chronic subjects were subsequently randomly selected from each participating site.

2.4.4 Sample size

The purpose of the survey was to compare the responses of the acute and chronic groups in relation to their recent physiotherapy treatment experiences, but did not involve an experimental design. It had been mentioned above in connection with the sampling frame, that probability sampling was not employed although an approximation in terms of cluster sampling was used. Since the survey was considered a pilot study and there was no information on the variability of the data it was not possible to do a sample size calculation. (Personal communication from statistician). The sample size for the current study was therefore not calculated on statistical grounds. The methods of analysis to be used on the survey data, which included descriptive statistics, correlation, and differences between groups, guided the decisions made of the number subjects required. In terms of statistical techniques for aggregating variables, Nunnally (1978) proposed that there should be at least 10 times as many subjects as variables. The sample size could therefore be a maximum of 380, in relation to the 38 variables (item statements) that comprised the questionnaire. Comrey (1973) proposed a scale from which the adequacy of sample size might be evaluated, in which 200 = fair; 300 = good, and 500 = very good. Sapsford (1999) suggested a useful rule of thumb in having at least 40 cases for each independent variable that was to be entered into the analysis, on the assumption of an equal split between the categories of the variables. However since sampling error is reduced by increasing sample size, 100 cases of each variable were preferable, which in the current study would have produced a sample size of 200 for the acute and chronic groups. With regard to these various recommendations a sample size of around 300 subjects was judged to be achievable within the resources and time scale of the study. This allowed for eight participants for each of the 38 variables in the questionnaire, or 150 subjects per group, and a sample size that would be regarded as 'good' (Comrey, 1973).

2.4.5 Response rate

In order to achieve 300 returns for analysis, over-sampling was employed. The standard safeguard against bias of the responding sample is to achieve near 75% response rate or higher if possible (Mangione, 1995). However no single rate is considered standard and in some surveys between 95-100% is expected while in others 70% is adequate (Fink & Kosecoff, 1998). An initial sample size of 420 was therefore estimated with an anticipated non-response rate of around 30% to produce the 300 usable returns required for analysis (30 respondents from each of 14 sites).

2.4.6 Non-respondents

The effect of non-response on survey estimates depends on the percentage not responding and the extent to which those not responding are biased (systematically different) from the whole population (Fowler, 1984). In order to reduce the degree of bias the following strategies were adopted (Sapsford, 1999; Fink & Kosecoff, 1998; Oppenheim, 2000; Fowler, 1984).

- Explanatory letters about the research, selection procedure, and opportunity to decline accompanied each questionnaire
- Respondents were assured of confidentiality of any information provided
- Questionnaires were addressed to subjects personally
- Stamped addressed envelopes were included for returns
- Follow-up letters encouraging returns sent to non-respondents 2 weeks after the initial mailing
- The colour, layout, length, style of presentation of questionnaire were all addressed with reference to the literature
- An assumption that the topic would be of interest to the respondents as it involved health care

The following steps were taken to deal with non-response;

- Subjects were encouraged to explain their reason for not participating in the study in the introductory letter
- A method of sociodemographic checks was included in the design through questionnaire coding
- The indication and direction of the bias due to non-response was reported in the Results section of the survey responses

2.4.7 Recall bias

The sampling frame for the survey included those subjects meeting the entry criteria for the study, who had been discharged within 3 months of completing a course of outpatient physiotherapy. This time frame was in line with the most widely used period of recall of events of intermediate salience (Sudeman & Bradburn, 1982) discussed earlier (page 116) but shorter than that used when recruiting subjects for the interview stages of the study. While there was the opportunity to aid recall using boundaries during the interviews (Mangione, 1995) this was not possible in the survey, although the mailed self-completion format allowed the respondents time to think about their answers thereby further stimulating their memory for events (Fowler, 1984). A three-month time frame was therefore used.

2.4.8 Questionnaire format

The item content of the questionnaire was developed from the data analyses of the individual and group interviews in the preliminary phases of the study. This analysis permitted the identification of those areas of care that were of particular importance to the subjects to be elicited, and for a list of topic areas to be drawn up under each of the main themes identified for the study. The questionnaire therefore contained statements about each of these topics, in order to contribute to the content validity of the tool which constituted a multi-item measure. The main purpose of the measure was to discriminate between the acute and chronic musculoskeletal groups in relation to their satisfaction with outpatient physiotherapy care as a means of describing differences in health experience and of identifying areas of need. Consideration was therefore given to the most appropriate form of questioning that should be used for the instrument.

Mangione (1995) describes two broad classes of question that can be used in questionnaires,

1. Open-ended, in which no specific categories of response are given and the respondents answer in their own words
2. Closed-ended, which give the question and present alternatives for the respondent to pick the answer that best represents his/her situation

Open-ended questions are either short e.g. questions of age or gender, or long, when they are usually placed at the end of the survey to elicit further information. Although long open questions can offer insight into why people believe the things they do, they are difficult to interpret unless accompanied by an elaborate coding system, whereas closed-ended questions are easier to interpret (Fink & Kosecoff, 1998). Many respondents also leave long open-ended

questions blank with only between 25%-50% contributing additional comments (Mangione, 1995). However short and long open questions were used both to elicit information on gender, age, and employment status, necessary to the interpretation of the results and to allow respondents the opportunity to make any additional comments in their own words. For the main body of the questionnaire items were worded as statements of opinion (closed questions) as to whether the respondent had experienced a particular aspect of care in the course of their physiotherapy treatment. These statements drew on the wording used by the subjects in the course of the earlier developmental interviews.

In order that the responses could be combined to produce a score, a rating scale followed each item statement. Rating scales include a list of alternatives that range from not much of a particular attribute to a great deal of the same attribute, and can be either unipolar (e.g. excellent – poor) or bipolar (eg. strongly agree – strongly disagree) (Mangione, 1995). In the case of bipolar scales it is more important to use an odd number of options that create a natural middle point (don't know/ not sure) particularly when asking knowledge or attitudinal questions. Scales should also be balanced with an equal number of points above and below the mid-point.

Likert (1932) proposed a technique in which questionnaire items were presented in such a form as to permit a judgement of value rather than a judgement of fact. Each statement becomes a scale in itself and a person's reaction to each statement is given a score, which is then combined by using a median or a mean. Values from 1 to 5 are assigned to each of the five different positions on the five point statements. The 1 is always assigned to the negative end of the scale and the 5 to the positive end of the scale. After assigning the numerical values to the possible responses, the score for each individual is determined by finding the average of the numerical values of the positions checked (Likert, 1932). Assessment of the validity of the scale is based on the premise that it is dealing with verbal behaviour and verbal reactions only. In declaring oneself in favour of one issue and opposed to another these declarations are accepted as symbols for overt acts and would therefore seem to be valid indices of other habits. However the possibility of responses being given by the subject which are judged to be socially acceptable rather than honest should be acknowledged (Likert, 1932).

Advantages. The Likert scale has been shown to be as reliable as that devised by Thurstone (1928) in which the distribution of attitude of a group on a specified issue was represented in the form of a frequency distribution (Oppenheim, 2000). It is less laborious to construct and

can achieve its aim as a measure of attitude with half the number of items. Additionally the scales have been shown to differentiate between the attitudes of different groups and between people in the same group (Likert, 1932). The scales provide more precise information about the respondents' degree of agreement and disagreement, and allow for the inclusion of items which enable more subtle explorations of the attitude in question (Oppenheim, 2000).

Disadvantages. The principal disadvantage of this type of scale is that the same total score can be obtained in different ways so that those identical scores can have different meanings. Since the scale offers no metric or interval measures, it cannot be determined where scores in the middle ranges change from mildly positive to mildly negative and the neutral-point of the scale is not necessarily the mid-point between the two extreme scale scores (Oppenheim, 2000).

A Likert 5-point scale was chosen for the questionnaire as being the most appropriate to the design of the study. All statements were given the same graded responses of 'strongly agree' (score 5) to 'strongly disagree' (score 1) with higher overall scores therefore indicating greater satisfaction. In order that the statements should be interpretable they were located at the end of the continuum (either positive or negative) and comprised a single dimension only (Fowler, 1984). Positively and negatively worded questions were randomly positioned throughout the questionnaire to control for acquiescence response bias (Ware, 1978) and central tendency bias was controlled for by the range of choices offered in the rating scale. The order effect in answering questions was not controlled for, as it is not so great with mailed questionnaires since people can look at all the items in their own time (Mangione, 1995).

2.4.9 Appearance of the questionnaire

In order to improve the response rate of the questionnaire, attention was directed towards its appearance and the ease of completion. Aspects of layout, printing, colour, spacing and answering directions (Oppenheim, 2000) were all taken into consideration and the tool was piloted before the main survey on a sample of respondents similar to those who would eventually complete the survey (Fink & Kosecoff, 1998). The questionnaire was presented in booklet form comprising 3 pages, using 11 point Arial script in black type, in a horizontal layout, on lightly coloured paper. Statements were grouped within a 7-box layout to avoid the impression of density. The instruction sheet comprised the first page of the questionnaire and was an integral part of the booklet format ensuring that it did not get detached. Respondents were instructed to circle the number for their opinion that was nearest to their own view about each statement and this was the consistent method of scoring used throughout the tool. Open-

ended questions on demographic details and a box for respondents' additional comments were included at the end of the questionnaire, together with a final reminder to ensure that all questions had been answered (Bourque & Fielder, 1995).

2.4.10 Reliability and validity of the tool

1) Validity.

A measuring instrument is valid if it does what it is supposed to do. Nunnally & Bernstein (1994) identify three major functions of psychological measures and their corresponding types of validity;

- Establishment of a statistical relationship with a particular criterion (predictive validity)
- Sampling from a pool of required content (content validity)
- Measurement of psychological attributes (construct validity)

In practice these three types of validity complement each other, however in relation to the current study predictive validity was the least applicable.

a) Predictive validity.

Predictive validity concerns using an instrument to estimate some criterion behaviour that is external to the measuring instrument itself (Nunnally & Bernstein, 1994). There is currently no criterion measure ('gold standard') available with which to correlate the new tool, as existing instruments have either been developed for use within a different health care system to the NHS, or with different patient populations to those in the current study. The validity of the current tool therefore depended primarily on content and construct validity.

b) Content validity.

Content validity of the tool depends on the adequacy with which a specified domain of content is sampled and two major standards for ensuring this are;

- A representative collection of items
- 'Sensible' methods of test construction (Nunnally & Bernstein, 1994)

The issue of content validity was addressed during the development and construction of the tool. Since the sampling unit or domain was not well specified it was necessary to formulate a collection of items that broadly represented the domain of interest. The content of the tool was informed by the interview data collected in the first part of the study, in which subjects were asked to evaluate their recent physiotherapy care. This resulted in the development of an item

pool of statements that were representative of subjects' perceptions of both the positive and negative elements of the treatment encounter. The multi-phase interviews in particular were designed to provide subjects with the opportunity to express, elaborate and validate their views of care, thereby reflecting the underlying values that guided their choice. Item statements finally chosen for the tool were judged to represent elements of each of the six principal categories relating to subjects' physiotherapy experience that emerged from the interview data. Content validity rests primarily upon an appeal to the propriety of content, the way that it is presented and to the extent that one can generalise from a particular collection of items to all possible items in a broader domain of items. However it can be difficult to construct items that most people will agree are satisfactory (Nunnally & Bernstein, 1994). Peer review permitted validation of the statement groupings, although Morse (1994 b) posits that expecting another investigator to have the same insight from a limited database is unrealistic and that the quantitative model of ensuring reliability and validity by using external raters is not recommended for qualitative research.

A review of findings from the satisfaction literature and a comparison with extant satisfaction instruments showed that general topic areas thought to be indicative of service satisfaction were covered in the questionnaire, thus providing support for content validity.

The new tool is still in the developmental stage, and a single study cannot confirm the validity of the instrument, however the collection of item material was as representative as possible of the principal domains of interest.

c) Construct validity.

The third type of validity, construct validity, depends on the extent to which results obtained from using the measure would remain the same if other measures in the domain were used (Nunnally & Bernstein, 1994).

There are three major aspects of construct validation,

- Specifying the domain of observables related to the construct
- Determining the extent to which the observables tend to measure the same thing, several different things or many different things from empirical research and statistical analysis
- Performing studies of individual differences/experiments to determine the extent to which supposed measures of the construct produce results that are consistent with accepted theoretical hypotheses concerning the construct

In relation to the first aspect of construct validation, a main limitation of the patient satisfaction literature is the lack of an accepted definition of the term 'satisfaction' and a theoretical basis for the construct. For this study 'satisfaction' was defined as a sense of contentedness, achievement or fulfilment that results from meeting patients' expectations and needs with respect to specific and general aspects of health care. These aspects of care were operationalised in relation to the physiotherapy experience in terms of discrete elements of care, representing the domain of the construct as identified for the study.

With respect to the second aspect of construct validity the adequacy of the domain relating to the construct was tested using factor analysis to determine how well the item statements, as operationalised measures of the construct, correlated with each other. The measures split into clusters, which in general accorded with the hypothesised structure of the tool, and supported the notion that the domain of 'satisfaction' for physiotherapy comprised a number of related but discrete elements. Tests of internal consistency provided further evidence of the internal structure of the individual scale items and of the scale as a whole. However, it is recognised that it is not possible to prove that any combination of variables actually 'measures' the construct (Nunnally & Bernstein, 1994. quotations in original). In the satisfaction literature the issue of construct validity has rarely been considered (Kinnersley, 1996) although results from numerous studies over the last 30 years using the construct name 'satisfaction' provide circumstantial evidence that those instruments are measuring elements of the domain related to the construct name. Content validity is supportive of construct validity in that the same procedures required to ensure content are intimately related to defining the domain of variables in construct validity.

The current stage of the development of the new tool precluded the third component of construct validity from being addressed in this study.

2) Reliability.

The reliability of a measure is the extent to which it yields the same results in repeated applications on an unchanged population or phenomenon, and three types of reliability are considered important in the assessment of instruments (Wilkin et al., 1992);

- i) Test-retest reliability (consistency over time)
- ii) Inter-rater reliability (consistency of different users of the instrument)
- iii) Internal consistency of items (to what extent do all the items measure the same dimension)

In relation to the aims of the current study and the stage of development of the tool, only the third aspect of reliability (internal consistency of items) was deemed an appropriate test.

In terms of test-retest reliability, two major limitations have been identified. One is that the first testing will influence the responses of the second test, to the extent that responses are remembered and repeated. Secondly, there may also be real changes in the subjects over time actually reflecting the responsiveness of the instrument to these changes (within-subject variation) rather than random error (Wilkin et al., 1992).

Inter-rater reliability is important for any measure that requires judgement or observation to be made by the person using the instrument (Wilkin et al., *ibid*). In the current study the measure was a self-completion questionnaire and therefore did not depend on the consistency of performance between raters for its administration.

The most appropriate test of reliability in developing the new tool was that of internal consistency of the scale, using coefficient alpha. Coefficient alpha sets an upper limit for the reliability of tests constructed in terms of the domain-sampling model based upon observed correlation (Nunnally & Bernstein, 1994). In this model any particular measure is considered to compose of a random sample of items from a hypothetical domain of items although in practice items are composed for particular measures. The reliability of scores obtained on a sample of items from a domain increases with the number of items sampled. Thus an individual item would be expected to have only a small correlation with true scores i.e. the score any subject would obtain over the whole domain. Reliability depends on the average correlation among items and the number of items, with the major source of error within a test being due to the sampling of items. According to the domain-sampling model each person has a particular probability of correctly answering each item, depending on the person's true score and the difficulty of the item. The more items in the test the less would be the error. The same would be true of agree/disagree statements, as used in the current study, where each person has a set probability of agreeing with each statement which in turn would lead to an expected number of agreements with the sample of items. In the early stages of research Nunnally & Bernstein (1994) suggest that modest reliability levels of ≥ 0.7 would be sufficient. This standard was therefore used during the testing of the scale in the current study.

2.4.11 Ethical considerations

Ethics Committee approval and permission from Physiotherapy Managers at all participating sites was obtained prior to conducting the various stages of the research. Subjects seen for interview, both individual and group, were required to sign a written Ethics Committee consent form assuring them of data confidentiality and permitting withdrawal from the study at any time without compromising any future physiotherapy care. The researcher introduced herself to all the interviewees as a physiotherapist. The study was explained as being of particular interest to physiotherapists in general not just to the hospital at which the interviews were held. The researcher knew none of the interviewees personally and had not been working in the department at the time when the interviewing stages of the study were being undertaken.

In relation to the main questionnaire survey, the Multicentre Research Ethics Committee (MREC) required that, in order to maintain patient confidentiality, patients' personal details should not be divulged to the researcher. This therefore necessitated a two-stage procedure in randomising the samples at each site (discussed in Chapter 7) and in the questionnaires having to be sent from, and returned to, the local physiotherapy departments before being forwarded on to the researcher. Written consent was not required from subjects completing the survey questionnaire, as participation was voluntary and subjects were under no obligation to respond. Personalised letters accompanied each questionnaire explaining the purpose of the study and inviting participation. Those respondents who did return their forms therefore implied consent to participating in the study.

2.5 SUMMARY

Multiple methods of data collection involving individual interview, group interview and survey, combining qualitative and quantitative techniques, were used to generate a rich and detailed picture of the research topic. Data triangulation (Denzin, 1989) permitted data to be collected from two contrasting groups of subjects, those with acute and chronic musculoskeletal conditions, to obtain diverse and comparative views in relation to answering the research questions.

CHAPTER 3

AN EXPLORATION OF PATIENTS' PERCEPTIONS OF THEIR PHYSIOTHERAPY TREATMENT: 1. DEVELOPMENTAL INTERVIEWS

3.1 INTRODUCTION

The initial phases of the study were exploratory and concerned with eliciting patients' views of their recent physiotherapy treatment. The following two chapters (3 & 4) detail the progressive data collection phases that were conducted beginning by using a broad interview guide to identify basic categories and themes, and progressing to a more structured format in which earlier findings were further elaborated and validated. These chapters comprise the first part of the study and conclude with a proposed model of patient satisfaction with outpatient physiotherapy.

In this chapter preliminary data collection using individual interviews sought to identify the topics and categories that would guide the multiphase interviews which were to form the main data collection phase in the second part of the study.

Since little research has been done into patients' satisfaction with physiotherapy the researcher was uncertain at this stage 'what there was to know'. It was important that topic categories should emerge through discussion with the respondents that were pertinent to physiotherapy, rather than being imposed on the basis of findings from the satisfaction literature. Initially four unstructured pilot interviews were conducted using a very broad topic guide to explore the field of interest. These will not be discussed in detail, but they informed the subsequent data collection phases that will be described in the current chapter. Interviewees were a convenience sample of subjects who had recently completed a course of outpatient physiotherapy treatment following an acute trauma. They were asked to discuss their recent physiotherapy experience in terms of the most and least satisfactory aspects of their care. It was found that while there were general expressions of satisfaction particularly with the outcome of care, subjects needed cues to enable them to broaden the discussion and include issues concerning other aspects of their physiotherapy care in addition to the general outcome. This accorded with findings by Locker & Dunt (1978) that patients report satisfaction or

dissatisfaction with particular aspects of their care when asked directly, but do not give sufficient priority to these aspects to mention them spontaneously. However when prompted by the researcher, subjects were able to discuss aspects of the content and organisational aspects of their treatment as well as the outcome

Seven broad categories emerged which were;

- Expectations of treatment,
- Perception of the problem,
- Content of treatment,
- Communication, Therapist,
- Organisation of treatment,
- Quality of life.

These exploratory interviews therefore identified some issues surrounding the physiotherapy process of care about which patients formed opinions and the cues used to stimulate their responses suggested the method that could be used in subsequent interviews to build on these findings.

3.2 DEVELOPMENTAL INTERVIEWS

The results from the exploratory pilot interviews suggested that using the broad categories of satisfactory/dissatisfactory aspects of care to guide the discussion did not encourage the emergence of subjects' views on other aspects of their physiotherapy experience unless prompted to do so. A detailed interview schedule was therefore needed in order to cue subjects to discuss more diverse aspects of their care, by incorporating elements relating to the content and organisational aspects of treatment that had emerged in the initial exploratory interviews.

Aim

The aim of the interviews was to explore the factors that affect patients' satisfaction with outpatient physiotherapy.

3.2.1 Method

Design

Semi-structured interviews using a detailed topic guide

Subjects

Acute: 2 subjects, 1 male 1 female, aged 41 years & 48 years attended.

Out of 4 subjects contacted, 1 male (aged 48 years) subsequently failed to attend, and 1 male (aged 28 years) was too busy to be interviewed.

Chronic: 6 subjects, 4 male 2 female, age range 45-70 years attended.

Out of 7 subjects contacted, 1 male (aged 55 years) failed to attend

Inclusion criteria

Subjects were recruited into acute and chronic groups for the study on the basis of the following criteria;

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Exclusion criteria

Subjects under 18 years
Non-English speaking subjects
Subjects with a diagnosis of cognitive impairment

Development of the tool

The cues used in the four pilot unstructured interviews to guide the discussion in relation to subjects' evaluation of their course of treatment as a whole, as well as discrete aspects of their care, suggested the design for the topic guide (Box 3.1). This subsequently drew on the framework of structure, process, and outcome proposed by Donabedian (1966) as a basis for the evaluation of the quality of medical care, with the latter two dimensions being of particular relevance to the study. The component of 'structure', that is concerned with the adequacy of facilities, qualification and organisation of medical staff and administrative operations, was judged to be less applicable to the focus of the current study which aimed rather to elicit subjects' views of their physiotherapy treatment experience. Additionally assessing aspects of the structure of a service is more easily achieved using audit tools in dealing with more concrete and accessible information (Donabedian, 1966).

Box 3.1 Topic guide: Developmental interviews

PRE-TREATMENT

1. The respondent's experience of any previous physiotherapy treatment
2. The respondent's definition of his/her problem
3. How this knowledge was gained
4. How inconvenient/intolerable the respondent's symptoms were prior to starting treatment
5. What value was placed on the referral to physiotherapy

TREATMENT

1. The respondent's perception of his/her clinical needs at the beginning of treatment
2. How these were expected to be addressed by physiotherapy
3. The interventions that helped most/not at all in addressing these needs
4. The reason for any appointments cancelled or missed during the course of the treatment

OUTCOME

1. The degree to which the respondent's needs addressed by the treatment (completely/partially/not at all)
2. The existence of any continuing health problem (acceptable/not acceptable)
3. What would have constituted an 'ideal treatment'
4. How would the respondent have preferred their treatment programme to have been organised (if different from their experience)

OVERALL SATISFACTION

1. Evaluate the episode of care from 0-10 and explain the reasons

In the topic guide the questions in the pre-treatment section aimed to establish the extent of the subject's previous knowledge or experience of physiotherapy. The treatment and outcome sections guided the discussion in relation to the treatment process and the outcome of care. Finally subjects were asked to rate their overall satisfaction with the therapeutic experience on a verbal 0-10 scale, which provides a simple and quick measure of general evaluation (Wilkin et al., 1992).

Procedure

The researcher drew up a convenience sample of subjects from the discharge lists of patients who had completed a course of physiotherapy outpatient treatment at the local hospital within the previous four months at hospital where she worked and who met the entry criteria for the study. The sample was stratified in terms of age, gender and diagnosis. The researcher contacted the subjects by telephone and invited them to attend for interview. An appointment

was arranged over the phone for about a week's time and they were subsequently interviewed either at home or at the hospital according to their preference. Ethics approval was given* and 8 semi-structured interviews were conducted using the topic guide (Box 3.1). Consent was obtained from all subjects to tape record the interviews. Each subject was provided with information about the study, gave their written consent prior to participating (Appendix 1) and was assured of confidentiality and anonymity in reporting their comments.

Interviews lasted between 40 minutes to around one hour and were all conducted by the researcher. During the interview, the general topic areas were introduced for discussion in the same order, which followed a natural progression from the start to the finish of the episode of treatment. The sub-statements were used as cues to explore specific aspects of the three main stages of care and were framed as open questions. The concluding closed question sought to encourage the subjects to summarise their overall level of satisfaction with physiotherapy.

Analysis

The interview transcript data from all 8 developmental interviews were analysed within the Interactive Model of Analysis (Miles & Huberman, 1994). These analytic stages comprised;

- Coding the data
- Identifying similar phrases, relationships between variables, patterns, themes, distinct differences between sub-groups, and common sequences.
- Elaborating a set of generalisations that cover the consistencies discerned in the database
- Confronting the generalisations with a formalised body of knowledge in the form of constructs or theories.

The interview transcripts were coded using data chunks comprising conceptual phrases or sentences representing subjects' views and experiences of outpatient physiotherapy with reference to answering the research questions. The stages were as follows;

- 1 Each line of the transcript was numbered.
2. The transcripts were read through a number of times and statements judged to represent similar concepts were identified and underlined on the transcript.

* Correspondence dealing with all the Ethics Committees involved with this study can be found in Appendix 8 .

3. Cross-reference of these numbered statements could be then be made to the original transcripts in order to restore the context from which they were extracted.
4. Verification of the coding and categorisation system was achieved by submitting all the lists of category statements from the 8 interviews to four judges for peer review (Appendix 2).
5. The data chunks were then grouped with reference to each individual subject, under general category headings on separate sheets, a different sheet being used for each category heading.
6. A number of statements were therefore subsequently attributed to each patient for each category.
7. The statements were then re-examined and grouped into a number of subcategories that described discrete components of the principal category heading.
8. These sub-category statements were ranked from the most to the least commonly mentioned and colour coded, with the number of patients out of the total of 8 who made comments being noted.
9. The statement that most concisely captured the essence of the subcategory for each respondent was then selected and subsequently entered on the matrix chart (Appendix 2).

3.2.2 Results

Twelve principal category groupings emerged from the analysis of the interview data in relation to the three main topic areas of the interview schedule which were;

3.2.2.i Pre-treatment

- Perception/rationalisation of the problem
- Perceptions of physiotherapy

3.2.2.ii Treatment

- Expectations of treatment
- Perception of treatment
- Information received
- Information required
- Perception of therapist
- Compliance
- System/organisation of treatment
- Access
- Value

2.2.iii Outcome

- Result of treatment

A summary of subjects' responses in relation to the principal emergent categories is presented below. Raw data are found in Appendix 2.

Comments were subdivided into those from subjects with no previous experience of physiotherapy (*no PT*) and those having had previous physiotherapy treatment (*previous PT*). Neither of the subjects in the acute group in this sample had received previous physiotherapy therefore there are no responses under the category (*previous PT*). Not all subjects responded in all areas and some subjects made more than one response in an area.

3.2.2.i Responses in relation to the categories that emerged following discussions about the Pre-treatment phase of the physiotherapy encounter

a) Perception/rationalisation of the problem

Acute (no PT) n = 2.

Both subjects were expecting recovery without the need for specific treatment intervention. There was initial loss of function. They had ideas of what was/might be needed in the way of treatment.

Chronic (previous PT) n=4.

Two subjects attributed the problem to age and were not expecting much improvement. They also reported functional limitation and pain. Another had some insight into the problem through previous experience. One subject not sure what was causing his problem.

Chronic (no PT) n= 2.

One subject related her neck problem to age and reported pain and loss of function. The other had neck problems with symptoms of dizziness, aching and pain.

b) Perception of physiotherapy

Acute (no P) n=1

One subject did not expect to be sent for physiotherapy for a finger injury

Chronic (previous PT) n=1.

One subject thought physiotherapy only involved treatment to limbs, not chest.

Chronic (no PT) n=1.

There was a perception that physiotherapy involved 'moving bones and massage'.

Cont...

3.2.2.ii Responses in relation to the categories that emerged following discussions about the Treatment phase of the physiotherapy encounter

a) Expectations of treatment

Acute (no PT) n = 2.

Both subjects hoped to get better and possibly make a 100% recovery. It was important to get back to normality. They did not know what to expect from treatment through lacking previous experience. Expected treatment might be painful.

Chronic (previous PT) n = 4.

All subjects were hoping for relief of symptoms to be able to manage the problem although they did not know what the treatment might involve.

Chronic (no PT) n = 2.

Both subjects were expecting relief of symptoms. One had no clear idea of what was wanted from treatment while the other was expecting treatment similar to previous osteopathy, but more intense.

b) Perceptions of treatment

Acute (no PT) n = 2.

Both subjects felt that the therapist did a good job in improving their function. One was expecting a longer session of treatment of at least an hour and to attend more frequently. The other was surprised at the number of treatment sessions received. Both were given exercises as the main treatment input.

Chronic (previous PT) n = 4.

All subjects felt that the therapist did all she could to help the problem. Treatment sessions were long enough at around half an hour. All were taught exercises that were helpful. Treatment improved the symptoms and was beneficial. One was surprised at the frequency of treatment sessions per week, being more than expected.

Chronic (no PT) n = 2.

Both subjects felt the therapist did as much as she could to ease the symptoms. Subjects had spinal mobilisations and traction respectively which was the most beneficial input. One also found that exercises were helpful. Both were satisfied with the number and frequency of attendance for treatment.

c) Information received

Acute (no PT) n = 2.

Both were given advice on exercises and one had an exercise sheet to take home. Both had been given an explanation from the doctor about their problem and prognosis for recovery, and in one case the therapist additionally advised that there would be residual symptoms. Cont...

3.2.2.ii Responses in relation to the categories that emerged following discussions about the Treatment phase of the physiotherapy encounter (cont.)

c) Information received (cont.)

Chronic (previous PT) n = 4.

In three cases the therapist explained what the treatment would involve and for gave an explanation of their symptoms. The doctor/specialist had previously given all subjects an explanation about their condition. Two subjects were given instructed in home exercises.

Chronic (no PT) n = 2.

Both subjects were given an explanation of their problem and the treatment plan by the therapist. One was instructed in home exercises. The doctor had previously given one subject an explanation of his problem.

d) Information required

Acute (no PT) n = 1.

One subject asked for an explanation of her fracture

Chronic (previous PT) n = 2.

One subject asked for an explanation about a bone scan. The other said that she would ask if she did not understand anything that happened during treatment

Chronic (no PT) n = 2.

One subject asked whether his condition would be permanent. The other wanted more information about her condition but not in too much detail.

e) Perception of therapist

Acute (no PT) n = 2.

One subject thought that the therapist was competent and knew her job.

Chronic (previous PT) n = 3.

Two subjects felt that the therapist had done her best in helping them. One felt that she showed personal concern, and another that she was 'very good and spoke to me very nice'.

Chronic (no PT) n = 1.

One subject felt the therapist knew what she was doing.

Cont...

3.2.2.ii Responses in relation to the categories that emerged following discussions about the Treatment phase of the physiotherapy encounter (cont.)

f) Compliance

Acute (no PT) n = 2.

One subject felt that it was wise to follow any advice given, and the other commented, 'The more you practise the better (it) becomes'.

Chronic (previous PT) n = 2

Both subjects reported practising the home exercises that were taught.

Chronic (no PT) n = 2

For one subject doing home exercises relieved his pain, but another admitted that there was not always time to do the exercises.

g) System/organisation

Acute (no PT) n = 2.

Both subjects were given a choice of appointment times. One subject commented on the punctuality of the treatment sessions and having continuity of therapist. There was also individual attention given during treatment in both cases. One subject felt disadvantaged in having no treatment when the therapist was away.

Chronic (previous PT) n = 4.

All subjects commented on the long waiting time for a first appointment. Two subjects appreciated punctuality in being seen for treatment. One subject was only expecting to be seen for treatment once a week but another twice or three times a week. One commented on having 'one to one' sessions and another of missing treatment when the therapist was away. Two subjects appreciated having flexible appointment times. One was advised on discharge arrangements.

Chronic (no PT) n = 2.

Both subjects appreciated punctuality of treatment sessions, but one subject commented on the long wait for initial treatment. Both were seen once a week for treatment, which was expected in one case. One subject suggested that a 6-month follow up would give patients more faith in what they were doing.

h) Access

Acute (no PT) n = 1.

One subject found it more convenient to attend for treatment near to his work than at his local hospital at home (out of district referral)+

Chronic (previous PT) n = 1.

One subject had problems finding the department* Another appreciated immediate access on telephone inquiries.

Cont...

3.2.2.ii Responses in relation to the categories that emerged following discussions about the Treatment phase of the physiotherapy encounter (cont.)

h) Access (cont.)

Chronic (no PT) n = 1.

One subject would have had easier access to the local GP surgery for treatment than attending hospital department. **

+When this part of the study was being conducted patients were only accepted for treatment if they lived or worked in the area. Out of District referrals had to attend their local hospital.

*The physiotherapy department had temporarily re-located.

**Physiotherapy was also offered at some GP surgeries making it easier for some patients to access.

i) Value of treatment*

Acute (no PT) n = 1. This subject would have cancelled any appointment rather than therapy.

Chronic (previous PT) n = 3. Priority would be given to treatment unless the subject had another hospital appointment. There was an appreciation of the long wait for an initial appointment.

Chronic (no PT) n = 2. An appointment would only be cancelled in exceptional circumstances.

*At this stage of the study 'satisfaction' was being conceptualised in terms of 'value', therefore subjects were asked whether they would give priority to their therapy appointment over other engagements.

3.2.2.iii Responses in relation to the categories that emerged following discussions about the Outcome phase of the physiotherapy encounter

a) Result of treatment

Acute (no PT) n = 2.

One patient reported 100% improvement 10/10, the other a 90% improvement 9/10 because of residual functional limitation.

Chronic (previous PT) n = 4.

In all cases treatment achieved the aim of reducing pain. One subject was 100% better than when he started treatment 10/10. Another was satisfied with treatment but not with the wait for an initial appointment, therefore given 8/10. One was a lot better and gave 9/10. The fourth was satisfied and gave 10/10.

Chronic (no PT) n = 2.

There were mixed responses. For one respondent all problems were solved 10/10 and there was complete satisfaction. For another 8/10 because the problems remained and longer treatment had been expected.

3.2.3 Discussion

Differences between the acute and chronic groups were particularly apparent in relation to the categories of Perception/rationalisation of the problem, and Expectations of treatment and reflected the influence of the underlying pathology of the condition in relation to these topics. Both groups who had not had previous physiotherapy made fewer comments overall, possibly lacking experience from which to make a judgement of the treatment process. In general, although subjects did not have specific expectations about what physiotherapy input might comprise they had expectations in relation to the effect of treatment on their symptoms and their hopes for recovery. Subjects in the chronic group generally attributed their symptoms to the effects of age, consistent with findings from the literature (Bradley & Tennant, 1991) and were expecting relief of their symptoms rather than a cure for their condition. While those in the acute group neither of which had had previous experience of physiotherapy, were anticipating a complete resolution to their problem. Instructions on exercises and explanation of symptoms were the most consistent therapy input across all groups, supporting the finding of the provision of exercises for pain reduction and increasing range of motion (Feine & Lund, 1997), with subjects indicating that they were compliant in carrying out their home exercise programs. There were few specific comments about the therapist but in general there was an indication that the therapist had been competent and had done her best in trying to effect a beneficial treatment outcome. There was a general appreciation of punctuality for treatment sessions and flexibility of appointment times, although the lack of cover for therapists' absence was seen as detrimental to making progress with treatment. Overall, subjects were very satisfied with their physiotherapy care, with the main detracting factors being an incomplete resolution of the problem, long waiting time for treatment and a shorter than expected course of treatment.

There was some indication that the emerging broad categories supported those found in the literature in terms of subjects' evaluations of technical and professional competence, communication/explanation and access/organisational issues. There was also a tendency for patients to report overall satisfaction with their care. However in relation to the focus of the current study, the interviews also permitted an exploration of subjects' expectations of their care, principally in terms of symptom relief as well as their evaluation of the effect of treatment on their health status. These were discussed within the context of the subjects' perceptions not only of their presenting problem but also of what physiotherapy would be able to offer.

3.2.4 Conclusion

It was important in the early stages of the study to ensure that as broad a range of subjects' views would be elicited in order to inform the framework for the planned multiphase interviews in the next phase of the study. The topic guide used in the developmental interviews was more successful in stimulating comments from the respondents on a range of issues than simply asking about their satisfactory and unsatisfactory experiences of care. While some focus to the principal areas of interest of the study had begun to emerge further data collection phases involving a larger number of subjects were deemed necessary at this stage to increase confidence that the emerging categories were representative of subjects' views in the acute and chronic groups. Alternative strategies of data collection were subsequently considered.

3.3 FOCUS GROUPS

Alternative data collection methods including participant observation, the Delphi technique and focus groups were discussed in Chapter 2 in relation to answering the research questions pertinent to this phase of the study. The advantages of the focus group particularly in terms of producing concentrated amounts of data on the topic of interest, combined with the social orientation of the procedure suggested this as the method of choice for the additional data collection phase at this stage of the research. Focus groups were therefore conducted in this second phase of the study.

Aim

The aim of the focus groups was to explore the factors that affect patients' satisfaction with outpatient physiotherapy

3.3.1 Method

Design

Four focus groups (semi-structured group interviews) were convened on two sites, one inner city and the other suburban, as discussed in Chapter 2 (see page, 117). Two groups, one acute and one chronic were convened for a single session on each site.

Subjects

a) Inner city sample

Acute: 4 subjects, 2 male: 2 female, age range 39-70 years attended

Out of 30 subjects contacted (13:17 male /female) 3 others initially agreed to participate but failed to attend, 1 male (age 35 years) and 2 female (age 46 & 82 years)

Chronic: 5 subjects, 2 male: 3 female, age range 46-71 years attended

Out of 32 subjects contacted (9:23 male/female) 5 others initially agreed to participate. 1 subsequently cancelled (female age 55 years) and 2 male (age 65 & 78 years), 2 female (age 41 & 56 years) failed to attend.

b) Suburban sample

Acute: 10 subjects, 2 male: 8 female, age range 36-79 years attended

Out of 42 subjects contacted (17: 25 male/female) 2 others initially agreed to participate. 1 female (age 69 years) subsequently cancelled and 1 female (age 59 years) failed to attend

Chronic: 11 subjects 3 male: 8 female, age range 55-82 years attended

Out of 52 subjects contacted (15: 37 male/female) 2 others initially agreed to participate. 1 female (age 63 years) subsequently cancelled and 1 female (age 37 years) failed to attend

Inclusion criteria

Subjects were recruited into acute and chronic groups for the study on the basis of the following criteria;

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Exclusion criteria

Subjects under 18 years
Non-English speaking subjects
Subjects with a diagnosis of cognitive impairment

Recruitment of subjects

Purposeful sampling was employed to select homogenous groups of subjects for the focus groups (Morgan, 1997) in terms of matched acuity or chronicity. Thus only subjects with acute conditions attended 2 of the groups while subjects with chronic conditions only attended the other 2 groups. All subjects met the entry criteria for the study on each of the two sites (inner city and suburban). Subjects were selected from the discharge lists of patients at the respective hospitals who had completed a course of outpatient physiotherapy within the previous four months, for which they had been treated for either an acute or chronic musculoskeletal condition.

The samples were stratified in terms of gender, age bands, and condition (acute/chronic).

Group size was determined by reference to the literature (Merton, 1956: Morgan, 1997: Krueger, 1994: Carey, 1994) and 6-8 participants were recruited for each group. Over-recruitment was employed in all cases to allow for dropouts.

Development of the tool

Donabedian's (1966) framework that had informed the development of the topic guide used in the earlier semi-structured interviews had permitted subjects to discuss a range of issues relating to the process and outcome of their physiotherapy care. It was therefore decided to use this broad framework to inform the selection of questions that were to guide the discussion in the focus groups. It was found from the preliminary interviews that communication had formed a central part of the treatment process and that organisational issues also impacted on the evaluation of the outcome of care. Questions were therefore selected with reference to these broad categories and grouped under the headings of; opening, introductory/transition, key and ending questions (Kreuger, 1994).

- *Opening* questions sought to identify the common characteristics of the participants in relation to their condition and reason for attending for physiotherapy.
- *Introductory/Transition* questions were used to introduce the general topic for the discussion, and provide the participants with an opportunity to reflect on any past experiences of treatment or on their knowledge of physiotherapy in relation to their condition.
- *Key* questions provided the central focus for the discussion, and centred on communication in the therapeutic encounter, the organisational aspects of treatment and the treatment outcome.
- *Ending* questions provided all participants with the opportunity to sum up their experience and identify the most important aspect of their course of treatment, and for the researcher to feed back a general summary of the discussion to all concerned.

The guide was organised to create a natural progression of topics for discussion, in which each new topic area was introduced by a question thereby giving direction to the group. A series of questions to be used as prompts in relation to the introductory and key questions were also formulated, drawing on issues that had been discussed in the initial exploratory interviews.

The topic guide for the focus groups is presented in Box 3.2.

Box 3.2 Topic guide for Focus Group interviews

1. Opening question *(To identify the characteristics the participants have in common)*

- a) First of all we'll just go round the table and ask each of you to say briefly, what you had recently been attending physiotherapy for.

2. Introductory/transition question *(To introduce the general topic and/or provide participants with an opportunity to reflect on past experiences and their connection with the topic)*

- a) Think back for a moment to the time when you received your appointment to attend for your physiotherapy treatment. What was going through your mind at that time?

Prompt: Previous experience of physiotherapy/ hearsay from others/ what kind of health problems are treated by physiotherapists in out-patients/ how will physiotherapy be able to help your problem/ what will the treatment session entail/ how long will the course of treatment be

3. Key questions

- a) It has been said that good communication is the most important thing in a medical consultation. Would you agree? Do you think this is true in physiotherapy?

Prompt: What other things are important in the patient/physiotherapist relationship

- b) What sort of things mattered to you most in the way your treatment was arranged? Why were they important to you?

Prompt: How long did you wait for an appointment?/ What choice of treatment times were you given?/ What did you feel about the length of the treatment sessions?

- c) Not everyone feels that they benefit from their physiotherapy treatment. What was your experience?

Prompt: How did treatment affect your symptoms?/ What effect did it have on your everyday life? /What insight did you gain about your health problem/injury?

- d) Other things that people have mentioned as being important for example, What makes a good therapist?
What things contribute to a successful course of treatment for you?
How can the organisation and delivery of physiotherapy treatment be improved?
- e) Are these important to you or not? How are they important?

4. Ending questions

- a) "All things considered" identify the most important thing for you about your recent course of physiotherapy treatment (Go round the table)
- b) "Summary". Is this an accurate summary of what we have talked about?
- c) "Finally". Have we missed anything?

5. Dismissal

Thanks to all for attending.

Piloting the tool

Prior to conducting the first focus group, the proposed questioning route and potential probes were discussed with one of the research supervisors. She then acted as assistant moderator to the researcher for the first focus group, which was regarded as the pilot. After the first focus group had been conducted the researcher reflected on the appropriateness of the interview guide and to the way the group was conducted. As there were no major changes to be made the data from the first focus group is included in the analysis. The same questioning route was used in the succeeding three groups to provide structure to the discussion but without limiting the free flow of exchanges between participants and to allow for comparison to be made across the groups.

Procedure

Subjects were contacted by telephone and invited to attend. Those who consented to take part were subsequently sent letters giving details of the research, the purpose of the group, and a map giving directions to the meeting place if appropriate (Appendix 1). The focus groups were held at the respective hospital sites in rooms chosen to create an informal atmosphere for discussion away from the clinical environment of the physiotherapy departments. Refreshments were provided for attendees at the beginning of each focus group.

All subjects were required to give their written consent to participating before the group started (Appendix 1) and assured of confidentiality and anonymity in relation to the topics discussed within the group. Participants' attendance was voluntary and they were free to withdraw at any time. Agreement was obtained to tape record the proceedings and no objections were raised. The assistant moderator was introduced at the beginning of the proceedings as an assistant to the researcher who would be responsible for audio-taping the session and taking notes as a backup and to ensure that responses could be correctly attributed to each participant when the tape was transcribed.

Before starting the session, participants were reminded of the reason for the focus group. This was to elicit their views on their recent physiotherapy treatment. Each participant was then asked to say briefly what condition (s)he had been attending physiotherapy for, in order to identify some common ground between the respondents and to allow the assistant moderator to identify each speaker in her notes. The 'Introductory' questions then asked participants to 'think back' and recall their pre-treatment experiences and expectations, thereby increasing the reliability of the data, by grounding their responses in relation to specific events rather than in the immediate interview situation (Kreuger, 1994).

In introducing each new topic area the 'key' questions were framed as open-ended questions to elicit participants' most immediate responses, and were then followed up by prompts formulated in advance, to cue further ideas should the discussion begin to wane or become too narrowly focussed. Although the topic guide provided a framework for the discussion, the predetermined order of questions was not always rigidly followed. It was sometimes necessary for the researcher to follow up on new topics as appropriate when they arose, and to skip over areas already covered earlier stages of the interview (Morgan, 1997).

Towards the end of the session the researcher changed to closed-ended questions to bring a greater focus to the respondents' views by asking them to identify a single aspect of their treatment that was of particular salience for them and encapsulated their whole physiotherapy experience. These responses provided particular insight into those aspects of physiotherapy that subjects regarded as most important (Morgan, 1997).

At the end of the session the researcher summarised the main issues that had been discussed and sought verification from the participants by asking 'Is this an accurate account of what has been discussed?' This summing up was not achieved in one group (chronic, suburban) because of time constraints, although the researcher had sought clarification and confirmation of topics periodically throughout the course of the discussion thereby lending support to the validity of the responses. Finally, all the respondents were thanked for attending and each was given a small monetary gift in appreciation for their time.

Analysis

The interview transcript data were analysed within the Interactive Model of Analysis (Miles & Huberman, 1994) (see page, 138). The interview transcripts were coded using data chunks comprising conceptual phrases or sentences representing subjects' views and experiences with reference to answering the research questions.

The stages were as follows;

1. Each line of the transcript was numbered.
2. The transcripts were read through a number of times and statements judged to represent similar concepts were identified and underlined on the transcript.
3. These statements were then entered under discrete category headings on separate sheets.
4. The principal category headings were then used to construct matrix charts.
5. One statement/phrase for each subject was then identified that epitomised their sentiment in relation to each specific category.

6. These statements/phrases were then entered on to the matrix charts (Appendix 2) identified as follows;

- i) the number accorded to each respondent representing the order in which they spoke in the group,
- ii) the line of transcript where the statement appeared,
- iii) the outcome of care judged by respondents as positive, negative or ambivalent

7. Verification of the coding and categorisation system was achieved by submitting the transcripts and matrix charts for peer review by four judges. (Appendix 2)

3.3.2 Results

Results from the inner city and suburban areas were combined as both had identified broadly similar issues. Raw data and matrix charts with representative statements from respondents in relation to the principal emergent categories are presented in Appendix 2. Some subjects made more than one comment under each category heading so that percentages shown on the matrix charts may total more than 100%.

Six principal categories of data emerged from the analysis of the four focus groups in relation to the topics raised by the i) Introductory, ii) Key, and iii) Ending questions used in the focus groups. These categories were;

- Expectations of treatment
- Communication / information / explanation
- Perceptions of the therapist
- Process / content of treatment
- Treatment outcome
- Salient aspects of care

A summary of subjects' responses in relation to the principal emergent categories is presented below.

3.3.2.i. Responses from the four focus groups in relation to the category that emerged from the Introductory questions used to guide the discussions

a) Expectations of treatment

Acute groups (n=14)

Thirteen subjects made comments on their expectations of treatment that fell broadly into four types. (One subject arrived late for the group and was not asked to comment as the discussion had moved on to a subsequent topic).

- Three (21%) were apprehensive that the treatment would be painful.
- Three (21%) had a positive approach to treatment and were looking forward to starting,
- Six (43%) did not know what to expect.
- One subject had previous knowledge of physiotherapy and therefore knew what to expect.

Chronic groups (n=16)

All sixteen subjects in this group expressed their thoughts as follows;

- Nine (56%) were hoping for symptomatic relief.
- Two (13%) expected that the condition would get better,
- Two (13%) were expecting a specific treatment modality.
- Three (19%) did not think that physiotherapy would have much to offer.

3.3.2.ii Responses from the four focus groups in relation to the categories that emerged from the Key questions used to guide the discussions.

a) Communication /Information/Explanation

Acute group (n=14)

Eleven (76%) subjects in this group made comments in this category.

- Six (43%) mentioned specific information they were given with regards to exercise
- Three (21%) had their injury explained, of whom one was told that the treatment might be painful.
- Two (14%) mentioned the two-way aspect of communication between themselves and therapist, and one the continuity between therapists.
- One additionally highlighted the importance of receiving praise from the therapist in the course of treatment.

Cont...

3.3.2.ii Responses from the four focus groups in relation to the categories that emerged from the Key questions used to guide the discussions (cont.)

a) Communication /Information/Explanation (cont.)

Chronic group (n=16)

Eleven subjects (69%) responded in this category.

- Eight comments (50%) principally concerned the explanations that the patients were given, either in relation to their treatment ($n=4$), or their problem ($n=4$).
- Two (13%) felt they were made aware of *their* responsibilities in relation to receiving treatment,
- One subject felt she was not fully informed about the 'process' of treatment.

b) Perception of the Therapist

Acute group (n=14)

- Ten subjects (71%) made specific reference to the therapist in this category, which generally related to the therapist's affective qualities and professional manner, which were seen in a very positive light.
- Two (14%) commented on the therapist's 'personal touch' and an interest in getting the patient better
- Two (14%) perceived the therapist as being busy.

Chronic group (n=16)

- Ten subjects (63%) made comments (often more than)) relating to their perception of the therapist but these tended to be contradictory in relation to the categories identified.
- Seven (44%) commented on the therapist's affective qualities, but in three cases these were described in negative terms.
- Three (19%) felt that the therapist was knowledgeable in relation to the delivery of the appropriate treatment although one patient did not think so.
- Of three subjects (19%) who commented on the therapist's communication skills, two were in negative terms.

Cont...

3.2.2.ii Responses from the four focus groups in relation to the categories that emerged from the Key questions used to guide the discussions (cont.)

c) Process of treatment

Acute group (n=14)

Of ten subjects (71%) who made comments in relation to this topic,

- Eight (57%) commented on discharge arrangements ($n=5$), waiting times ($n=2$), appointments ($n=2$), and access ($n=1$).
- Three (21%) commented on exercises they were given as part of their treatment.
- One subject was critical of both the process and content of treatment

Chronic group (n=16)

Eleven subjects (69%) mentioned issues concerning the content and organisational aspects of their treatment;

- Four subjects (25%) were concerned about the amount of information the therapist should have relating to them at the beginning of the treatment.
- Three (19%) mentioned waiting time for initial assessment and frequency of attendance for treatment,
- Two (13%) commented on the value of regular treatment review after discharge.
- Two (13%) talked of the content of the treatment session in terms of the exercises they were given.

d) Treatment Outcome

Acute group (n=14)

Ninety three percent of the subjects ($n=13$) reported a positive outcome to treatment, principally in terms of having made a good functional recovery, and being able to return to work. Only one subject felt negative about the outcome and admitted to only slight improvement as a result of treatment.

Chronic group (n=16)

There were mixed responses in relation to the overall outcome of care by all 16 subjects in this group.

- Four (25%) reported a positive result in terms of symptomatic relief.
- Six (37%) reported a negative outcome to treatment, with no improvement in their symptoms
- Five (31%) reported ambivalent outcomes, with a qualified positive result,
- One (6%) felt his pain was worse as a result of having treatment.

Cont...

3.2.2.iii Responses from the four focus groups in relation to the categories that emerged from the Ending questions used to guide the discussions.

a) Salient aspects of care

Acute group (n=14)

Subjects in the acute groups identified various aspects of care as being salient features;

- For five subjects (36%) the salient factor concerned the content of the treatment session in terms of explanation given, exercises taught, and that treatment was not painful, respectively.
- Three (21%) felt that the treatment outcome was the most important aspect for them in relation to being able to return to work,
- Three (21%) identified a treatment modality that they felt was particularly helpful for symptom relief
- Three (21%) identified aspects of their relationship with the therapist in the encouragement they received that they were going to improve with treatment and the personal attention they received

Chronic group (n=16)

All respondents in the chronic groups mentioned a variety of salient factors with two subjects identifying two salient factors each.

- Seven (44%) identified the treatment outcome as the most important feature of their care, which in four cases was negative in that treatment either did not effect any improvement or made the pain worse.
- Six (38%) highlighted the specific treatment modality they received as their key factor (massage, heat, exercises, shoe raise)
- Four (25%) mentioned the affective qualities of the therapist as being kind, helpful and understanding
- A single comment was made in relation to the thoroughness of the initial assessment received in the context of the treatment content.

Results from the analysis of the focus group data suggested that subjects could be divided into 3 groups in relation to their overall evaluation of care. This grouping was dependent on the extent of subjects' previous knowledge and experience of physiotherapy, and on their expectations of treatment meeting their needs.

The 3 groups were;

1. Positive

Those subjects who perceived that aspects of the treatment process and the clinical outcome had met or exceeded their expectations reported a positive evaluation of their care.

2. Ambivalent

Subjects who reported beneficial effects of treatment, but with residual problems following discharge, were appreciative of the care they had received although their expectations of clinical improvement were not met.

3. Negative

Those subjects who perceived that neither aspects of the treatment process nor the clinical outcome had met their needs reported a negative outcome of their care.

Table 3.1 shows the number of subjects from the focus groups that could be grouped into one of the three categories according to their overall evaluation of care.

Table 3.1 Number and percentage of focus group attendees reporting positive, ambivalent or negative outcomes of physiotherapy

Outcome of care	Acute <i>n</i> =14	%	Chronic <i>n</i> =16	%
Positive	13	93	4	25
Ambivalent	0	0	5	31
Negative	1	7	7	44

It can be seen from Table 3.1 that there was only one subject from the acute groups for whom physiotherapy constituted a negative experience, whereas in the chronic groups all three categories of outcome could be identified.

Following the analysis of the focus group data two explanatory models of patient satisfaction with outpatient physiotherapy were proposed.

3.3.3 Discussion

Principal differences between the acute and chronic groups concerned subjects' expectations of treatment and the clinical outcome of care and this difference was apparent in both inner

city and suburban samples. Subjects with acute conditions had little if any previous experience of therapy on which to base their expectations, and therefore tended to adopt a 'common sense' approach to treatment and recovery. There was therefore some expectation that the treatment might be painful, but in general they were looking forward to getting started and anticipated getting 'back to normal' as soon as possible.

However, in the chronic groups subjects were mainly hoping for symptomatic relief but with an underlying realisation that their condition was not 'curable'. Those who were categorised as having a positive outcome had their treatment needs addressed or exceeded. They appeared to have a more realistic appraisal of their condition at the start of treatment with generally low expectations of what treatment might be able to offer. They were therefore surprised that physiotherapy was able to resolve their problem. Those with ambivalent outcomes in the chronic groups were all expecting pain relief and that was only partially achieved through treatment. Those subjects whose high expectations of a 'cure' were not realised tended to report negative experiences of the whole physiotherapy experience. This categorisation reflects that found by Grahn et al. (1999) in relation to factors that might influence change in patients with prolonged musculoskeletal disorders. Patients were either highly, moderately or less motivated to improve with a rehabilitation programme. The level of perceived emotional, social and professional support, were strongly related to motivation. Highly motivated patients regarded professionals more as advisers and were active in their treatment programme, whereas moderately motivated and less motivated patients were more dependent on professional input with the latter group remaining relatively passive recipients of treatment.

While the majority of subjects felt they were given explanations and information about their condition and aspects of their treatment, there was an indication that the process of communication was perceived as reciprocal and encouraging in the acute group but more directive in the chronic group. This difference was also reflected in the perceptions of the therapist, particularly in those subjects who achieved positive as opposed to negative clinical outcomes. Whereas all the acute subjects' comments on the therapists' affective qualities were positive, those in the chronic group were mixed being expressed in both positive and negative terms. A possible explanation for these differences is that therapists might be more attentive and caring with subjects who had sustained a sudden injury, or who were perceived as being 'easy to treat' and achieved positive outcomes as a result of treatment (Condie, 1991). The acute subjects tended to be well motivated and perceived the therapist as taking a personal interest in their wellbeing, which further encouraged them to strive for improvement as a way

of 'repaying' the therapist for his/her efforts on their behalf. While some subjects in the chronic group were also appreciative of the therapist's efforts even though their symptoms were not improved, there were others who appeared to engender a less empathic attitude from the therapist as the treatment progressed and no symptomatic relief was achieved. The medical model of care appeared to underlie the style of treatment expected by those in the chronic group with negative clinical outcomes and assumed a relationship to be one of unequal status, with the therapist as the expert. There was a general belief from those in the chronic groups that compliance with home exercises was an important component of their treatment although some admitted that these were not always assiduously carried out.

In relation to the treatment process, subjects in the acute group had been surprised at the short wait before starting treatment as there had been an assumption that waiting times for physiotherapy were similar to NHS clinic waiting times and therefore likely to be long. As mentioned in the Introduction subjects with acute injuries are usually allocated urgent treatment slots, so that the wait is typically days rather than weeks or months as in the case of chronic conditions (Ratstall & Fashanu, 2001). There was also some indication that acute subjects were given more comprehensive discharge arrangements, with the opportunity to contact the department for further advice if necessary. This was not the case with the chronic group. Therapists might expect chronic subjects to continue with self-help regimes that they had been taught so that further specific treatment is either not required or unlikely to be of benefit, whereas there might be potential for further intervention in acute cases that may not have completely resolved.

At the close of the focus groups, subjects were asked to identify the single aspect of treatment that was of particular salience to them as a way of encapsulating their evaluation of the physiotherapeutic experience. These factors were found to concern four main areas of care; treatment modalities, outcome, relationship with the therapist and content of treatment. Treatment that employed pain relieving modalities (heat and massage) and a therapist who was empathic were important factors for chronic patients particularly those who reported positive outcomes of care and achieved symptomatic relief. For those in the acute groups, exercise was an important feature together with a therapist who gave encouragement and explanation, resulting in functional improvement. The technical and interpersonal skills of the therapist, together with the provision of information and explanation found in this study, are aspects of quality care that have repeatedly been found in the literature (Blanchard et al., 1990; McIver, 1991a; Thomas & Bond, 1996). Nevertheless, the application of these skills across disciplines

will vary in relation to the nature and context of the clinical intervention. The evaluation of the outcome of treatment in terms of clinical effectiveness is however an aspect of care that has received much less attention in the literature (Hall & Dornan, 1988) although it forms an important element in the current study.

The focus groups proved to be an effective method for exploring the subjects' experiences and attitudes towards physiotherapy. However difficulties were encountered in relation to the recruitment of subjects in the inner city area, which had implications for the relative size and composition of the first two groups. A number of potential subjects were either unavailable or unable to attend for a variety of reasons so that, despite over-recruitment, final numbers fell below those planned resulting in two rather small groups (one acute and one chronic). By contrast, there was a minimal dropout rate for the two suburban groups. The resulting stratification of the sample in relation to gender was biased towards female participants in all but the smallest acute group. In the chronic groups although the male/female ratio was 5: 11, this reflected the gender proportions in the initial sampling frame of potential participants. Nevertheless, a bias towards subjects in the older age ranges was noticeable in all groups.

3.3.4 Summary

Rich data was collected from the four focus groups that had face validity for the participants. Differences between the acute and chronic groups that emerged, particularly in relation to subjects' expectations of care and evaluation of the clinical outcome, reflected earlier findings from the study. Principal categories derived from the focus group data built on the analysis from the developmental interviews permitting further refinement of the earlier categories into fewer, but more succinct groupings. These were needed to guide the in-depth interviews in the next phase of the study. Although the emergent broad categories resembled those found in the literature, the content was specific to the physiotherapeutic context. The salient aspects of care that were identified highlighted those aspects of physiotherapy that subjects found the most important, which were outcome and specific treatment modalities.

3.4 DEVELOPMENTAL MODELS

Results from the analysis of the focus group data suggested that subjects could be classified into three groups according to the eventual outcome of their care (positive, ambivalent or negative). A re-examination of the developmental interview transcripts in the light of these findings showed that a similar interpretation could be applied to the way in which those subjects evaluated their physiotherapy experience. These broad distinctions permitted tentative conclusions to be drawn concerning the relationship between the discrete components of the treatment process and the impact of these relationships on the subjects overall evaluation of their care. A model was therefore proposed in which the pathology of the subject's condition and their subsequent expectations of care influenced their evaluation of the elements comprising the physiotherapeutic encounter that ultimately determined their degree of satisfaction/dissatisfaction with the whole experience (Figure 3.1). This model is based on the Simultaneous Importance-Performance Grid (Burns, 1986). The key to the model is presented below.

Figure 3.1 Factors influencing patients' evaluation of the therapeutic encounter

Group	Expectations	Therapist	Communication	Treatment process	Outcome
ACUTE	LOW No knowledge	Friendly	Two way	Low	Positive
		Impersonal	One way	Moderate	Ambivalent
	HIGH Ambitious	Friendly	Two way	High	Negative
		Impersonal	One way	Low	Positive
				Moderate	Ambivalent
				High	Negative
CHRONIC	LOW Low hopes	Friendly	Two way	Low	Positive
		Impersonal	One way	Moderate	Ambivalent
	HIGH Unrealistic	Friendly	Two way	High	Negative
		Impersonal	One way	Low	Positive
				Moderate	Ambivalent
				High	Negative

Key to interpreting Figure 3.1

GROUPS

- Acute:** Patients referred to physiotherapy after having sustained a fracture or recent traumatic injury.
- Chronic:** Patients referred to physiotherapy with a diagnosis of either spinal or peripheral degenerative joint disease.

EXPECTATIONS

- Acute:** **Low (no knowledge)** Patients with no previous experience of physiotherapy treatment. No specific preconceptions of what therapy would involve or comprise.
- High (ambitious)** Patients may have had previous treatment. Some clear preconceptions as to what therapy should comprise.
- Chronic:** **Low (no hopes)** Patients have a good understanding of their condition, and may have had therapy before with ambivalent results. Not optimistic that therapy will be of much benefit.
- High (unrealistic)** Patients have some knowledge of their condition and have had frequent episodes of therapy in the past with no lasting effect. Over optimistic that treatment will effect a cure.

THERAPIST

- Friendly:** The therapist is perceived as taking a personal interest in the patient and establishes a good rapport. Encourages a collaborative approach to treatment assessment and planning.
- Impersonal:** The therapist is perceived as lacking an empathic and caring approach. Appears to show little interest in the patient's well being. Maintains a paternalistic relationship in the therapeutic encounter.

COMMUNICATION

- Two way:** The therapist involves the patient in the treatment process, by eliciting their perspective, and fully responding to their explanatory and information needs.
- One way:** The patient is not encouraged to question or discuss aspects of the treatment process. Mandatory explanations and information only are given.

TREATMENT PROCESS

- Low:** The patient is not dependent on a high degree of therapist input but is motivated to take an active and responsible role in the treatment process. (S)he is able to work independently with appropriate instruction to achieve the treatment goal.
- Moderate:** The patient requires a moderate amount of therapist input but is also able to take some responsibility for self maintenance.
- High:** The patient is dependent on a high degree of therapist input and is unable to sustain benefit when required to work independently.

OUTCOME

- Positive:** The patient's physical and psychological needs have been met as a result of treatment.
- Ambivalent:** Some of the patient's biopsychosocial needs have been met as a result of treatment.
- Negative:** The patient had derived no benefit from treatment.

Reading from left to right in Figure 3.1 the shaded cells relating to the acute and chronic groups at the top and bottom of the grid represent the extreme positive and negative outcomes that could be reported from these groups and in relation to the discrete dimensions of care. This might suggest that;

- Acute subjects with relatively low expectations of treatment enjoyed a good relationship with their therapist with whom they were able to communicate easily. They felt they were required to be active participants in their treatment and were able to work on their own between sessions. They achieved a good functional result.
- Chronic subjects with unrealistically high expectations of treatment had a more impersonal relationship with the therapist with a more directive style of communication. They felt they were dependent on therapeutic input rather than self-management and derived little benefit from treatment.

Between these two extremes, the resulting treatment outcome can be traced horizontally across the grid, starting on the left. The descriptions in the Expectations and Therapist cells appear to be of particular significance to the overall result. The grid also highlights the combinations of variables operating in the course of the treatment process leading to the patient's overall evaluation of care, so that each column represents an adaptation level against which subsequent judgements are made as these are encountered throughout the process of care.

In relation to the clinical outcome of care, in terms of symptomatic change *per se*, a model is proposed in which patients' satisfaction with the outcome is dependent on the feasibility of the treatment being effective in dealing with their presenting condition (Figure 3.2).

It can be seen from Figure 3.2 that four possible outcomes of care could be predicted,

1. Completely effective

The patient will be completely satisfied with the treatment outcome, when the therapist is able to resolve their problem. The patient's positive expectations of complete resolution are then fully met.

2. Clinically ineffective

When the therapist is unable to achieve a complete resolution of their clinical problem although the patient has high expectations of this, dissatisfaction with the outcome will result. The patient's expectations of a good result are not met.

3. Clinically effective

The patient will be satisfied with the treatment when the therapist is able to achieve a positive outcome although the patient was not expecting treatment to be beneficial. The patient's expectations are then exceeded.

4. Completely ineffective

When the patient's condition was judged not to be amenable to significant change as a result of treatment, and the patient had low expectations of being helped, the result of the intervention would result in complete dissatisfaction. The patient's negative expectations would then be met.

Figure 3.2 The perceived relationship between patients' expectations of treatment benefit and the feasibility of achieving a clinically effective outcome

PATIENT EXPECTATION OF TREATMENT BENEFIT	CLINICAL OUTCOME	
	Achievable	Not achievable
Positive	Complete clinical effectiveness Complete satisfaction Positive expectations met	Clinically ineffective Dissatisfaction Positive expectations not met
Negative	Clinically effective Satisfaction Negative expectations exceeded	Completely ineffective Complete dissatisfaction Negative expectations met

The theoretical models presented in Figure 3.1 (Therapeutic Encounter) and Figure 3.2 (Clinical Outcome) suggest a framework within which the multiple facets affecting patients' evaluation of the process and outcome of their care could be explained. The models therefore represent two principal dimensions along which an evaluation of the total therapeutic experience can be made.

This bipartite view of satisfaction with care parallels Herzberg's Two Factor theory (Herzberg, 1999). This work involved research into workers' satisfaction with their jobs. It was found that when workers were happy with their jobs, they most frequently described factors relating to events that indicated they were successful in the performance of their work and contributed to the possibility of professional growth. Feelings of unhappiness were associated with conditions

that surrounded the job but were not associated with the job itself. The latter were called 'hygiene' factors, and when they deteriorated to a level below that acceptable to the worker, dissatisfaction resulted. However having optimal hygiene factors did not lead to increased satisfaction but just prevented dissatisfaction. The factors that led to increased satisfaction, called 'motivators' were those that met the individual's need for self-actualisation in his work (cf. Maslow, 1970). While both kinds of factors have been found to meet the needs of the worker, it was primarily the 'motivators' that brought about satisfaction and improved performance in the job. In relation to the current study, the successful resolution of the patient's problem (clinical outcome) could be equated with the 'motivators' in being the factors that satisfy the person's need for self-actualisation and personal growth by permitting a return to optimal functioning. The components of the treatment context (therapeutic encounter) could equate with the 'hygiene' factors that are the conditions which surround the care giving, including the relationship with the therapist and the context of the treatment situation. While both kinds of factors are necessary to meet the patient's biopsychosocial needs, satisfying the 'hygiene' components alone would only serve to prevent dissatisfaction but would not result in overall satisfaction. The 'motivators' would be essential for bringing about the kind of satisfaction that results from the improvement in personal performance consequent on the clinical effectiveness of the care received.

3.5 CONCLUSION

Two explanatory models were proposed to account for the relative importance of elements of the therapeutic encounter and those contributing to the clinical outcome of care that could inform subjects' overall evaluation of their physiotherapy experience. These models suggested a framework for the next stage of the study, which aimed to inform the development of the proposed survey tool, by further exploring the broad categories relating to subjects' satisfaction with their physiotherapy treatment that had emerged from the earlier phases of the study.

CHAPTER 4

AN EXPLORATION OF PATIENTS' PERCEPTIONS OF THEIR PHYSIOTHERAPY TREATMENT: 3. MULTIPHASE INTERVIEWS

4.1 INTRODUCTION

Following analysis of the data from the developmental interviews and focus groups two theoretical models were proposed. These supported the notion of satisfaction as a multidimensional concept and of representing distinct dimensions of care; process and outcome, along which an evaluation could be made (Donabedian, 1966, 1988; Herzberg, 1999). This suggested a framework for the next stage of the study, to inform the development of the proposed survey tool, by further exploring the broad categories relating to subjects' satisfaction with their physiotherapy treatment that had emerged. Although some of these categories were similar to those reported in the literature, particularly communication, interpersonal relationship and organisation, those relating to expectations and clinical outcome had not been so widely examined. The use of a larger sample for this stage of the research would increase the reliability and validity of the results obtained thus far.

Aims

The aims of the multiphase interviews were to;

- i) Explore the factors that affect patients' satisfaction with outpatient physiotherapy
- ii) Examine patients' experiences of their recent physiotherapy treatment in relation to the discrete aspects of care that had been identified in the developmental interviews and focus groups.
- iii) Inform the content of the survey tool to be used in the second part of the study.

4.1.1 Design Strategies

Although some categories had emerged from the earlier interviews that provided a framework for the next data collection phase of the study, it was important that these should not preclude the possibility of further issues being raised by subjects concerning the evaluation of their care.

Therefore alternative methods of structuring the topic guide for the next set of interviews were considered which would address both of these issues.

i) Sending pre-interview information

Respondents could be sent information in advance with an outline of the study and general topic areas to be covered during the interview.

Advantage. This method would give subjects the time to recall salient events from their recent physiotherapy experience so that during the interview they would be able to expand and explain the reasons behind their expressed views.

Disadvantage. A disadvantage of the method could be that the respondent's own views would be biased through discussing the topic areas with others. The resulting views expressed might therefore be coloured by the perceptions of physiotherapy by those who may or may not have had personal experience of treatment. This method was therefore discounted.

ii) Interviews using visual probes

It has been found that presenting subjects with statements on cards, in which they are asked to sort or rank the cards depending on their agreement/disagreement or degree of importance of the issue to them can encourage them to elaborate on their views about the particular topic (Kitzinger, 1995). Two contrasting studies in which this technique has been used were reviewed in terms of applicability to the current research.

i) Cataldo et al. (1978) used a card sorting procedure for survey interviewing using decks of stimulus cards and a placement board. In this method the subject was read a general statement and then invited to sort a deck of cards into four piles on a board in relation to four named activities pertaining to the specified topic. The number of responses in each category was then entered on matrices. Repeated card sorts could then be administered, each preceded by a different introductory statement and using different response categories but with the same deck of cards.

Advantages. Reactions to a long list of stimuli can be obtained according to one frame of reference and then to another without having to ask a long sequence of repetitive closed ended questions.

Disadvantages. The method was essentially one for seeking comparable gradations of subjects' behaviours, with an indication of how they felt about an issue indicated by the way their response categories were laid out on the placement boards. It could be very time consuming with respondents being required to sort as many as nine decks of cards, so that their enthusiasm wanes as the number of card sorts required increases. However the main limitation was that it dealt with one specific issue in depth whereas the current study aimed to encourage subjects to discuss a range of issues concerning the disparate aspects of care. This method was therefore discounted as being applicable to the current study.

ii) Pascoe & Attkisson (1983) simplified the method described by Cataldo et al. (1978) for use in evaluating health care services. Six key characteristics of health services (clinic location and appointments, clinic building, offices and waiting time, clinic assistants and helpers, nurses and doctors, my needs versus clinic services, and service results) together with sub-points (descriptors) of each dimension, were presented to subjects on separate cards. In a two step process the subjects first rank ordered the cards from most to least important, and then rated the absolute and relative quality of the six cards along a continuum in a vertical orientation from worst (bottom anchor) to best (top anchor). This method was therefore able to give more specific information about particular programme components than a global measure and was able to detect subgroups of patients who were dissatisfied with specific programme features. Results showed that this tool, the Evaluation Ranking Scale (ERS), permitted an explicit assessment of a range of service dimensions to be made with results that were more normally distributed and specified exactly how program features were rated (Pascoe & Attkisson, 1983).

Advantage. The ERS provided a model that could be modified for conducting the interviews in the current study as it been found to provide more specific information and to be more discriminating in the evaluation of the components of health care services.

Disadvantage. While both parts of the ERS could potentially be useful in evaluating physiotherapy care, it was not the intention in this study to compare the performance between physiotherapy departments. Therefore only the first part of the ERS in which subjects ranked and evaluated their personal experiences of care was applicable to answering the research questions posed in the current study.

Conclusion. Two studies were reviewed in relation to their applicability to the current research. Modification of the method used by Pascoe & Attkisson (1983) was judged to be the more appropriate in relation to the current study. Subjects would be encouraged to lead the

discussion through the selection and ranking of the topic cards thereby permitting the prioritisation of these issues from their perspective. They would then be encouraged to elaborate on the rationale behind their choices in order to illuminate the discrete topics of interest. This method would permit the discussion to range from one with an initial broad focus concerning the general category chosen by the subject to one in which more specific views on the topic could be elicited through the use of probes. The initial sorting of the cards would give subjects the opportunity to see all the areas that were to be discussed and the time for them to recall their recent experience of treatment before the start of the interview. Since the interviews would be conducted individually this would provide the opportunity of reading the cards to respondents who had visual or literacy difficulties.

While the card sorting phase would constitute the main part of the interview, an initial unstructured phase would also be incorporated into the design to allow subjects to discuss aspects of their treatment that were of particular importance to them before they were shown the cards. This would ensure that the subjects' frame of reference would not be pre-empted by their knowledge of the discrete topics to be identified in the later card-ranking phase.

4.1.2 Development of the tool

i) Design of the cards

The exploratory interviews and focus groups in the first phase of the study had generated data on subjects' experiences and views of their physiotherapy treatment, which were subsequently organised into five principal dimensions of care which were;

- Expectations of physiotherapy:
- Perceptions of the therapist:
- Communication /explanation/information
- Process/content of the treatment sessions:
- Treatment outcome.

The Process/content grouping was subsequently sub-divided into two;

- Content of the treatment sessions,
- Organisation of the treatment sessions

This division represented two discrete aspects of service delivery that had become apparent from the statements relating to both of these dimensions during the previous interviews and had been included under the composite category heading of 'Process/Content'.

The category headings of three other dimensions were also changed to clarify their meaning

and avoid ambiguity in interpretation in the forthcoming card-ranking procedure. Thus,

- Communication/explanation/information *changed to* Explanation and Information given
- Perceptions of the therapist *changed to* My Therapist
- Treatment outcome *changed to* Result of the treatment

Six white cards (6" × 4") were printed (Times New Roman script) with one of the principal dimensions identified above on one side (upper case 14-point type) and descriptors of each dimension on the reverse (lower case 11-point type). The descriptors were representative statements derived from the interview and focus group transcripts relating to the main category headings and expressed in terms used by the subjects (Pascoe & Attkisson, 1983). Statements were worded positively and negatively to avoid acquiescence bias (Ware, 1978).

The list of dimensions and descriptors are presented in Table 4.1. The statements in Section 5 (Content of treatment sessions) were deliberately very general and did not identify specific treatment modalities as these would be for the subjects to elaborate on in the course of discussion. Three descriptor statements were used in Section 6, to represent the treatment outcomes in positive, negative or ambivalent terms, in keeping with the categories identified on the Therapeutic Encounter model (Figure 3.1 page 162)

ii) Design of the interview

The interview was designed with three phases;

1. Initial unstructured phase
2. Card ranking phase
3. Discussion of the descriptor statements

1. Initial unstructured phase

The design of the unstructured phase was suggested by the notion of 'triggering cues' identified in the consumer satisfaction literature (Day, 1977). It has been suggested that the consumer does not consciously evaluate his/her consumption experiences with respect to *a priori* expectations, but rather something out of the ordinary must occur to call his attention to some aspect of the purchase situation. The applicability of this notion to health care has been found in the nursing literature. Greeneich (1993) talked of a 'critical juncture continuum' in which a particular nursing care event mediates the patient's judgement of satisfaction with nursing care. The situation could therefore be applied to the physiotherapy process as evidenced by the 'salient aspects of care' identified by subjects in the focus groups.

Table 4.1 Dimensions of care with descriptor statements on the 6 cards used in the multiphase interviews

- 1) Expectations of the physiotherapy treatment**
 - The treatment would get me going again
 - The treatment would be painful
 - The treatment will involve the use of special equipment
 - I did not know what the treatment would be able to do for me
 - I did not think treatment would be able to help me

- 2) Explanation and information given**
 - I felt I could not discuss my problem with the therapist
 - I was told what was causing my problem
 - I was not told that the treatment might be painful
 - I was able to ask my therapist about anything connected with my treatment
 - The therapist did not answer all my questions
 - The treatment was fully explained to me

- 3) My therapist**
 - My therapist put me at ease and was very kind to me
 - My therapist did not seem interested in me
 - I got on very well with my therapist
 - My therapist did not have a good bedside manner
 - I did not get on well with my therapist
 - My therapist gave me encouragement and praise

- 4) Organisation of the treatment sessions**
 - I had to wait a long time to get my first appointment for treatment
 - I was able to choose the appointment times for treatment
 - Treatment sessions were too infrequent to get any benefit
 - The treatment sessions were too short
 - I did not have any of my treatment sessions cancelled
 - I was told I could contact the department if I had problems after discharge

- 5) Content of the treatment sessions**
 - The treatment was very comfortable and soothing
 - The treatment was tailored to my needs
 - The treatment was uncomfortable
 - The treatment was too rushed
 - I had the personal attention of the therapist during my treatment
 - I was left to work on my own during the session

- 6) Result of treatment**
 - The treatment has helped me in some ways but I am not completely better
 - I have made a full recovery as a result of treatment
 - The treatment has not helped me at all

2. Card ranking phase

This section drew on the first stage of the process described earlier by Pascoe & Attkisson (1983) in which subjects rank ordered the cards from most to least important. This ranking provided the framework for the subsequent discussion on the subject's evaluation of the disparate aspects of care. In a departure from the method by Pascoe & Attkisson (1983) only the card face showing the principal dimensions of care were presented to the subjects at this stage so as not to limit the focus of the discussion.

3. Discussion of the descriptor statements

The third phase was designed to cue subjects to discuss aspects of care that may not have been covered during the interview by checking the descriptor statements relating to each principal dimension of care that appeared on the reverse side of the cards.

4.1.3 Assistant researcher

Prior to conducting the multiphase interviews an assistant researcher was engaged to conduct interviews with subjects in the inner city hospitals. She was a physiotherapy academic with experience in qualitative research methods. A training session was held in which the structure of the interviews was discussed and sections of the pilot interview tapes played to illustrate the subjects' responses to different parts of the schedule. Instruction was also given in obtaining subjects' written consent and permission to audio-tape the interviews, and in supplying the subjects with information on the research project as required by the Research Ethics Committee. After the assistant researcher had conducted the first two interviews the tapes were reviewed by the researcher and discussed by telephone. Some suggestions were made in order to ensure greater standardisation between both researchers when carrying out the interviews, and the aim of each phase of the interview was clarified. A second check following two more interviews established that agreement has been achieved in the way the interviews were being conducted. The assistant researcher subsequently conducted ten interviews in the inner city area with five acute and five chronic subjects respectively.

4.2 METHOD

Design

Multi-phase in-depth interviews incorporating i) unstructured and ii) structured elements.

Subjects

Acute. 34 subjects, 15 male 19 female, age range 19-85 years

Out of 43 subjects contacted (20: 23 male/female) 9 others, 5 male (age range 19 –71years) and 4 female (age range 23-74years) declined to participate

Chronic. 32 subjects, 12 male 20 female, age range 39-86 years were interviewed

Out of 42 subjects contacted (14:28 male/female) 10 others, 2 male (age 61 & 61years) and 8 female (age range 36-88 years) declined to participate

Inclusion criteria

Subjects were recruited into acute and chronic groups for the study on the basis of the following criteria;

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Exclusion criteria

Subjects under 18 years
Non-English speaking subjects
Subjects with a diagnosis of cognitive impairment

Recruitment of subjects

The researcher drew up a list of subjects meeting the entry criteria for the study from the discharge lists of the two participating physiotherapy departments, one inner city and the other suburban. Purposeful sampling was employed from those who had completed a course of

outpatient physiotherapy within the previous 4 months with subjects stratified in relation to diagnosis, age and gender. In purposeful sampling subjects are selected as being information-rich cases for in-depth study and stratification illustrates the characteristics of particular subgroups that facilitates comparison (Patton, 1990).

Procedure

Subjects were contacted by telephone and invited to participate. They were subsequently interviewed either at home or hospital according to their preference. Consent was obtained to tape record the interviews from all the subjects. All subjects gave their written consent prior to participating in the study and were assured of confidentiality and anonymity in reporting their comments (Appendix 1). Sixty-six multiphase interviews were conducted with interviews lasting between 40 minutes to around one hour.

The interviews were conducted in three phases;

1. Initial unstructured phase

The subject's previous experience of treatment and knowledge of physiotherapy was established at the beginning of the interview to determine their degree of familiarity with the physiotherapy process of care. They were then asked to recall their recent course of treatment and to talk freely about any associations of the treatment that were of particular importance to them. Subjects were encouraged to write down the salient features of their care as a means of aiding recall and of reinforcing their commitment to discuss the issues they had identified (Morgan, 1997).

Phase 2 Card ranking phase

The 6 topic cards were placed on a table in front of the subject in a random order face up with only the general dimensions of care visible. The subjects were told that these dimensions related to discrete aspects of the physiotherapy process that had been identified during previous patient interviews. They were then asked to rank the cards vertically with the card representing the most important dimension for them at the top, and the least important at the bottom. Subjects were told to take their time in selecting the cards and that there was no right or wrong order. Following their selection, they were asked to explain their choices and talk about the respective dimensions of care in their own words, with the interview being conducted in a general conversational manner. Both open and closed questions were used as prompts to clarify, confirm, or elicit further information, when necessary.

Phase 3. Discussion of the descriptor statements

When the subject felt that (s)he had exhausted the discussion on the 6 dimensions the cards were turned over, retaining the original order, to reveal the descriptor statements on the back. This final stage of the interview provided the opportunity for the subject to discuss any aspects of the topic that had not been covered in the preceding interview, as well as validating subjects' earlier opinions by asking them to check the descriptor statements on the cards.

Piloting the tool

The feasibility of the method was piloted by conducting interviews with a convenience sample of 4 subjects who met the entry criteria. Two of whom had acute injuries and two with chronic conditions. Interviews were conducted either in the subject's home or at the hospital according to their preference. Written consent was obtained in accordance with Ethics Committee requirements and the patients all agreed to the interviews being tape-recorded. It was found that the overall structure of the schedule encouraged the subjects to talk more easily about their experiences of their physiotherapy treatment than was the case with the earlier exploratory interviews. Subjects reported that the cards were helpful in identifying the topics to be discussed. The transcripts were subject to a summary analysis of content only, as the main purpose of the pilot interviews was to assess the feasibility of the method, and the data were not used in the subsequent analysis of the multiphase interviews.

Analysis

The transcript data from the 66 interviews were analysed within the Interactive Model of Analysis (Miles & Huberman, 1994) (see page, 138). The interview transcripts were coded using data chunks comprising conceptual phrases or sentences representing subjects' views and experiences of the phenomenon with reference to answering the research questions.

The stages were as follows;

1. Each line of the transcript was numbered.
2. The transcripts were read through a number of times and statements judged to represent similar concepts were identified and underlined on the transcript.
3. Cross-reference of these numbered statements could be then be made to the original transcripts in order to restore the context from which they were extracted.
4. Separate coding sheets were used for each of the 6 card headings (expectations; therapist; explanation/information; content; organisation and result) for the acute and chronic groups in the two areas respectively.
5. Under each category heading, all statements made by each patient relating to that category

- were listed and identified by transcript page number. The patient was identified as M/F (male/female) together with their age, e.g. F.48 (female, age 48 years) and cross referenced to their own transcript which was also identified as e.g. F.48. If two or more subjects shared the same basic identification they were distinguished by adding their initials.
6. Verification of the coding and categorisation system was achieved by submitting samples of the coding sheets for independent peer review by two judges (Appendix 3)
 7. Summary sheets were constructed in which the key elements comprising each discrete category were counted and arranged into groups that were later presented in frequency tables.
 8. Statements representing a spectrum of views were chosen as illustrative verbatim quotes in relation to each category from those who ranked the associated category card either moderate/high or moderate/low.

4.3 RESULTS

Group results for acute and chronic subjects are presented under the following headings.

1. Initial unstructured phase
2. Card ranking phase
3. Discussion of the descriptor statements

Raw data are presented in Appendix 3.

1. Initial unstructured phase

a) Subjects' previous experience of physiotherapy

Acute group (n=34)

Fifteen subjects (44%) had received previous treatment, which in 7 cases was for an acute injury and in 8 for a chronic/degenerative spinal or peripheral problem. Nineteen subjects in the acute groups (56%) had no previous experience of physiotherapy, but had acquired some knowledge mainly through talking to friends or relations, or as a result of previous professional training (nursing).

Chronic group (n= 32)

Twenty-two subjects (69%) had previous experience of physiotherapy for a recurrent or different joint problem. Of those who had not 10 (31%) had gained some idea of what physiotherapy might involve from talking to friends, seeing physiotherapy being given to a

family member, or from 'common sense' knowledge of what it might involve.

b) Most salient aspects of treatment

The topic areas discussed (Table 4.2) were arranged from those most to those least frequently mentioned. Each subject discussed more than one topic area as can be seen from the percentages recorded on the chart. Although topic categories are presented for clarity, they were generally not dealt with as discrete issues in the course of the discussions.

Table 4.2 Topics discussed by subjects in the unstructured phase of the interview.

Topics discussed	Mentioned in relation to topic Acute (n=34)		Topics discussed	Mentioned in relation to topic Chronic (n=32)	
	No.	%		No.	%
Content of the treatment sessions	26	76	Content of the treatment sessions	23	72
Explanation & Information received	24	71	Organisational aspects of treatment	15	47
Organisational aspects of treatment	18	53	Effects of treatment	14	44
The therapist	18	53	Personal beliefs	13	41
Personal beliefs	17	50	Result of treatment	11	34
Result of treatment	11	29	Explanation & Information received	10	31
Self help	5	15	The therapist	10	31
Expectations	4	12	Home exercises	10	31
Facilities	2	6	Expectations	8	24
			Self help	3	9
			Knowledge of condition	3	9

It can be seen from Table 4.2 that the Content of the treatment sessions was most frequently mentioned in both groups. The second most frequently mentioned was Explanation and Information received in the acute group and Organisational aspects of treatment in the chronic group. Forty-four percent of the chronic group discussed the Effect that treatment had on their symptoms during the course of their treatment and identified the provision of Home exercises (31%) as an important component of treatment. The relationship with the Therapist was of particular salience to 53% of subjects in the acute group but only 31% in the chronic group.

Although subjects were invited to write down the salient features of treatment to aid recall and act as a basis for the discussion, 11 (32%) in the acute group, and 14 (44%) in the chronic group just preferred to talk.

2. Card-ranking phase

The responses given by the subjects in the card-ranking section of the interview indicated how they prioritised, evaluated and viewed the different aspects of their physiotherapy care. Subjects were asked to rank the 6 topic cards from most important (Number 1) to least important (Number 6). The results are presented in the following order for convenience and this does not represent a rating scale.

- 1) Expectations of physiotherapy
- 2) Explanation and information given
- 3) My therapist
- 4) Content of the treatment sessions
- 5) Organisation of the treatment sessions
- 6) Result of treatment

Responses to the open ended questions in relation to each topic card were coded into more than one category so that the percentages given in the Tables may be >100%. Results from the inner city and suburban samples are combined for the acute and chronic groups respectively, as the aim was to achieve a range of responses from subjects in different locations and not to compare inner city and suburban responses *per se*.

Verbatim quotes, representing a spectrum of views in relation to each dimension were chosen to illustrate the reasoning that subjects gave for their choices when ranking the cards. With reference to the general topic of the research the statements were representative of those who either ranked the card high (ranked 3 or above) or low (ranked 4 or below).

1. Expectations of physiotherapy

It can be seen from Table 4.3 that whereas (29%) subjects in the acute group ranked the Expectations card at number 6, 31% of the chronic group ranked it at number 1. There is some polarisation of ranking in the chronic group with subjects ranking this card either moderate/high or low, with only one subject ranking it at number 4. In the acute group the tendency was toward moderate/low ranking overall, with the smallest number of subjects choosing this card as number 1 or 2.

Table 4.3 Number and percentage of subjects ranking the card ‘Expectations of Physiotherapy’ from 1 (most important) to 6 (least important)

Acute <i>n</i> =34			Chronic <i>n</i> =32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	3	9	1	10	31
2	4	12	2	4	13
3	7	21	3	5	16
4	5	15	4	1	3
5	5	15	5	6	19
6	10	29	6	6	19

Subjects identified a number of expectations in relation to the process and outcome of their care (Table 4.4).

Table 4.4 Expectations of physiotherapy: number and percentage of subjects’ responses

Expectations expressed	Acute (<i>n</i> =34)		Expectations expressed	Chronic (<i>n</i> =32)	
	No.	%		No.	%
Did not know what to expect	15	44	Symptom relief	20	63
Expecting specific treatment modality	15	44	Expecting specific treatment modality	9	29
Expecting to make a good recovery	13	38	Expecting complete recovery	6	19
Expecting complete recovery	13	38	Did not know what to expect	3	9
Not expecting full recovery	7	21	Not expecting physiotherapy to help	2	6
Expecting treatment to be painful	4	12			
Expecting a particular treatment approach	2	6			
Expecting to have to wait for treatment	1	3			

It can be seen from that subjects in the acute group held different expectations and these were expressed principally in terms of recovery and content of the treatment sessions. Thirty eight percent of the sample had expectations of making a complete recovery, although in terms of what the treatment might comprise 44% said they did not know.

In the chronic group expectations were expressed principally in terms of symptom relief (63%) and of receiving particular treatment modalities (29%) although 19% were hoping for a complete resolution of their problem.

Samples of verbatim responses from subjects with respect to Expectations of physiotherapy, indicating the range of views expressed are presented in Tables 4.5 and 4.6.

Table 4.5 Verbatim responses by subjects on the topic of Expectations of physiotherapy who ranked this card 3 or above

Acute Subjects

I didn't really know what they were going to suggest other than sort of keep moving it
I expected to be able to do everything again (after) physio
I just thought they were going to make it all better
I was hoping everything would be nice and clear and this bump would be gone
I was expecting to get this arm going as quickly as possible with the physio
I didn't expect to be as good as I was when the POP came off
I didn't think it would be a one-to-one (treatment)

Chronic Subjects

I wanted to be free of pain and able to do things I hadn't been able to do
You're expectations are that it's going to be some kind of cure
Hopefully they will help me to get better without having surgery
I was hoping physiotherapy would do a lot of good because I was in such great pain
It was the expectations of help I was going to get to relieve the pain and stiffness
I was expecting traction
I knew it would be working on my shoulder and different exercises I'd have to do

Table 4.6 Verbatim responses by subjects on the topic of Expectations of physiotherapy who ranked this card 4 or below

Acute Subjects

I think my expectations were I would get fitter a little bit faster than I actually did
I wasn't expecting it to be 100%
I did expect to be back to normal eventually.
Well, really I mean I didn't know what to expect, not having been there before.
I think I probably had a vague idea that it would be a combination of manipulation and exercise
Well I thought they were going to stretch (my neck)
I didn't think I would get seen quickly.

Chronic Subjects

I didn't really expect to actually cure my headaches, relief but not cure
I expected him to work miracles, I expected some type of relief
I thought it was going to be electrical
I thought it might be heat treatment or something like that
First of all what I wanted to get done was to get cured
My expectations were nil to be honest, but I followed on because my doctor recommended it to me
I didn't have a clue what I was going to have...it was all new to me

2. Explanation and Information given

It can be seen from Table 4.7 that the least number of subjects chose this card as either number 1 or 6. There was a tendency towards a higher overall ranking in the acute group with the majority of subjects (26%) selecting this card at number 2, compared with the majority in the chronic group (31%) who selected it at number 4.

Table 4.7 Number and percentage of subjects ranking the 'Explanation and Information given' card from 1 (most important) to 6 (least important)

Acute <i>n</i> =34			Chronic <i>n</i> =32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	3	9	1	2	6
2	9	26	2	7	22
3	7	21	3	5	16
4	7	21	4	10	31
5	6	18	5	7	22
6	2	6	6	1	3

Table 4.8 shows the distribution of subjects' open responses to probes in relation to the explanation and information they were given in the course of the therapeutic encounter. The percentages shown are of the whole sample so that the total is more than 100%.

Table 4.8 Explanation and Information given in the course of the therapeutic encounter: number and percentage of subjects' responses.

Explanation and information given	Acute (<i>n</i> =34)		Explanation and information given	Chronic (<i>n</i> =32)	
	No.	%		No.	%
Explanation of problem	29	85	Explanation of problem	18	56
Given home exercises	23	68	Told effect of treatment	14	44
Given written exercises	18	53	Given home exercises	13	41
Told effect of treatment	17	50	Given written exercises	13	41
Warned of discomfort	14	41	Shown diagrams/models	9	28
Questions asked	13	38	Given a treatment plan	7	22
Shown diagrams/models	10	29	Warned of discomfort	3	9
Given a treatment plan	9	26			
Given discharge plans	9	26			
Patients told of their responsibilities	8	25			
Patients did not want details	5	15			

It can be seen from Table 4.8 that medical, educational and organisational issues were discussed in both groups, with 85% of the acute group and 56% of the chronic group reported being given an explanation of their problem. Both groups were also given written exercise sheets and instructed in home exercise programs. Notably, 38% of the acute group reported

asking for information in the course of their treatment. There appears to have been no involvement with discharge planning or in reinforcing adherence to treatment regimes in the chronic group.

Sample of verbatim responses from subjects with respect to Explanation and Information given during their treatment indicating the range of views expressed are presented in Tables 4.9 and 4.10.

Table 4.9 Verbatim responses by subjects in relation to Explanation and Information received who ranked this card 3 or above.

Acute subjects

It's important for me to understand what type of damage I've had really
To have it written down, what I had to do, was a great help
She explained that the reason why I need to have (strapping)
I always think it's very helpful to be told exactly why you're doing the exercises
The therapist used to say, once it starts to hurt then we stop
They told me exactly what they were going to do, how they would do it
It helped to know exactly what exercises I should be doing or shouldn't from day to day

Chronic subjects

She showed me the skeletal spine and showed me where the trouble was
The first week I went she explained all about the neck and what would happen (in treatment)
She was very good in explaining why we were doing the exercises and what it was going to do for us
She explained to me exactly what is going on and what she is going to do to me
I was fully put in the picture as regards the problem that I had
Yes, she used to explain everything....I don't know if I can remember it now
She went to great lengths to explain each time why a particular exercise was being done

Table 4.10 Verbatim responses by subjects in relation to Explanation and Information received who ranked this card 4 or below.

Acute subjects

I want no details anyway as long as it was getting better
Neither (therapist nor doctor) showed me or really explained properly what I'd done
I got like work sheets showing me different exercises I should try
She explained the different exercises and what they do, you know
She even went and got the bones and showed me where I had broken it
Not much information given or explanations given unless I asked for it
If I asked them to find out something they generally did

Cont...

Table 4.10 Verbatim responses by subjects in relation to Explanation and Information received who ranked this card 4 or below (cont.)

Chronic subjects

He explained what he wanted me to do when I came home, exercise wise
 He did explain everything, showed me charts, what was wrong, and the skeleton, he pointed it all out
 He told me what his objectives were in advance (how) he was going to deal with this, deal with that
 The info they all give meexplained everything I could possibly want to know
 I don't think he told me (about condition) or if he did I don't remember
 I was given several sheets relating to neck exercises....on posture
 The treatment was fully explained to me...in a sort of... chatty way

3. My therapist

Table 4.11 shows the distribution of the card selection for My therapist. This card was ranked moderate/high by around 75% of the sample in both the acute and chronic groups, with the majority ranking it 1 or 2.

Table 4.11 Number and percentage of subjects ranking the 'My Therapist' card from 1 (most important) to 6 (least important)

Acute n=34			Chronic n=32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	13	38	1	10	31
2	8	24	2	7	22
3	5	15	3	6	19
4	2	6	4	3	9
5	3	9	5	2	6
6	3	9	6	4	12

Subjects identified factors relating to the affective qualities of the therapist and the manner in which (s)he responded to the subjects at an interpersonal level, as well as to instrumental issues concerned with aspects of professional competence and medical knowledge (Table 4.12). Subjects often ascribed more than one attribute to their therapist, so that the percentages shown total more than 100%.

Subjects ascribed a number of attributes to their therapist, with the most frequently mentioned being 'nice' and 'good', However in the acute group 35% also described their therapist as 'friendly', compared with only 13% in the chronic group. Thirty one percent of subjects in the chronic group felt that the therapist put them at their ease compared with 12% in the acute group.

Table 4.12 Qualities ascribed to the therapist: number and percentage of subjects' responses

Attribute	Acute (n=34)		Attribute	Chronic (n=32)	
	No.	%		No.	%
Nice	16	47	Good	14	44
Good	14	41	Nice	13	44
Friendly	12	35	Put patient at ease	10	31
Helpful	8	24	Knowledgeable	7	22
Knowledgeable	6	18	Helpful	5	16
Pleasant	5	15	Friendly	4	13
Put patient at ease	4	12	Polite	4	13
Concerned	3	9	Efficient	3	9
Understanding	3	9	Concerned	2	6
Listened	2	6	Gentle	2	6
Competent	2	6			
Polite	2	6			
Lovely	2	6			
Confidence inspiring	2	6			

There were a number of additional attributes ascribed to the therapist that were mentioned by the subjects only once. These are shown in Tables 4.13 and 4.14. Attributes mentioned by both groups are in **bold**.

Table 4.13 Attributes ascribed to the therapist only once by subjects in the acute group

Open and honest	Gave encouragement	Considerate	Not just doing her job
Warm	Confident	Brilliant	Professional
Kind	Easy and outgoing	Sympathetic	Lovely
Cheerful	Sweet	Authoritarian	Dedicated
Marvellous	Excellent	Persuasive	Great
Sense of humour	Gentle	Informative	

Table 4.14 Attributes ascribed to the therapist only once by subjects in the chronic group

Lovely	Great	Understanding	Considerate	Neat
Personal	Sincere	Cheerful	Punctual	Confident
Excellent	Kind	Dedicated	Brilliant	Professional

Sample of representative verbatim responses from subjects with respect to the Therapist indicating the range of views expressed are presented in Tables 4.15 and 4.16.

Table 4.15 Verbatim responses given by subjects in relation to the Therapist, who ranked this card 3 or above

Acute subjects

Nice personality, very nice girl
She put me at ease...and ...she was friendly
Her whole attitude was so caring
She was very nice and friendly and always ...considerate, not demanding too much
She gave me confidenceand she cared
She was fairly open and honest with me
She was very, very confident in what she told me to do

Chronic subjects

She made you feel very comfortable and helped you in every possible way
Her personality put you at ease really
She was really good, she knew what she was doing
She was just a very nice person who tried to help me
Like a friend really
She was just a very pleasant girl...I felt like, she was *trying* to help
Brilliant, not too personal, but extremely efficient and really good, great

Table 4.16 Verbatim responses given by subjects in relation to the Therapist, who ranked this card 4 or below.

Acute subjects

He was a nice chap, we got on OK.
She was very nice and very pleasant
She was a very pleasant lady, extremely nice to me, and kind
Very polite, very professional
She just had full control of the situation, humour, but also persuasiveness
She just seemed very competent....she did make me feel comfortable

Chronic subjects

Nice young girl, like a friend really, very gentle and I thought she was a lovely girl
She was quite pleasant
He was very helpful and very nice
They were very sincere, telling me this, that, and the other
Well, he was very nice, he was punctual
She helped all she could ...being young I think she was worried about the (condition)
She knew what she was doing, she appeared very confident

4. Content of treatment sessions

Table 4.17 shows the result of the ranking for the card 'content of treatment' sessions. Nine percent in the acute group and 3% in the chronic group ranked it highest. While the majority of the chronic group (28%) ranked it number 3, 29% of the acute group ranked it as number 5.

Table 4.17 Number and percentage of subjects ranking of the 'Content of treatment sessions' card from 1 (most important) to 6 (least important)

Acute n= 34			Chronic n=32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	3	9	1	1	3
2	5	15	2	6	19
3	7	21	3	9	28
4	6	18	4	6	19
5	10	29	5	8	25
6	3	9	6	2	6

A variety of treatments were applied during the physiotherapy sessions with subjects often receiving more than one modality (Table 4.18). Although exercises and mobilisations were the principal interventions in each case, the chronic group also reported receiving traction (34%) postural advice (34%) and home exercise (41%), while the acute group used gym equipment (35%) and ultrasound (32%).

Table 4.18 Therapeutic modalities used during the treatment sessions: number and percentage of subjects' responses.

Modalities	Acute (n=34)		Modalities	Chronic (n=32)	
	No.	%		No.	%
Exercises	21	62	Exercises	25	78
Gym equipment	14	41	Mobilisations	23	72
Mobilisations	13	38	Taught home exercise programme	13	41
Ultrasound	11	32	Traction	11	34
Heat treatment	9	26	Postural correction /advice	11	34
Electrical equipment (not U/S)	8	24	Heat treatment	6	19
Wax	7	21	Ultrasound	4	13
Theraband	7	21	Electrical equipment (not U S)	4	13
Massage	7	21	Collar	3	9
Pulleys	5	15	Frictions	2	6
Ice	3	9	Theraband	2	6
Acupuncture	3	9			
Contrast baths	3	9			
Traction	2	6			
Strapping	1	3			
Biofeedback	1	3			
Sling suspension	1	3			

Additional therapeutic modalities that were also mentioned once by subjects in the chronic groups (Table 4 19).

Table 4.19 Therapeutic modalities mentioned once only by subjects in the chronic group

Massage Taping	TNS Knee support	Soft tissue stretches Acupuncture	Wrist support
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Sample of verbatim responses from subjects with respect to the content of the treatment sessions indicating the range of views expressed are presented in Tables 4.20 and 4.21.

Table 4.20 Verbatim responses given by the subjects in relation to the Content of their treatment sessions, who ranked this card 3 or above.

Acute subjects

The content was very good, it wasn't boring old things...the same every week
 The type of treatment has to be *the* most appropriate to get your injury healed
 If she hadn't have given me the right exercises...the result of treatment wouldn't have been so good
 If I'd had intensive therapy...I felt the end result would have been quicker
 I was surprised there wasn't anything else that could have been done
 I did feel every time I came out of there absolutely exhausted
 I found it a bit hard at first but I was quite interested and quite pleased with the treatment I was getting

Chronic subjects

There's a lot to try and take in all at once with what they're telling you
 I was pleased with what she did, the massaging and the exercises
 She worked on my legs, yea, I thought the content was very, very good
 It hurt when I used to do (exercises), the pain was there
 After she manipulated it you could feel it releasing, so it's marvellous
 She didn't just assume that she knew what was wrong, it was a working together process
 I thought you would have been on a bed and they'd do all the spine and manipulate that way

Cont...

Table 4.21 Verbatim responses given by the subjects in relation to the Content of their treatment sessions, who ranked this card 4 or below

Acute subjects

I wanted this result, how it happened was up to everybody here to show me
 I don't feel qualified to say whether they were the right or wrong exercises for me
 It didn't really matter what was in as long as I was getting what I wanted out of it
 If I could have had U/S from day one it might have been more beneficial than the heat treatment
 It wasn't as painful as I thought it would be
 I was rather surprised that there was a lot of exercise
 I did prefer it when I was on the gym bars and the rope

Chronic subjects

I just went by whatever she wanted me to do
 I think the content of the treatment was excellent, I think he done everything he could basically
 I felt he sussed me out, and I didn't want to be going up there for ages
 She gave me things to do without even thinking about it...things I could do on my own
 They didn't say they could do anything really to help me but just do the exercises
 I would have liked more exercises with the limb itself at the time
 I would have *liked* it to have gone on a bit longer because it was the relief of it after all that time

5. Organisation of the treatment sessions

Table 4.22 shows the distribution of the card selection for Organisation of the treatment sessions. The majority of subjects in each group ranked this card at number 4, but in the chronic group there is an indication of some polarisation between those ranking the card high (32%) or low (62%), whereas in the acute group the trend is towards middle/low ranking overall.

Table 4.22 Number and percentage of subjects ranking the 'Organisation of treatment session' card from 1 (most important) to 6 (least important)

Acute n=34			Chronic n=32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	1	3	1	5	16
2	5	15	2	5	16
3	7	21	3	2	6
4	9	26	4	12	37
5	6	18	5	3	9
6	6	18	6	5	16

The length of time that subjects waited to get their first appointment for treatment varied between the acute and chronic groups, with those in the acute group tending to be seen within weeks rather than months (Table 4.23).

Table 4.23 Waiting time for a first appointment for treatment: number and percentage of subjects' responses

Waiting time for first appointment	Acute (n=34)		Waiting time for first appointment	Chronic (n=32)	
	No.	%		No.	%
The next working day following referral	1	3	One month	6	19
Within a week	20	59	Within 2 weeks	5	16
A week to 10 days	4	12	Within a week	4	13
Within 2 weeks	4	12	Three months	4	13
2-3 weeks	2	6	Six months or longer	3	19
3 weeks	2	6	4-6 weeks	2	6
			Two months	2	6
			Four months	2	6

One subject (Acute) was non-specific and said her waiting time was 'not long'
No data available for 4 chronic subjects

The majority of subjects in both groups were seen weekly for their treatment sessions (Table 4.24)

Table 4.24 Frequency of treatment sessions: number and percentage of subjects' responses

Frequency of treatment per week	Acute (n=34)		Frequency of treatment per week	Chronic (n=32)	
	No.	%		No.	%
Once a week	18	53	Once a week	19	59
Once a week then twice a week	2	6	Once a week then once a fortnight	3	9
Once a week then once a fortnight	1	3	Twice a week	3	9
Twice a week	4	12	Twice a week then once a week	2	6
Twice a week then once a week	3	9	Three times a week	1	3
Three times a week	2	6	Variable	1	3

Four acute subjects attended for group/circuit work. One attended daily. Two attended twice a week, and one subject was seen weekly in the group with additional individual treatment twice a week.
No data are available for 3 chronic subjects

It can be seen from Table 4.25 that the length of treatment sessions varied from 10-15 minutes to an hour, although the majority of subjects in both groups had sessions lasting 30 minutes.

Table 4.25 Length of treatment sessions: number and percentage of subjects' responses

Length of treatment session	Acute (n=34)		Length of treatment session	Chronic (n=32)	
	No.	%		No.	%
30 minutes	14	41	30 minutes	15	47
Up to one hour*	7	21	15- 30 minutes	9	28
15- 20 minutes	6	18	10-15 minutes	4	13
Up to 45 minutes	5	15	Up to 45 minutes	1	3
			Up to one hour	1	3

*Including group work for n= 4 acute subjects.

No data available for 2 acute subjects. No data available for 2 chronic subjects

Choice of appointment times

Only 15% (n=5) of the acute group and 16% (n=5) of the chronic group who attended for individual treatment sessions reported that they were not always given a choice of appointment times. Subjects in the acute group who had group sessions were required to attend at set times each week.

There was no data available for one subject in the chronic group.

Punctuality of treatment sessions

The majority of respondents (68% acute: 69% chronic) felt that they were seen on time or within 5 minutes of their appointment time. In the acute group four patients were kept waiting for their appointments by 10-15 minutes, but understood that this was due to previous patients arriving late. One patient reported that she waited half an hour for her treatment, as the therapists appeared to be otherwise busy in the department. Data was not available for 4 subjects.

In the chronic group only three patients reported waiting up to 15 minutes. Data was not available for 6 subjects.

Discharge arrangements

Respondents were asked about discharge arrangements on completion of their course of treatment. Twenty (59%) of the acute group and 18 (56%) of the chronic group reported that they were told they could contact the Physiotherapy department for advice or further treatment following discharge.

Eight acute (24%) and seven chronic (22%) subjects were discharged with no follow-up arrangements.

Three (acute) required a medical re-referral, one (chronic) was referred back to the consultant, and another (chronic) was admitted to hospital.

Data was not available for 2 (acute) and 5 (chronic) subjects.

Transport

Four respondents (12%) in the acute group decided to make their own way up for treatment as hospital transport was perceived to be too time consuming. Three patients (9%) in the chronic group required hospital transport to attend for physiotherapy.

Décor

There were comments by two respondents (6%) in the acute group about the décor of the department. One thought the waiting area was too drab. The other felt the treatment area was clean and pleasant, but that there should be some provision of drinking water for the patients using the gym. There were no comments on this topic by any of the patients in the chronic group.

Busy department

Eleven subjects (32%) in the acute group and 9 (28%) in the chronic group specifically mentioned that the department was very busy. In 7 (acute) cases this meant that the therapist had to treat more than one patient at a time, and in 4 (acute) cases subjects thought were taking up taking up treatment time unnecessarily.

6. Result of treatment

The order of ranking for the result of treatment card is presented in Table 4.26 and it can be seen that there is a difference between the acute and chronic groups. In the acute group the Result of treatment is ranked either predominantly high or low. Thirty two percent of the whole sample ranked the card as Number 1, and 29% as Number 6. In the chronic group this card was ranked predominantly low, with 43% of subjects selecting it at Number 6.

Table 4.26 Number and percentage of subjects ranking the ‘Result of treatment’ card from 1 (most important) to 6 (least important)

Acute <i>n</i> =34			Chronic <i>n</i> =32		
Card Rank No.	No. subjects	%	Card Rank No.	No. subjects	%
1	11	32	1	4	13
2	4	12	2	3	9
3	1	3	3	5	16
4	4	12	4	1	3
5	4	12	5	5	16
6	10	29	6	14	43

Subjects were asked to assess the result of their physiotherapy treatment in terms of complete recovery, partial recovery or no change (Table 4.27).

Table 4.27 Subjects’ assessment of the result of treatment in terms of the level of recovery achieved: number and percentage of responses

Result of treatment	Acute <i>n</i> =34		Chronic <i>n</i> =32	
	No. subjects	%	No. subjects	%
Made a full recovery	10	29	6	19
Treatment helped but not completely better	24	71	16	50
Treatment has not helped	0	0	9	28

One subject in the chronic group was undecided because of the fluctuating nature of her condition therefore the total percentage is less than 100%

Sample of verbatim responses from subjects with respect to the Result of treatment indicating the range of views expressed are presented in Tables 4.28 and 4.29.

Table 4.28 Verbatim responses given by the subjects in relation to the Result of treatment, who ranked this card 3 or above.

Acute subjects

I would say I've got 99% use of my hand back
I thought I progressed very well really...I am back to normal
The result of the treatment was that my ankle did get better
I can do everything I could do before
I wanted to get a good result at the end of it...which I think I've got now
The result was the most important because I didn't want to lose the freedom I had before the accident
I just wanted a good result at the end of treatment
The most important thing was that I did get full facility back

Chronic subjects

In terms of how I am now, I'd say 100%, because I'm symptom free
I would say I've made a full recovery
I think it's safe to say on this one virtually a full recovery
I'm not completely better, but I think it's helped me
I was very pleased with it. I can't say it's gone but I do my exercises and that
It feels better, and I do know what to do to help myself
I was over the moon with the treatment, 'cos the pain I was getting (went)
I don't feel that its done me that much good to be honest

Table 4.29 Verbatim responses given by the subjects in relation to the Result of treatment, who ranked this card 4 or below.

Acute subjects

The result was good. I was pleased too, I was on the mend
I think that as a broken arm it probably is completely recovered
I'm quite happy with the outcome, they got as far as they could for me
I thought I would get 100%.....then the bombshell that she can't do any more for me
Not as much (recovered) as I thought
I don't know why I expected it to be 100%, maybe because I didn't understand the extent of the break
Well I was a little bit disappointed that I've still got a swelling
The thing that really worries me that I've got no grip in the fingers
There hasn't really been (a result) to be honest

Chronic subjects)

I knew it wasn't doing any good, to me it was a waste of time
It never did anything, no worse, just the same
I was pleased with feeling good afterwards, but not for long
I'd say it was worse, it wasn't his fault, there was nothing he could do
It's helped a little bit, but I think it's just gone back to normal again
I know I don't feel any better
No help whatsoever, there was no recovery after treatment
It relieved the pain in my arm, but I've got that pain in my back still

A summary of the principal findings from the card-sort section of the interviews in relation to the six dimensions of care that were discussed by the subjects is shown in Table 4.30

Table 4.30 Summary of topics discussed by subjects in the card ranking section of the multiphase interviews in relation to the 6 principal dimensions of care

Card heading	Acute group n=34		Chronic group n=32	
	Topic discussed	% subjects	Topic discussed	% subjects
Expectations	Did not know what to expect	44	Symptomatic relief	63
	Expecting specific treatment modality	44	Expecting specific treatment modality	31
	Expecting to make a full recovery	38	Resolution of the problem "cure"	22
	Expecting a good recovery	38	Not expecting treatment to help	16
	Not expecting full recovery	21		
	Expecting treatment to be painful	12		
Explanations	About the injury and prognosis for recovery	85	About the condition	56
	Home exercises	68	Home exercises	41
	Effect of treatment	50	Effect of treatment	44
	Given treatment plan	26	Given treatment plan	22
Therapist	Nice	47	Good	44
	Good	41	Nice	41
	Friendly	35	Put you at ease	31
	Helpful	24	Knowledgeable	22
	Knowledgeable	18	Helpful	16
	Pleasant	15	Polite	13
	Put at ease	12	Friendly	13
Content	Exercise	62	Exercises	78
	Mobilisations	38	Mobilisations	72
	Gym work	35	Postural advice	34
	U/S	32	Traction	34
	Heat treatment	26	Electrical treatment (other)	26
	Electrical treatment (other)	24	Heat treatment	19
	Wax.	21		
Organisation	Initial assessment:		Initial assessment:	
	Within 1 week	59	Within 1 month	35
	Within 2 weeks	24	Within 1 week	13
			Within 3 months	13
	Flexible appointment times	85	Flexible appointment times	84
	Punctuality of sessions	68	Punctuality of sessions	69
Busy department	32	Busy department	28	
Result	Full recovery	29	Full recovery	19
	Residual problems	71	Residual problems	50
			No change	31

3. Descriptor statement discussion phase

In the final stage of the interview the subjects were asked to check the descriptor statements on the reverse of the cards and to discuss any further aspects of the topics that had not been covered in the preceding interview. Tables 4.31-4.36 show the number of agree/disagree responses to each statement in relation to the 6 principal dimensions of care for all subjects. Not all subjects responded to each statement. In cases where subjects had been quite verbose in their discussions during the interview, they felt that they had covered the topics identified in the statements and had nothing further to add. Others scanned the statements and either agreed or disagreed if the statement was of particular salience to their experience and they wanted to reinforce earlier comments they had made on the topic earlier in the interview. In general comments in this section did not identify any additional aspects of care that had not been previously discussed during the course of the interview.

The majority of subjects in both groups expected the treatment to 'get them going again' with over half anticipating that the treatment would be of help (Table 4.31). Around half of the acute subjects expected the treatment to be painful.

Table 4.31 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension 'Expectations of physiotherapy'

Descriptor statement	Acute n=34				Chronic n=32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
Expectations of physiotherapy								
The treatment would get me going again	26	76	0	0	21	66	1	3
The treatment would be painful	18	53	6	18	10	31	11	34
The treatment will involve the use of special equipment	12	35	11	32	10	31	12	38
I did not know what the treatment would be able to do for me	13	38	6	18	12	38	6	19
I did not think the treatment would be able to help me	2	6	19	56	3	9	19	59

In relation to communication in the course of therapy (Table 4.32) around 75% of subjects in both groups felt that the treatment had been fully explained to them and that they had been able to ask the therapist anything connected with the treatment. However less than half of those in the acute group (47%) compared with 78% of those in the chronic appeared to have been given an explanation of their condition.

Table 4.32 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension of 'Explanation and Information given'.

Descriptor statement	Acute n=34				Chronic n=32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
Explanation and Information given								
I felt I could not discuss my problem with the therapist	1	3	21	62	0	0	17	53
I was told what was causing my problem	16	47	2	6	25	78	3	9
I was not told that the treatment might be painful	8	24	8	24	13	41	4	13
I was able to ask my therapist about anything connected with my treatment	26	76	1	3	24	75	0	0
The therapist did not answer all my questions	0	0	24	71	1	3	18	56
The treatment was fully explained to me	24	71	5	15	27	84	1	3

Subjects in both acute and chronic groups appeared to have had a very good relationship with their therapist and agreed that they had been given encouragement and praise in the course of their treatment (Table 4.33)

Table 4.33 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension of 'My Therapist'

Descriptor statement	Acute n=34				Chronic n=32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
My Therapist								
My therapist put me at ease and was very kind to me	30	88	0	0	29	91	0	0
My therapist did not seem interested in me	0	0	20	59	0	0	17	53
I got on very well with my therapist	30	88	0	0	29	91	0	0
My therapist did not have a good 'bedside manner'	0	0	19	56	0	0	21	66
I did not get on well with my therapist	0	0	13	38	0	0	19	59
My therapist gave me encouragement and praise	25	74	3	9	24	75	3	9

The majority of subjects in both groups felt that the treatment was comfortable, although more of those in the acute group (74%) thought it was tailored to their needs (Table 4.34). There appears to have been greater degree of 'one to one' attention given to those in the chronic group (88%) which would accord with acute subjects' involvement in group work where they would be working on their own.

Table 4.34 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension of 'Content of treatment sessions'

Descriptor statement	Acute n=34				Chronic n=32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
Content of treatment sessions								
The treatment was very comfortable and soothing	20	59	6	18	19	59	6	19
The treatment was tailored to my needs	25	74	0	0	18	56	2	6
The treatment was uncomfortable	12	35	13	38	8	25	18	56
The treatment was too rushed	3	9	23	68	4	13	20	63
I had the personal attention of the therapist during my treatment	22	65	4	12	28	88	2	6
I was left to work on my own during the session	19	56	8	24	4	13	17	53

In relation to the organisational aspects of treatment (Table 4.35) those in the acute group were given more urgent appointments for treatment (76% : 41%). Around half of all subjects were satisfied with the length and frequency of their sessions and the majority did not have any of them cancelled. Those in the acute group were more likely to have been encouraged to contact the department again following discharge (68% compared with 53%).

Table 4.35 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension of 'Organisation of treatment sessions'.

Descriptor statement	Acute n=34				Chronic n=32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
Organisation of treatment sessions								
I had to wait a long time to get my first appointment for treatment	4	12	26	76	12	38	13	41
I was able to choose the appointment times for treatment	24	71	4*	12	26	81	2	6
Treatment sessions were too infrequent to get any benefit	8	24	16	47	7	22	15	47
The treatment sessions were too short	9	26	19	56	8	25	17	53
I did not have any of my treatment sessions cancelled	19	56	8	24	21	66	7	22
I was told I could contact the department if I had problems after discharge	23	68	4	12	17	53	7	22

* Two patients attended for class work and had to attend at predetermined times

Although the majority of subjects in both groups agreed that treatment had helped them greater improvement was reported in the acute group (Table 4.36)

Table 4.36 Number and percentage of subjects' agree/disagree responses to the descriptor statements in relation to the dimension of 'Result of treatment'

Descriptor statement	Acute <i>n</i> =34				Chronic <i>n</i> =32			
	Agree	%	Disagree	%	Agree	%	Disagree	%
Result of treatment								
The treatment has helped me in some ways but I am not completely better	24	71	0	0	19	59	0	0
I have made a full recovery as a result of treatment	10	29	0	0	6	19	0	0
The treatment has not helped me at all	0	0	0	0	7	22	0	0

4.4 DISCUSSION

i) Unstructured interview

The initial unstructured part of the interview sought to establish subjects' experiences and knowledge of physiotherapy and to elicit the most salient aspects of their physiotherapy experience. It was apparent that even when subjects had not had physiotherapy before there was some popular notion of what it might involve, not only in terms of content ('massage and exercise') but also that it would be vigorous ('pulling you about') and painful. Any past experiences of physiotherapy tended to be evaluated in terms of the degree of symptom relief achieved from treatment, and in the majority of cases this was regarded as positive. When subjects had previous experience of treatment this did not necessarily inform their expectations of their current episode, particularly when a different area of the body was being treated. However, for some subjects in the chronic group there were expectations that previously successful modalities might be employed again with similar beneficial effect.

When subjects were asked to recall salient aspects of their recent physiotherapy treatment there was a tendency for more than one topic to be identified whether they had attended before or not. Only five subjects in each group identified a single discrete aspect of their treatment for discussion. This accords with findings in the satisfaction literature that patients form opinions about disparate aspects of their care (Abramowitz et al., 1987).

In the acute group aspects of treatment and information given were often 'linked' with the therapist because (s)he was providing them both. Specific comments on the therapist were only separated out if they were especially salient in some way. In relation to the content of the treatment sessions, topics discussed by this group related predominantly to the treatment modalities used, but also to the reasons why some sessions were remembered specifically as being either painful or enjoyable. Information was given principally in relation to the patient's condition and, while some subjects were reassured by the amount of explanation they received either from the doctor or therapist about the consequences of their injury and prognosis, others would have liked more.

The relationship with the therapist was of particular importance to subjects in the acute group, especially the ability of the therapist to show genuine interest, adopt a personal approach during treatment, to give encouragement, and to appear knowledgeable about the subject's condition in order to give the appropriate treatment. Subjects' personal beliefs about their physiotherapy experience ranged from ideas about their condition and how therapy might help them, the time it would take to recover from injury, preconceptions of hospitals and how they would be dealt with there. Organisational issues mentioned were principally related to the waiting time for treatment following referral and included both favourable and unfavourable impressions, with other comments on frequency of attendance, staff shortages and the perception that physiotherapy departments are busy. Only 29% of subjects commented on the clinical outcome of their treatment, with some being pleased with the result while others were disappointed that residual problems remained. Reports of self-help measures taken by five subjects were an indication of willingness to adhere to treatment regimes, as these subjects were keen to discuss the work they did on their own between treatment sessions in order to make quicker progress.

Subjects in the chronic group like those in the acute generally discussed more than one topic and aspects of the treatment session were the most frequently raised issues. Discussions about the treatment were closely linked with subjects' beliefs about their condition and the efficacy of treatment on their symptoms. Treatment was perceived in different ways, as either being helpful/ problematic, uncomfortable/comfortable, or generally what was expected. There was often a detailed description of the technique(s) used during the session if this had been a particularly salient feature for the subject. Subjects discussed specific results of treatment and although these were generally good, they expressed disappointment that no resolution of symptoms had been achieved, or that they had achieved short-term benefit only. Nevertheless, there was some recognition that knowledge had been gained for self-help measures in order to

maintain improvement following discharge.

Organisational issues were of particular importance for those in the chronic group including frequency of attendance, length of the course of treatment, being seen promptly for sessions and waiting times between referral and starting treatment. There were also suggestions for periodic follow-ups after discharge and fast-track appointments for repeat attenders to be part of the general physiotherapy management process.

Discussions about explanations given in relation to the subject's problem, the treatment rationale and pathology were frequently linked with those about the therapist as in the case with the acute group, although for some the relationship with the therapist itself was of particular importance. Attributes of the therapist that were especially valued were the ability to put the subject at ease and instil confidence through his/her knowledge and professional manner.

Nearly a third of those in the chronic groups discussed the home exercise programme they had been taught. They appreciated that practising these exercises between treatment sessions and particularly after discharge was thought to be necessary for ongoing symptomatic benefit. There was an indication that the importance of continuing these regimes had been emphasised in the course of the treatment sessions.

ii) Card-ranking phase

The card-ranking section of the interview provided subjects with cues to discuss the discrete dimensions of the physiotherapy process since it was important that their views should inform the content of the proposed new survey tool. It has been shown that the measurement and meaning of satisfaction information is clearest if the domain of the system under consideration is explicit and consistent. Pascoe (1983) distinguished between the macro and micro domains of interest. In relation to measuring satisfaction with health care, this approach would equate to patients having a generally favourable opinion of the health service system as a whole (macro), but being dissatisfied with specific aspects of care they have received (micro). The card headings used in the current study therefore identified multiple micro domains reflecting the context, process, and outcome of physiotherapy care on which subjects were asked to make evaluative judgements. Only one subject in the whole sample had difficulties with literacy and needed to have the dimensions and descriptor statements on the cards read for him.

In relation to their expectations of physiotherapy, those subjects with no previous experience

of treatment speculated about their forthcoming care based on lay knowledge of what physiotherapists do. Fitzpatrick & Hopkins (1993) found that when patients are unfamiliar with the circumstances of the medical encounter, they express only 'the vaguest guesses as to what might happen' and these guesses were informed by common sense ideas of what normally happens in medical consultations. Achieving a good recovery was the underlying theme for the acute subjects in the present study, although some recognised that this would not necessarily be complete and therefore held lower expectations for this aspect of care. When subjects did not feel that they had enough knowledge of their condition to speculate on their prognosis or rate of recovery, they relied on the therapist to 'give them' appropriate expectations as a basis for assessing their progress with treatment. This accords with the notion of *unformed* expectations discussed on page 53.

In the chronic group, those with previous experience of physiotherapy were generally expecting some symptomatic relief as a result of treatment, with only six subjects hoping for a complete resolution of their problem. Although three subjects did talk in terms of expecting a 'cure' and one of a 'miracle' these sentiments were later qualified more pragmatically in relation to the possible benefits of treatment, so that in general their expectations were not as 'unrealistic' as initially appeared. Two subjects were sent for treatment although they knew from past experience that it was unlikely to be beneficial. These subjects therefore had negative expectations of treatment although they did not both give low ranking for the expectations card. While one of them ranked it 6th, the other placed it 2nd, although she was not able to produce a very cogent explanation for her selection. This issue of subjects' reasoning behind their card selection will be dealt with in more detail later.

Patient education comprises an important component of the physiotherapeutic intervention. Those therapists who feel that it contributes to better patient compliance and a more successful treatment outcome, are more likely to incorporate this component into their treatment plan (Sluijs et al., 1993). Results from this study showed that therapists engaged in educating their subjects to a high degree in the course of treatment and subjects in the acute group particularly valued the time that the therapist spent in explaining their injury to them. For the chronic subjects, education in coping strategies and the promotion of greater self-efficacy accorded with the notion that patient empowerment was an important aspect of health care, achieved through effective communication and information (Klaber Moffett & Richardson, 1997). It has been shown that subjects only recall about half of the information they receive in the course of a medical encounter, although this could be improved by supplementing this with written information (Ley & Llewelyn, 1989). Therapists employed strategies to improve the subjects'

retention of information by using diagrams or anatomical models and by the provision of specific instructions, usually as written exercise sheets. The majority of acute subjects valued an explanation about their injury, prognosis and recovery, although there was variation in the amount of detail required. This reflects findings by Steptoe et al. (1991) in relation to seeking or avoiding information. A common report was that the doctor did not have time to provide details in a busy outpatient clinic but that the therapist was able to meet the subjects' information needs. There was an indication that those subjects who ranked the Explanations card as their fifth or sixth choice received less information, particularly in relation to their injury and the effect of treatment. Nevertheless for some subjects these details were of secondary importance to their overall recovery while for others it was of utmost importance. When subjects did not feel that they were given enough spontaneous information by the therapist, they found that this was generally forthcoming when they asked. Although it has been found that asking more questions is associated with poorer compliance (Hall & Roter, 1988) results from this study suggest that subjects who asked questions were genuinely interested in gaining a fuller understanding of their problem in order to engage more effectively with their treatment programme.

The role of the therapist in the delivery of care is crucial in understanding the needs and circumstances of the patients (Walker, 1995) and this was reflected in the way subjects talked about the therapist in the context of the treatment they received. The therapist card was ranked highly by acute subjects and there was a tendency for therapists to be viewed as 'friendly' particularly among the younger age groups where a good relationship was seen as essential for a successful treatment outcome. Most therapists are young themselves and it is understandable that they might show more interest in treating members of their peer group. For older acute subjects, the therapeutic encounter possibly provided the social support that was often lacking for those living alone. Subjects with chronic conditions valued the 'traditional qualities' of a practitioner who was easy to talk to, gave personal attention, was kind, attentive and saw the patient's point of view (Al Bashir & Armstrong, 1990). However for some in the chronic group the therapist was perceived as being less helpful in pursuing treatment options in order to achieve a successful treatment outcome. There was a perception that old age and chronicity precluded any beneficial effects resulting from the treatment input. Chronic subjects tended to describe their therapist principally in terms such as 'nice' and 'good' although subjects in the acute group used the term 'friendly' more frequently in accordance with findings by Payton & Nelson (1995). This could suggest that the emphasis placed on the affective and interpersonal aspects of the therapeutic encounter found in the literature might not be supported, but instead accord with Fitzpatrick & Hopkins (1983) that patients attribute greater importance to

judgements of outcome than process.

Nevertheless the focus on the therapist's affective qualities rather than on their technical skills, found in this study, could also indicate an underlying assumption that as professionals, therapists would be expected to be clinically competent. This view is supported by the satisfaction literature in which the patient needs to feel that the doctor is clinically competent and not just nice and caring in order to be satisfied with the encounter (Hall et al., 1988). In terms of physiotherapy Walker (1995) asserted that 'one would have to question a therapist's suitability for the job if patients did not feel better for the consultation'. However, the affective element of the care process afforded by therapist/patient relationship might be an indication that although the treatment had successfully addressed the patient's illness experience (the human experience of sickness) it might not have been effective for their disease (structural or functional abnormalities) (Kleinman et al., 1978). There is evidence of this apparent 'treatment paradox' in subjects' discussions of the outcome of care (see below) and in the course of the previous stages of the research. They had distinguished between the efforts of the therapist in trying to effect a beneficial outcome of care which was generally greatly appreciated, with a sometimes less than satisfactory clinical result of treatment. This theme was apparent for both the acute and chronic groups and although on theoretical grounds it was anticipated that patients in the acute groups would achieve better clinical outcomes, results from the multiphase interviews showed that only 29% reported a full recovery. These findings underscore the multidimensionality of the satisfaction construct in relation to physiotherapy, so that patients' opinions about discrete aspects of their care emanate from their expectations, perceptions and beliefs of the health care process.

Hulka et al. (1975) reported that having a regular physician and a long duration of attendance with them were highly correlated with increased satisfaction. Although the direction of that relationship was highly speculative, data from the current study suggested that continuity of care contributed to satisfaction particularly in subjects requiring long term interventions. Young acute subjects who ranked the therapist card highly tended to have injuries requiring long courses of treatment where the relationship with the therapist was particularly important. However, even when treatment was not protracted these subjects relied on the therapist's encouragement and support to achieve the best possible outcome. Although continuity of therapist was viewed as 'ideal' in the chronic groups, this depended on the relative importance subjects' attributed to the therapeutic relationship. For some there was a perception that the therapist did not show the same degree of interest when the contact was relatively short or when therapists changed departments. If the relationship with the therapist was felt to be of

particular importance the lack of continuity in these circumstances was unsatisfactory. For others this was not so important provided that the 'new' therapist was fully briefed on the subject's case.

In designing the cards it was decided to separate the components relating specifically to the application of treatment (content of treatment sessions) from those dealing with the 'hotel' aspects of the service (organisation of treatment sessions) in order to cue the discussion to these two discrete areas of care. Information on organisational issues parallels that sought by surveys of hospitals, community and primary care services subsequent to the Griffiths report (1983) that have focussed on the physical amenities of services as opposed to provision of medical care. However it became apparent during the interviews that subjects interpreted the 'organisation' card in one of two ways that had not been identified when piloting the tool. Although over half interpreted it in connection with appointment making, frequency of attendance and waiting time for the treatment session as originally intended, others related it to the exercises or modalities given, at which times and in which order during treatment. Once the ambiguity became apparent it was decided not to change the name of the 'organisation' card but to allow the subjects to interpret it in their own way. Those subjects who did not spontaneously engage in the first interpretation described above, were guided into the topic often by reference to organisational aspects of treatment they had identified in the earlier unstructured part of the interview. Since these two interpretations would have biased the order of ranking, it was decided to treat the significance of the ranking of this card with caution, but to include the ensuing discussions in the subsequent analysis.

There was a general appreciation in both groups for punctuality of treatment and flexibility in appointment times, especially by those who had to take time off work. Subjects with chronic conditions waited longer for treatment but in both groups subjects equated waiting times for their first appointment with NHS waiting lists and were unaware of prioritisation strategies in outpatient physiotherapy departments (Ratstall & Fashanu, 2001). Some chronic subjects in particular were therefore surprised at getting more urgent treatment slots and being seen either in days or weeks rather than months. The frequency of attendance for treatment was at least once a week in the majority of cases for both acute and chronic groups. However, nearly a quarter of acute subjects who were given a weekly appointment would have preferred to have attended either twice or three times a week and felt that they would have made quicker progress had they done so. Of eight chronic subjects who made specific comments on the frequency of attendance, half would have preferred to be seen more often. In the acute group, infrequent treatment and lack of personal attention by the therapist when treating more than one patient at the same time were attributed to a very busy department and the fact that the

therapist's time was limited. Once starting physiotherapy acute subjects generally valued having a dedicated therapist seeing them on a one-to-one basis throughout their course of their treatment, although not all had expected this. The fact that some therapists might rotate to a different department while the subject was having treatment was not seen as a problem. There was a perception that good continuity of patient care between therapists was retained through efficient note keeping and communication.

In the acute groups, subjects variously linked their discussions about the therapist, explanations given and the result of treatment, rather than identifying the content of treatment as a discrete topic. Subjects valued the explanations they got from the therapist about the efficacy of particular treatment modalities so that they could relate it to their recovery process. Over half of the acute subjects identified some aspect of the content of their treatment in the preliminary unstructured part of the interview as being particularly salient for them. When subjects had positive results from treatments for related injuries in the past, they anticipated receiving the same input for their current injury. Those modalities that gave symptomatic relief were most popular and appear to have been given particular currency among the suburban group. The acute subjects who ranked the content card highly felt that without the most appropriate treatment they would not achieve a successful result, although they did not necessarily know what the treatment would comprise. Those who ranked the content card low either did not have particularly strong views or found some aspect of the treatment unsatisfactory. For example, one found the exercises he was asked to do in the gym were boring, while another would have liked more 'hands on' treatment. Although of eight acute subjects who ranked the content card low, six had identified aspects of their treatment in the preliminary unstructured part of the interview, of whom four had particularly enjoyed their sessions. This apparent paradox will be discussed later in section (iv) which deals with the pattern of card ranking. Subjects received similar treatment modalities across both sites and these were predominantly administered on a one-to-one basis. However group work was an additional feature of one department and was very popular with all the subjects, for whom this provided the principal component of their treatment. These groups not only offered the element of competition for the younger participants but also the opportunity to socialise for the older ones. However a shortage of gym equipment was identified and subjects found that sometimes there was not enough equipment available for them to use when they needed it thereby compromising the benefit achieved.

For those in the chronic groups, whether they had previous physiotherapy or not, there was a general understanding that their condition was not 'curable' but that treatment might help

them. Subjects were therefore looking for symptomatic relief. For those with no previous experience of physiotherapy there was a popular notion that this would entail massage, exercise or manipulation. Those who subsequently received spinal mobilisations or other 'hands on' techniques tended to equate these with massage or manipulation and generally appreciated the element of touch during treatment, although few subjects were actually given massage as such and none had manipulation, in terms of a Grade V thrust technique. The therapists appear to have stressed the benefits of exercise during treatment and subjects were keen to know which exercises would be most appropriate as a means of self-help. The greater use of heat treatments reported by the suburban group suggested a different treatment approach since the diagnoses of subjects from both sites was broadly similar. The content card was ranked in a similar way by the chronic subjects on both sites with few selections ranked at either at 1 or 6. However over half of all chronic subjects ($n=23$) had identified aspects of the content of their treatment in the unstructured part of the interview. For those who ranked this card highly, it was generally because the treatment had proved to be particularly beneficial, albeit in some cases only short-term. Neither of the two chronic subjects who ranked 'content' lowest had identified this aspect of their treatment in the unstructured interview and appeared to view what happened in the course of their session as a given. Both had previous physiotherapy treatment for the same problem.

In both acute and chronic groups the majority of subjects reported an improvement of symptoms following treatment, but relatively few had achieved complete resolution of their problem. Although there was a marked difference in the ranking of the result card between the two acute sites being predominantly high (inner city) and low (suburban) the relative proportions of subjects reporting complete or incomplete recovery was broadly similar and one can only speculate on the possible reason for this. In general, chronic subjects reporting good results in terms of symptom relief were those in the younger age groups, which would accord with the notion of physiotherapy being more effective in less chronic conditions (Condie, 1991). While chronic subjects reporting negative results were those for whom expectations of improvement were not met, others felt that they had achieved some positive outcome in terms of self-help strategies although not achieving the degree of symptom relief they had hoped for. This supports the notion of the treatment paradox in which patients distinguish between satisfaction with their care (the medical intervention) and with the outcome (result of the intervention), and express high levels of satisfaction even when the outcome is bad (Woolley et al., 1978; Orth-Gomer et al., 1979). Acute subjects, whose treatment did not result in complete recovery, did not attribute this to any shortcomings on the part of the therapist whom they rated highly in the card sort, but to the residual limitations of their particular condition.

They rationalised that they would either have to persevere with their home exercise programmes on their own to try and effect further improvement, or accept a less than optimum result.

While subjects expressed their views of physiotherapy during the course of the interviews only 7 (2 acute: 5 chronic) used the term 'satisfaction'. This accords with findings by Fitzpatrick & Hopkins (1983) that patients rarely used the term 'satisfaction' spontaneously when asked to give an evaluative judgement of a service. This suggested that 'satisfaction' is simply the term patients or consumers are prompted to use by the survey instruments employed to canvass their opinions. It is noteworthy therefore, that a patient satisfaction questionnaire was routinely used in the department where four of the subjects in the chronic group who expressed the term 'satisfaction' were treated.

iii) Discussion of the descriptor statements

In the third stage of the interview, the descriptors of the main card headings allowed for further elaboration on points not covered in the earlier part of the interview and also acted to validate subjects' earlier responses. The wording of the statements had been informed by the exploratory interviews and focus groups in the earlier part of the study and was found to reflect the sentiments expressed by those seen for the multiphase interviews. Additional comments made by subjects in this section tended to provide further evidence of the rationalisation processes behind their opinions, rather than in identifying aspects of care that had not been captured in the course of the interview. This confirmed the feasibility of incorporating the descriptor statements into the item pool for the survey instrument planned in the final stage of the study, as encapsulating the elements of care that were of particular interest to patients.

iv) The pattern of card ranking

The process of ranking the cards and discussing them required the patients to recall their recent treatment experiences and explain them in terms of their card-sort choices. However in an observation similar to that of Locker and Dunt (1978) it became evident from the analysis that an examination of the numerical ranking of the cards, without an understanding of the rationale behind their selection, could lead to a misinterpretation of the results. Cards ranked highly could indicate that the particular aspect of care was regarded as *either* satisfactory *or* unsatisfactory and that a card with a low ranking was not necessarily regarded as being unimportant. An examination of the interview transcripts provided some understanding of the underlying rationale for these rankings. As mentioned in the Introduction, subjects' principal concerns in coming to physiotherapy were to gain functional or symptomatic improvement in

their condition, but the way that this was achieved was sometimes of more importance than the achievement itself. For example, subjects would not necessarily rank the 'result' card highly and in fact they might even rank it very low, because it was reasoned to be the *inevitable sequel* to the treatment. These subjects might therefore identify other aspects of treatment identified by the card-sort headings as representing what they saw as being instrumental in bringing about the desired outcome. Thus the *therapist* was closely *associated with the treatment* they received, so that a number of subjects ranked the 'therapist' card highly because of his/her interventions in effecting improvement, rather than necessarily because of his/her particular attributes in the therapeutic relationship. For others, the need to be given a detailed explanation of their problem was of primary importance in helping these subjects to achieve a successful outcome, and they would therefore rank the explanation card highly.

There was no consistent relationship found between high expectation and high result rankings, which might have been anticipated on the basis that subjects attend treatment to improve/resolve their problem. In only one of the sub-groups (acute, inner city) was the summary score for result ranked as either 1 or 2 (Appendix 3). In the other three sub-groups the majority summary ranking was low at 6. Contrarily, result was sometimes ranked low because it was assumed that that was what the subject was there for, although it could be ranked high because the subject *hoped* for a good outcome but did not achieve it. Again it was sometimes ranked high because it *was* the most important aspect of treatment for that subject. It could therefore be conjectured that subjects' perceptions of *other* discrete aspects of the treatment process were of greater concern in contributing towards the result of care, and not necessarily symptom relief *per se*. Thus in relation to other choices, the content card might be important because of the need for getting the appropriate treatment modality. Explanation could be important because the subject particularly needed to know about his/her problem and how the treatment was going to help. The therapist was perceived as being important because (s)he delivered the treatment, or that the relationship with the therapist *per se* might have met a particular psychosocial need. Similarly the organisational aspect of treatment might be important in relation to fitting treatment into the subject's busy lifestyle. Therefore the order of card ranking was dependent on the subject's needs and priorities of care at the time they attended for treatment. The lack of an overall pattern to the responses therefore supports Locker & Dunt's (1978) contention that subjects' responses should not be taken at face value because of the various underlying reasoning processes that inform their choices. Just because a subject ranked the expectation card low did not necessarily mean that this was unimportant, but that given the choice of other options its *relative* importance was superseded by something

else of more immediacy to the subject.

4.5 SUMMARY AND CONCLUSIONS

The multiphase structure of the interviews was successful in providing an insight into the reasoning processes that subjects adopted in evaluating the discrete aspects of their physiotherapy treatment and of the priorities that informed their judgements.

While some aspects of patients' satisfaction with ambulatory care reported in the literature were found to be applicable to the physiotherapeutic situation, the content of the discussions necessarily focussed on the delivery of care within the specific context of outpatient physiotherapy. Patients therefore reported having different expectations of their treatment, they also formed opinions about disparate aspects of their care, valued different qualities in the therapist and had varying information needs. Opinions obtained from two contrasting groups of patients showed that principal differences between the two could be attributed to their pathology and subsequent expectations of the outcome of treatment. Where previous experience and/or prior knowledge of physiotherapy existed this influenced patients' expectations of their current episode of care and was more apparent among those in the chronic group. Results suggested that physiotherapy input was more successful in the management of patients with acute rather than chronic conditions, although many of those in the acute group reported less than optimum clinical outcomes.

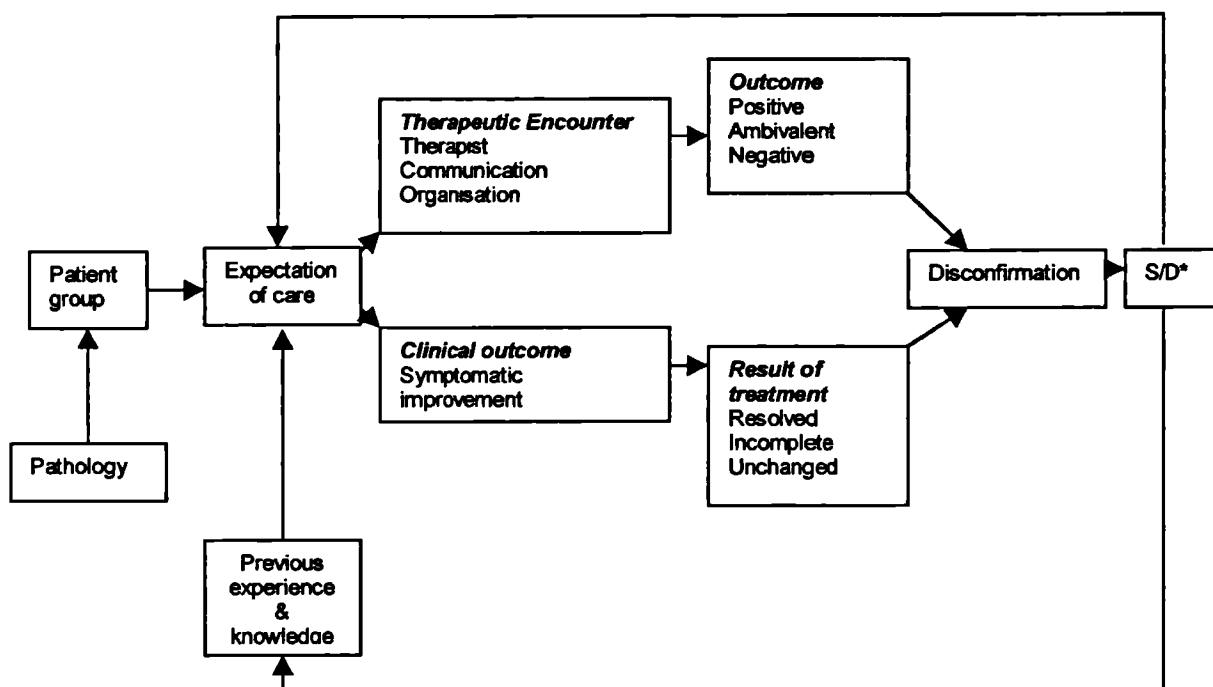
4.6 MODEL OF CARE AND HYPOTHESIS DEVELOPMENT

The link between subjects' expectations of physiotherapy, their relationship with the therapist and their overall assessment of the outcome of care, proposed following the analysis of the exploratory interviews and focus groups data, continued to be supported by the results of the multiphase interviews. Subjects with positive or tentatively formed expectations of being helped tended to report a positive outcome to the encounter if the therapist was subsequently able to meet or exceed their expectations. When unrealistic or negative expectations of change remained unaltered throughout the course of treatment an unsatisfactory result ensued.

The theoretical models presented earlier (pages, 162 & 165) provided a framework for a satisfactory outcome of care. They represented two dimensions along which subjects' evaluation of the total therapeutic process could be made i.e. the therapeutic encounter and the clinical outcome. Following the analysis of the multiphase interview data a model of patient satisfaction with outpatient physiotherapy is proposed, which draws on the Expectancy

Disconfirmation model (Oliver, 1980) and incorporates both of these two principal dimensions (Fig. 4.1).

Fig. 4.1 A Model of Patient Satisfaction with Outpatient Physiotherapy



* = Satisfaction/dissatisfaction

It can be seen from Fig. 4.1 that the pathology of the patients' condition impacts on their expectations of care in terms of what it might involve as well as what the clinical outcome is likely to be. These expectations are informed by any previous experience of physiotherapy as well as by the evaluation of that experience. The current episode of care is then evaluated along two parallel continua incorporating elements of the Therapeutic Encounter and Clinical Outcome respectively (pages, 162 & 165). Disconfirmation of prior expectations following treatment results in either satisfaction or dissatisfaction with the whole physiotherapeutic experience and subsequently informs the expectations of any future referral for physiotherapy.

The following four hypotheses were therefore proposed which guided the analysis of the survey data in the second part of the study;

- H1. Satisfaction with OP physiotherapy in patients with acute and chronic musculoskeletal conditions is a function of their evaluation of the therapeutic encounter and clinical outcome components of their care

H2. The relative importance of satisfaction with the dimensions of the therapeutic encounter and clinical outcome varies between the acute and chronic groups

H3. There is an association between high levels of satisfaction with the clinical outcome and the therapeutic encounter in patients with acute musculoskeletal conditions.

H4. There is an association between low levels of satisfaction with the clinical outcome but high levels of satisfaction with the therapeutic encounter in patients with chronic musculoskeletal conditions.

SECTION THREE

CHAPTER 5

DEVELOPMENT OF THE SURVEY QUESTIONNAIRE

5.1 INTRODUCTION

In the first part of the study subjects were asked to give their views on disparate aspects of their physiotherapy care. Through individual and group interviews principal categories emerged that provided a framework for the main data collection phase which involved multiphase interviews. The card-ranking phase of these interviews gave insight into the reasoning behind subjects' evaluation of the discrete aspects of their care and the card descriptor statements permitted a check to be made on the validity of the views expressed. The first two research aims were therefore achieved which were to explore the factors affecting patients' satisfaction with physiotherapy and establish which of those factors were commonly identified by patients with acute and chronic musculoskeletal conditions.

This chapter describes the development of the questionnaire tool that would be used to achieve the third research aim and comprises the second part of the study.

Aim

The aim of the study was to;

- i) Examine the level of satisfaction, that patients with acute and chronic musculoskeletal conditions have with their physiotherapy outpatient care.

The objectives were to;

- i) Develop a valid and reliable tool to measure patients' satisfaction with their outpatient physiotherapy care
- ii) Examine the psychometric properties of the tool
- iii) Test the four stated hypotheses from Part One of the study (see pages 211/212)

5.2 DEVELOPMENT OF THE TOOL

5.2.1 Item pool development

It was hypothesised that subjects' responses to the descriptor statements on the reverse of the cards during the third part of the multiphase interviews would be consistent with their comments in the two earlier parts of the interview thereby supporting content validity. Results showed that this was the case and with two exceptions described below, all descriptor statements were checked either 'agree' or 'disagree' by more than 50% of the total sample. These statements were based on subjects' comments derived from the developmental interview and focus group transcripts (Appendix 2. Matrix charts) and related to six principal categories of care;

- Expectations of treatment
- Explanation and information
- Perceptions of the therapist
- Content of the treatment sessions
- Organisation of the treatment sessions
- Result of treatment

An initial item pool was generated from these 32 descriptor statements and these are presented in Table 5.1.

Two statements, which were checked by 50% or less of the total sample, were not included in the item pool, as follows,

- I did not get on well with my therapist (checked by 48% of total sample)
- I was not told that the treatment might be painful (checked by 50% of total sample)

One further statement 'The treatment will involve the use of special equipment' was also eliminated from the pool. This item was checked 'agree' and 'disagree' equally by the acute and chronic groups and therefore gave no clear indication of the impact that this expectation had on subjects' evaluation of their care. Furthermore it was the only statement in the expectation sub-scale that was not linked to symptomatic change. With this item removed all remaining statements in the expectation sub-scale were subsequently linked to the clinical outcome of care rather than to the content of the treatment session, and would therefore permit an examination of the expectation - outcome link as proposed in the clinical outcome model (page, 165). With these exceptions, the remaining statements that were scored greater than 50% from the total sample were included in the initial item pool for the survey instrument.

Table 5.1 Statements representing subjects' attitudes towards six discrete elements of their physiotherapy care

Expectations of the physiotherapy treatment

1. The treatment would get me going again
2. The treatment would be painful
3. The treatment will involve the use of special equipment
4. I did not know what the treatment would be able to do for me
5. I did not think treatment would be able to help me

Explanations and information given

6. I felt I could not discuss my problem with the therapist
7. I was told what was causing my problem
8. I was not told that the treatment might be painful
9. I was able to ask my therapist about anything connected with my treatment
10. The therapist did not answer all my questions
11. The treatment was fully explained to me

Perceptions of the therapist

12. My therapist put me at ease and was very kind to me
13. My therapist did not seem interested in me
14. I got on very well with my therapist
15. My therapist did not have a good bedside manner
16. I did not get on well with my therapist
17. My therapist gave me encouragement and praise

Organisation of the treatment sessions

18. I had to wait a long time to get my first appointment for treatment
19. I was able to choose the appointment times for treatment
20. Treatment sessions were too infrequent to get any benefit
21. The treatment sessions were too short
22. I did not have any of my treatment sessions cancelled
23. I was told I could contact the department if I had problems after discharge

Content of the treatment sessions

24. The treatment was very comfortable and soothing
25. The treatment was tailored to my needs
26. The treatment was uncomfortable
27. The treatment was too rushed
28. I had the personal attention of the therapist during my treatment
29. I was left to work on my own during the session

Result of treatment

30. I have made a full recovery as a result of treatment
31. The treatment has helped me in some ways but I am not completely better
32. The treatment has not helped me at all

Eleven statements were added to the item pool under the six category headings (in parenthesis) of which 6 statements were generated from patients' comments in the multiphase interviews.

- I expected the treatment would help relieve my pain* (expectations of care)
- I expected the treatment would cure my problem* (expectations of care)
- My therapist gave me confidence that I was going to get better (therapist)
- I was always seen very promptly for my treatment sessions (organisation)
- I had confidence that the therapist knew what (s)he was doing (professional care)
- The treatment helped me at the time but the effect did not last (result of treatment)

These statements were included in the item pool because they represented common themes identified by respondents during the course of the multiphase interview.

Of the remaining 5 statements, two relating to the efficacy of the treatment intervention were added which reflected an optimum outcome of care, and linked with the expectations subjects had of pain relief and cure (see statements marked * above).

- I am now completely pain free as a result of treatment (result of treatment)
- I have regained full mobility as a result of treatment (result of treatment)

The addition of these statements would permit a test of the clinical outcome model by examining the relation between patients' expectations of care and the clinical outcome achieved.

Three additional statements identified in the course of the multiphase interviews indicating that they comprised important aspects of their care were included as follows;

- My therapist did not listen to what I had to say (therapist)
- I was made aware of my responsibilities in managing my condition (explanation and information)
- It was important for me to see the same therapist throughout my treatment (organisation/management)

Finally, a review of the content of extant patient satisfaction questionnaires (see Chapter 1) was made for any additional items that might be appropriate for inclusion in the study. However apart from those relating to cost and physical facilities which were not applicable to this study relevant aspects of other category headings identified in the literature had already been included in the potential item pool. The physiotherapy service being evaluated forms part of the National Health Service and is free at the point of delivery, therefore issues of cost do not arise. In terms of physical facilities identified by Hall & Dornan (1988) as including

'aesthetic and functional aspects, parking, and adequacy of equipment and laboratories', these were considered to be outside the scope of influence of physiotherapy departments and not directly related to the focus of the study. Only two subjects in the acute group had identified a shortage of a particular piece of gym equipment in the course of their discussion, and a further two, also in the acute group, commented on the décor in the department. Therefore items resulting to these topics were not included in the item pool.

Following the inclusion of the additional statements noted above, changes were made to two of the original card category headings;

- 'Content of treatment' was re-named 'professional care' reflecting the component item statements dealing with both the delivery and organisation of the care given in the course of the treatment session.
- 'Result of treatment' was re-named 'clinical outcome' reflecting an expansion of this category to include statements which identified the symptomatic effects of treatment in addition to an evaluation of outcome.

Five of the statements were re-worded to permit a broader frame of reference, from which subjects could formulate their responses, as follows,

- *Statement 1*, 'I expected the treatment would get me going again', was re-worded as 'I expected the treatment would get me better' which would permit an evaluation of the extent that treatment had been effective.
- *Statement 7*, 'I was told what was causing my problem', was re-worded as 'My therapist explained my condition to me in great detail' to facilitate recall of the explanations that had come specifically from the therapist rather than from the doctor.
- *Statement 23*, 'I was told I could contact the department if I had problems after discharge', was re-worded as 'I was able to contact the department for help if I had any further problems after discharge'. This provide a more comprehensive statement linking the completed course of treatment to any future input the patient might feel (s)he needed.
- *Statement 28*, 'I had the personal attention of the therapist during my treatment', was re-worded as 'I had the undivided attention of the therapist during my treatment', suggesting that a 'one to one' relationship obtained during the course of the treatment session.
- *Statement 29*, 'I was left to work on my own during the session' was re-worded as 'I was happy to be left to work on my own during the session'. This would distinguish between the times when a therapist would not necessarily be with the patient all the time (class work, using

gym equipment, being treated with some electrotherapy modalities or on traction) compared with those occasions when (s)he would be expected to be (in a one to one, 'hands on' session).

Following these modifications the revised list of category headings and statements was presented in Table 5.2. The revised items are marked *, and the statements that were added put in italics.

Sociodemographic variables of age, gender, education, social class and marital status have also been shown to influence levels of satisfaction and were recommended for inclusion in any satisfaction survey instrument (Fitzpatrick, 1991 b). The sociodemographic categories that have demonstrated the most consistent relationships with service satisfaction were those of age and gender (Fox & Storms, 1981). Increased satisfaction is typically associated with being old and female, although the amount of variance in satisfaction associated with age and gender has been shown to be small (Pascoe, 1983). It was judged that items of age and gender would be appropriate for inclusion in the questionnaire, particularly in relation to the respective acuity and chronicity of the two groups being studied.

However the issue of marital status was more problematic in view of the current trend in social attitudes towards cohabiting. These items were therefore not included, as the sensitivity of some patients in responding to such items may preclude their completion of this section of the questionnaire and result in an incomplete data set in this domain. Employment status was included to provide a profile of respondents.

Four statements derived from the literature, two of which included the word 'satisfaction', were added as a 'general satisfaction' category on the grounds of face validity for the tool (Ware, 1981). These statements were;

- I am completely satisfied with the treatment I was given in this department
- The quality of service I received in this department could have been better
- I am completely satisfied with all aspects of my visit to the physiotherapy department
- I should have got a better result from the treatment I was given in this department

Table 5.2 Statements representing subjects' attitudes towards six principal categories their physiotherapy care following revision. Revised items marked * with added statements in *italics*

No.	Statement
Expectations of care	
1.	I expected the treatment would get me better*
2.	I expected the treatment would be painful
3.	I did not know what the treatment would be able to do for me
4.	I did not think treatment would be able to help me
5.	<i>I expected the treatment would help relieve my pain</i>
6.	<i>I expected the treatment would cure my problem</i>
Explanation and Information	
7.	I felt I could not discuss my problem with the therapist
8.	The therapist explained my condition to me in great detail*
9.	I was able to ask the therapist about anything connected with my treatment
10.	The therapist did not answer all my questions
11.	The treatment was fully explained to me
12.	<i>I was made aware of my responsibilities in managing my condition</i>
Therapist	
13.	My therapist put me at ease and was very kind to me
14.	My therapist did not seem interested in me
15.	I got on very well with my therapist
16.	My therapist did not have a good 'bedside manner'
17.	My therapist gave me encouragement and praise
18.	<i>My therapist did not listen to what I had to say</i>
19.	<i>My therapist gave me confidence that I was going to get better</i>
Organisation	
20.	I had to wait a long time to get my first appointment for treatment
21.	I was able to choose the appointment times for treatment
22.	Treatment sessions were too infrequent to get any benefit
23.	The treatment sessions were too short
24.	<i>It was important for me to see the same therapist throughout my treatment</i>
25.	I did not have any of my treatment sessions cancelled.
26.	I was able to contact the department for help if I had any further problems after discharge*
27.	<i>I was always seen very promptly for my treatment sessions</i>
Professional care	
28.	The treatment was very comfortable and soothing
29.	The treatment was tailored to my needs
30.	The treatment was uncomfortable
31.	The treatment was too rushed
32.	I had the undivided attention of the therapist during my treatment*
33.	I was happy to be left to work on my own during the session*
	<i>I had confidence that the therapist knew what (s)he was doing</i>

Cont...

Table 5.2 (cont.)

No.	Statement
	Clinical outcome
34.	I have made a full recovery as a result of treatment
35.	<i>I am now completely pain free as a result of treatment</i>
36.	The treatment has helped me in some ways but I am not completely better
37.	<i>I have regained full mobility as a result of treatment</i>
38.	The treatment has not helped me at all
39.	<i>The treatment helped me at the time but the effect did not last</i>

5.2.2 Description and grouping of item statements

Following the development of the item pool, the six principal categories of statements were grouped in relation to the therapeutic encounter and clinical outcome models as follows,

1. Therapeutic Encounter

Explanation and Information
Therapist
Organisation
Professional care

2. Clinical Outcome

Expectations of care
Clinical Outcome

A further examination of the statements showed that each reflected a discrete component of the principal category headings under which it was grouped. For example, under the category 'Explanation and Information', subjects reported being given explanations, instructions, or advice in relation to, i) their condition, ii) the treatment received, and iii) general care management. The statements were therefore sub-categorised in relation to these discrete components. The same process was then applied to the statements under all of the other principal category headings. Descriptions derived from the subjects' accounts of the disparate aspects of their care in the multiphase interviews were then accorded to each discrete sub-category to which the statements were judged to belong. The list of statements together with their sub-categories and associated descriptions were given to four independent senior outpatient physiotherapists in order to judge the correctness of fit between these components. Changes were subsequently made if there was >50% disagreement between the judges and researcher. Only 3 changes were subsequently made in relation to naming the sub-categories to which the statements were attributed. These were as follows;

- Q1. 'I felt I could not discuss my problem with the therapist'. Sub-category changed from 'general' to 'treatment'.
- Q6. 'I was made aware of my responsibilities in managing my condition' Sub-category changed from 'general' to 'treatment'.
- Q16. 'Treatment sessions were too infrequent to get any benefit' Sub-category changed from 'appointment' to 'continuity'

One change was made in relation to the descriptions of the sub-categories. Under the category 'Explanation and Information' the descriptor statement 'advised on importance of self-help' was moved from sub-category 'General' to sub-category 'Treatment'.

Table 5.3 shows the item statements with their attributed sub-categories grouped under the principal category headings of Therapeutic Encounter, Clinical Outcome and General Satisfaction

Table 5.3 Grouping of statements under the principal category headings of Therapeutic Encounter, showing the sub-category to which each statement is attributed

Statements under principal categories	Statement sub-category
1. THERAPEUTIC ENCOUNTER	
Explanation and Information	
1. I felt I could not discuss my problem with the therapist	Treatment
2. The therapist explained my condition to me in great detail	Condition
3. I was able to ask the therapist about anything connected with my treatment	Treatment
4. The therapist did not answer all my questions	General
5. The treatment was fully explained to me	Treatment
6. I was made aware of my responsibilities in managing my condition	Treatment
Therapist	
7. My therapist put me at ease and was very kind to me	+ve Socioemotional talk
8. My therapist did not seem interested in me	-ve Socioemotional talk
9. I got on very well with my therapist	+ve Socioemotional talk
10. My therapist did not have a good 'bedside manner'	-ve Socioemotional talk
11. My therapist gave me encouragement and praise	+ve Socioemotional talk
12. My therapist did not listen to what I had to say	-ve Socioemotional talk
13. My therapist gave me confidence that I was going to get better	+ve Socioemotional talk

Table 5.3 (cont.)

Statements under principal categories	Statement sub-category
Organisation	
14. I had to wait a long time to get my first appointment for treatment	Appointment
15. I was able to choose the appointment times for treatment	Appointment
16. Treatment sessions were too infrequent to get any benefit	Continuity
17. The treatment sessions were too short	General
18. It was important for me to see the same therapist throughout my treatment	Continuity
19. I did not have any of my treatment sessions cancelled	Continuity
20. I was able to contact the department for help if I had any further problems after discharge	General
21. I was always seen very promptly for my treatment sessions	Appointment
Professional care	
22. The treatment was very comfortable and soothing	Content
23. The treatment was tailored to my needs	Content
24. The treatment was uncomfortable	Content
25. The treatment was too rushed	Organisation
26. I had the undivided attention of the therapist during my treatment	Organisation
27. I was happy to be left to work on my own during the treatment	Organisation
28. I had confidence that the therapist knew what (s)he was doing	Content
CLINICAL OUTCOME	
Expectations of care	
29. I expected the treatment would get me better	Symptoms
30. I expected the treatment to be painful	Symptoms
31. I did not know what the treatment would be able to do for me	Condition
32. I did not think treatment would be able to help me	Condition
33. I expected the treatment would help relieve my pain	Symptoms
34. I expected the treatment would cure my problem	Condition
Clinical outcome	
35. I have made a full recovery as a result of treatment	Function
36. I am now completely pain free as a result of treatment	Symptoms
37. The treatment has helped me in some ways but I am not completely better	Symptoms
38. I have regained full mobility as a result of treatment	Function
39. The treatment has not helped me at all	Symptoms
40. The treatment helped me at the time but the effect did not last	Symptoms

Table 5.3 (cont.)

Statements under principal categories	Statement sub-category
3. GENERAL SATISFACTION	
41. I am completely satisfied with the treatment I was given in this department	Treatment
42. The quality of service I received in this department could have been better	Service
43. I am completely satisfied with all aspects of my visit to the physiotherapy department	Service
44. I should have got a better result from the treatment I was given in this department	Treatment

Table 5.4 shows the descriptions accorded to the statement sub-categories of the Therapeutic Encounter model.

Table 5. 4 Descriptions accorded the sub-categorised statements grouped under the four principal categories of the Therapeutic Encounter model

Statement sub-category	Description of sub-category
1.Explanation and Information	
a) Condition	Explanation about the cause of the problem, explains anatomy, cause of symptoms, shows model/chart, X-Rays explained.
b) Treatment	Explains what the treatment will involve, plan of treatment, effect of treatment, what to do and not to, do, given written exercises and specific instructions advised on importance of self help.
c) General	Questions answered, information obtained if required,
2. Therapist	
a) Positive socioemotional talk	Good relationship with therapist, social conversation, develops rapport, friendly approach, shows empathy, shows understanding, gives encouragement, instils confidence, gives reassurance, general positive attitude towards patient.
b) Negative socioemotional talk	Impersonal approach, lack of rapport, poor communication, therapist shows lack of interest, patient's point of view not elicited

Table 5. 4 (cont.)

Statement sub-category	Description of sub-category
4. Organisation	
a) Appointments	Waiting times for treatment, appointments procedure, time keeping
b) Continuity	Allocation of therapist for treatment cancellation of sessions, staff absence
c) General	Length of sessions, discharge arrangements
4. Professional care	
a) Content	Modalities used, application of treatment, effect of treatment on symptoms, appropriateness of intervention,
b) Organisation	Time allocated for treatment, one-to-one or group work, arrangement for treatment sessions

Table 5.5 shows the descriptions accorded to the statement sub-categories of the Clinical Outcome model.

Table 5.5 Descriptions accorded the sub-categorised statements grouped under the two principal categories of the Clinical Outcome model

Statement sub-category	Description of sub-category
1. Expectations of care	
a) Condition	Expectations expressed in relation to the effect of treatment on the patient's condition, discusses prognosis as a result of treatment
b) Symptoms	Discusses expectations in relation to symptoms, pain relief, increased mobility, restoration of function
2. Clinical outcome	
a) Symptoms	Discusses effect of treatment on relief of symptoms, beneficial or non-beneficial effect
b) Function	Discusses effect of treatment on functional ability, degree of restoration of normal activity

Table 5.6 shows the descriptions accorded to the statement sub-categories of the General Satisfaction category.

Table 5. 6 Descriptions accorded the sub-categorised statements grouped under the category of General Satisfaction

Statement sub-category	Description of sub-category
1. General satisfaction	
a) Treatment	Discusses overall evaluation of the specific treatment received
b) Service	Discusses overall evaluation of the care and attention received while attending the department, includes the behaviour of clerical and therapy staff, and the organisational aspects of the course of treatment

5.2.3 Sequencing of item statements

Acquiescent response set (ARS) is a tendency to agree with statements of opinion regardless of their content (Oppenheim, 2000) and is a source of bias in surveys of patient satisfaction with physicians and medical care services. It has also been shown that patients with less education or income are more prone to ARS. Ware (1978) suggested the use of balanced scales as a solution to this problem, although he acknowledged that this might not be a complete solution. Balanced scales can be achieved if scale items, in the form of a complete statement hypothesised to measure a particular dimension, are distributed throughout the questionnaire. The inclusion of some items with reversed wording and scoring appropriately reversed can also control for an ARS (Fitzpatrick, 1991 b).

In order to control for ARS the order of inclusion of the statements were randomised by drawing numbers out of a hat and under each category one or more statements were worded negatively.

5.2.4 Scaling

The techniques of attitude scaling that were considered in relation to addressing the research questions were,

- 1) The Method of Equal Appearing Intervals (Thurstone 1928).
- 2) The Method of Summated Ratings (Likert, 1932)
- 3) Scalogram Analysis (Guttman, 1944)

i) The Method of Equal Appearing intervals.

Thurstone (1928) devised a method in which the distribution of attitudes on a specified issue was represented in the form of a frequency distribution. Between 80-100 statements were used in the construction of the scale and were printed on small cards, one statement per card. These were then presented to 200/300 subjects who were asked to arrange the statements in eleven piles ranging from opinions most strongly affirmative to those most strongly negative. The task was to sort the cards into eleven piles that *seem* to be fairly evenly spaced or graded. Only the two ends and the middle pile are labelled. The middle pile is indicated for neutral opinions (Thurstone, 1928 italics in original). If the scale was to be regarded as valid, the scale values of the statements should not be affected by the opinions of the people who helped to construct it. The reliability of the scale was established by preparing two parallel forms from the same material and presenting both forms to the same individuals. The correlation between the two scores obtained for each person in a group indicated the reliability of the scale.

Advantages: The main advantage assumed by the Thurstone attitude scales was that they permitted a direct interpretation of an attitude of an individual without requiring that general norms for the attitude in question were known (Nunnally, 1978). The reliability of Thurstone scales tended to be adequate and the use of the parallel form could be employed when studying attitude change (Oppenheim, 2000).

Disadvantages: The procedure is very laborious and the amount of time and resources required to develop an attitude scale using this method would be impractical in relation to the current research. There is little support for the assumption that a given item at a given point on the psychological scale being measured has a distribution such that individuals above and below that point will not agree with the item (Ware et al., 1972). Doubt has also been expressed that the scale values of the statements are independent of the attitude distribution of the readers who sort the statements (Likert, 1932). It has also been found that different types of judges give markedly different ratings to some of the statements and even when an effort is made to select items that judges agree on the standard deviations of scale values is still considerable (Nunnally, 1978)

ii) The Method of Summated ratings

In contrast to the laborious Thurstone method of scaling, Likert (1932) proposed a simpler technique that obviated the need for judges and yielded the same reliability with fewer items. In this method each statement becomes a scale in itself and a person's reaction to each statement is given a score. These scores are then combined, by using a median or a mean

(Likert,1932). Values of from 1 to 5 are assigned to each of the five different positions on the five point statements. One is always assigned to the negative end of the scale and the 5 to the positive end. After assigning the numerical values to the responses, the score for each individual is determined by finding the average of the numerical values of the positions checked. Assessment of the validity of the scale is based on the premise that it is dealing with verbal behaviour and verbal reactions only. However the possibility of responses being given by the subject which are judged to be socially acceptable rather than honest should be acknowledged.

Advantages. Likert scales have been shown to yield reliability coefficients as high or higher than those obtained with scales constructed by the Thurstone method (Edwards, 1957). They are also easy to construct and can be adapted to the measurement of many different kinds of attitudes (Nunnally, 1978). Additionally these scales provide more precise information about the respondents' degree of agreement and disagreement, and allow for the inclusion of items which enable more subtle explorations of the attitude in question (Oppenheim, 2000).

Disadvantages. The principal disadvantage of this type of scale is that there is no provision for differential weighting of items (Wilkin et al., 1992). Thus the same total score can be obtained in different ways and identical scores can have different meanings. Since the scale offers no metric or interval measures it cannot be determined where scores in the middle ranges change from mildly positive to mildly negative, and the neutral-point of the scale is not necessarily the mid-point between the two extreme scale scores (Oppenheim, 2000).

iii) Scalogram analysis.

The method of scalogram analysis (Guttman, 1944) differs considerably from the methods of constructing scales used by Thurstone and Likert and is a procedure for evaluating sets of statements or existing scales to determine whether or not they meet the requirements of a particular kind of scale (Edwards,1957). The pattern of dichotomous responses that result from answering the item statements is typically triangular and if this pattern is perfectly obtained a knowledge of the number of 'yes' responses from a person permits all the person's responses to be reproduced (Nunnally, 1978).

Advantage: Scalogram analysis can produce some short but highly effective and reliable scales and offers the safeguard of unidimensionality (Oppenheim,2000).

Disadvantages: Guttman scales deal principally with dichotomous items and seeks to obtain

only an ordinal measurement of human attributes (Nunnally, 1978). Not all areas of content will scale especially if they are wide and heterogeneous, and the procedure has been criticised for this and for a tendency to produce scales covering a very narrow universe of content (Oppenheim, 2000). There is also the problem of dealing with inconsistent (non-scale) responses which may account for up to a quarter of all respondents (Wilkin et al., 1992).

Conclusions.

Both the Thurstone and Guttman procedures are laborious to construct, although computer packages can now assist with scalogram analysis. The Guttman procedure deals principally with dichotomous items whereas the multiple response items afforded by the Likert procedure allow for a greater range of answers from respondents. The requirement for 200-300 judges in the development of the Thurstone scale is prohibitive particularly when time and resources for a study are limited. The Likert method of scale construction is one of the most popular psychometric rating techniques (Wilkin et al., 1992) and the scales have been shown to have high reliability (Edwards, 1957). The advantages offered by this approach in relation to satisfaction studies are threefold (Ware et al., 1983);

1. The use of identical response scales for all items facilitates completion of the survey.
2. It is easier to format a survey instrument when the same response choices are made each time, and
3. It is easier to revise items and reduce skewness when item stems are structured as statements of opinion.

Ware & Snyder (1975) also proposed that using a homogenous index based on two or more scale items yielded a more reliable score than the use of single individual scale items alone.

In considering the advantages and disadvantages of the three scaling methods as applicable to this study, the Likert method of summated ratings using a 5-point response scale was judged to be most appropriate in addressing the research questions. With regard to naming the extremes of the scale Likert (1932) states that 'it is quite immaterial what the extremes of the attitude continuum are called'. Since the questionnaire items represent statements of opinion the most appropriate graded responses were judged to be, 'strongly agree' to 'strongly disagree'. Favourable responses to the attitudinal item were therefore accorded a score of 5 and unfavourable responses a score of 1 with a high score indicating greater satisfaction.

5.2.5 Draft content of questionnaire

The first draft of the Physiotherapy Outpatient Satisfaction Questionnaire is presented in Table 5.7. This shows the sequence of item statements that resulted following randomisation.

Table 5.7 Draft content of the Physiotherapy Outpatient Satisfaction Questionnaire showing the revised sequencing of statements following randomisation.

Original sequence	Statement	Sequence after randomisation
13.	My therapist gave me confidence that I was going to get better	1
21.	I was always seen very promptly for my treatment sessions	2
28.	I had confidence that the therapist knew what (s)he was doing	3
44.	I should have got a better result from the treatment I was given in this department	4
22.	The treatment was very comfortable and soothing	5
33.	I expected the treatment would help relieve my pain	6
12.	My therapist did not listen to what I had to say	7
35.	I have made a full recovery as a result of treatment	8
19.	I did not have any of my treatment sessions cancelled	9
29.	I expected the treatment would get me better	10
40.	The treatment helped me at the time but the effect did not last	11
11.	My therapist gave me encouragement and praise	12
27.	I was happy to be left to work on my own during the session	13
34.	I expected the treatment would cure my problem	14
25.	The treatment was too rushed	15
43.	I am completely satisfied with all aspects of my visit to the physiotherapy department	16
2.	The therapist explained my condition to me in great detail	17
32.	I did not think treatment would be able to help me	18
15.	I was able to choose the appointment times for treatment	19
37.	The treatment has helped me in some ways but I am not completely better	20
8.	My therapist did not seem interested in me	21
18.	It was important for me to see the same therapist throughout my treatment	22
31.	I did not know what the treatment would be able to do for me	23
23.	The treatment was tailored to my needs	24
3.	I was able to ask the therapist about anything connected with my treatment	25
14.	I had to wait a long time to get my first appointment for treatment	26
17.	The treatment sessions were too short	27
39.	The treatment has not helped me at all	28
7.	My therapist put me at ease and was very kind to me	29
4.	The therapist did not answer all my questions	30
30.	I expected the treatment would be painful	31
9.	Treatment sessions were too infrequent to get any benefit	33
24.	The treatment was uncomfortable	34
36.	I am now completely pain free as a result of treatment	35
6.	I was made aware of my responsibilities in managing my condition	36
1.	I felt I could not discuss my problem with the therapist	37
26.	I did not have the undivided attention of the therapist during my treatment	38
41.	I am completely satisfied with the treatment I received in this department	39
38.	I have regained full mobility as a result of treatment	40
20.	I was able to contact the department for help if I had any further problems after discharge	41
42.	The quality of service I received in this department could have been better	42
10.	My therapist did not have a good 'bedside manner'	43
5.	The treatment was fully explained to me	44

Following the randomisation of statements (Table 5.7) their new location under the principal category headings Therapeutic Encounter, Clinical Outcome and General Satisfaction is shown in Table 5.8

Table 5.8 Re-located statements (numbered) in their sub-categories following randomisation, grouped under the principal categories Therapeutic Encounter, Clinical Outcome and General Satisfaction

THERAPEUTIC ENCOUNTER

- 1. Explanation and Information**
 - a) Condition 17
 - b) Treatment 25,36,44
 - c) General 30, 37
- 2. Therapist**
 - a) Positive socioemotional talk 1,12,29,32
 - b) Negative socioemotional talk 7,21,43
- 3. Organisation/management**
 - a) Appointments 2,19,26
 - b) Continuity 9,22,33
 - c) General 27,41
- 4. Professional care**
 - a) Content of session 3,5,24,34
 - b) Organisation of sessions 13,15,38

CLINICAL OUTCOME

- 1. Expectations of care**
 - a) Condition 14,18,23
 - b) Symptoms 6,10,31
- 2. Clinical outcome**
 - a) Symptoms 11,20,28,35
 - b) Function 8,40

GENERAL SATISFACTION

- 1. Satisfaction with care**
 - a) Treatment 4,39
 - b) Service 16,42
-

The second draft of the questionnaire showing the addition of a 5-point Likert scale with scoring reversed to indicate negatively worded statements, together with the final version of the questionnaire used in the pilot survey is presented in Appendix 4.

5.2.6 Questionnaire pre-test

To check ease of understanding, a draft copy of the questionnaire and proposed patient instruction sheet was given to a random sample of 7 patients (3 male: 4 female) attending the physiotherapy outpatient department together with a check sheet for their feedback (Appendix 4). All patients reported that they would have no difficulty filling in the questionnaire, that the item statements were easy to understand and that the details of the study and instructions for completing and returning the completed questionnaire were clear and comprehensive.

5.3 CONCLUSION

The designed 44-item questionnaire was informed by data collected from the individual and group interviews conducted in the first part of the study. The item statements were representative of the views expressed by subjects when discussing the disparate aspects of their physiotherapy care. The principal categories that had emerged from the interview data provided the framework for the design of the tool thereby relating it to the two proposed conceptual models of outpatient physiotherapy (Therapeutic Encounter and Clinical Outcome).

The next two chapters detail the field trials that were conducted using the new tool and report on the validity and reliability of the measure.

CHAPTER 6

THE PILOT QUESTIONNAIRE SURVEY

6.1 INTRODUCTION

The questionnaire was designed to evaluate patients' satisfaction with their outpatient physiotherapy treatment. It was developed following the analysis of interview data collected in the first part of the study as described in Chapters 3 and 4. This chapter details the pilot survey that was conducted to test the psychometric properties of the new tool.

Aim

The aim of the pilot survey was to examine the psychometric properties of the tool by assessing the internal reliability and validity of the instrument

6.2 METHOD

Design

Mailed questionnaire survey

Subjects

One hundred and twenty male and female subjects discharged within the previous 3 months from five participating physiotherapy outpatient departments.

Inclusion criteria

Subjects were recruited into acute and chronic groups for the study on the basis of the following criteria;

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Exclusion criteria

Subjects under 18 years
Non-English speaking subjects
Subjects with a diagnosis of cognitive impairment

Site selection

A convenience sample of physiotherapy outpatient departments in five Health Districts from the North Thames Region were chosen to participate in the pre-test study as providing a contrasting area from which to draw the patient population compared with the earlier phases of the study. These sites were selected following a meeting with the North Thames Physiotherapy Managers and Educationalists Group in September 1999 at which a presentation of the research was given. The 23 managers present were invited to propose their respective outpatient departments for inclusion in the study. Twelve managers gave their approval, with apologies from those with no musculoskeletal outpatient departments, or from those already involved with research projects.

Sites were subsequently selected on the basis of the following criteria,

1. Physiotherapy outpatient departments with a caseload of patients fitting the inclusion criteria for the study
2. Physiotherapy outpatient departments in contrasting geographical areas

Five sites were selected, two inner city and three suburban.

Ethics approval

Ethics Committee approval was sought from each participating Health Authority (Appendix 8). On receipt of Ethics approval the respective Superintendent Physiotherapists were contacted to arrange for a site visit and discuss the logistics of the survey (Appendix 5).

Letters explaining the purpose of the survey and inviting subjects' participation in the study accompanied each questionnaire (Appendix 5). Subjects were advised that participation was voluntary so that return of questionnaires constituted consent.

Selection of subjects

Thirty subjects were recruited from departments with > 4WTE outpatient staff and 20 from departments with < 4WTE to reduce the burden on staff. Equal numbers of acute and chronic

subjects meeting the entry criteria were selected by the staff from their outpatient discharge lists.

Sample size

Decisions regarding sample size were discussed in Chapter 2 and were guided by the stage of the research and the analysis to be used on the data. It has been proposed that during the construction of a measure when a small number of items have been purposefully constructed they are applied to a relatively small sample of subjects (around 100) and the results submitted to item analysis (Nunnally, 1978). De Vaus (1996) suggested that between 75-100 respondents would provide a useful pilot test. Over sampling was therefore employed to allow for non-response and a sample size of 120 was used for the survey.

Procedure

Questionnaire bundles were given to each Superintendent for distribution to the staff that included the following:

- 30 (or 20) patient information letters (one to accompany each questionnaire) (Appendix 5)
- 30 (or 20) questionnaires (half coded A to be sent to subjects with acute conditions, and half coded C for those with chronic conditions) (Appendix 4)
- Stamped addressed envelope (s.a.e) to accompany each questionnaire.
- 10 Follow-up letters (for non-respondents) (Appendix 5)
- 4 spare questionnaires, s.a.e and information letters if subjects report non-receipt of original at follow-up

Superintendents were asked to keep a list of the subjects to whom questionnaires were sent together with their names and addresses so that follow-up letters could be sent. Questionnaires were coded by condition (acute/chronic) and site (hospital) to facilitate the follow-up of non-respondents. Reminder letters were then sent from participating departments to non-respondents after 2 weeks. All completed questionnaires were then forwarded to the researcher following the second 2-week period allocated for returns.

Acknowledgement letters were sent to the Superintendents in all the participating departments at the conclusion of the survey (Appendix 5).

Analysis

Statistical analysis of the questionnaire data was carried out using the Statistical Package for the Social Sciences (SPSS) Release 10 for Windows (Bryman & Cramer, 2001). Missing values were entered as zero.

Principal components analysis (PCA) with Varimax rotation and Kaiser Normalization was used to identify the factor constructs that might explain the intercorrelation among the variables examined by the questionnaire statements. In deciding how many factor constructs to keep, two main criteria were used. The first, Kaiser's criterion, selects only those factors that have an eigenvalue of greater than one. An eigenvalue represents the amount of variance explained by a specific component. The second method is the graphical Scree test, in which a graph is drawn of the descending variance accounted for by the factors initially extracted. The plot typically shows a break between the steep slope of the initial factors and a gentle one of the later factors. The factors to be retained are those that lie before the point at which the eigen factors seem to level off.

Rotation of a component solution is a technique that can be used to increase the interpretability of a PCA solution without changing its fundamental qualities. The two methods most commonly used to rotate factors are orthogonal rotation, which produces factors that are unrelated to or independent of one another, and oblique rotation, in which the factors are correlated. Varimax is a method of orthogonal rotation, and has the advantage that the information the factors provide is not redundant since a person's score on one factor is unrelated to their score on another. However a disadvantage is that the factors may have been forced to be unrelated whereas in real life they may be related (Bryman & Cramer, 2001).

To examine the component structure of the questionnaire data, the 44 item statements were submitted to a PCA with subsequent Varimax rotation. A criterion of ≥ 0.4 was used to determine an acceptable level of factor loading (Nunnally, 1978).

6. 3 RESULTS

i) Response rate

Of 120 questionnaires sent out, 77 were returned giving a total response rate of 64%. Details of the questionnaire returns received from all five sites are presented in Table 6.1

Table 6.1 Questionnaire returns from pilot survey identified by site and by subject group

Site	No. questionnaires sent out.	No. returned (acute)	No. returned (chronic)	Total No. returned	%
1	30	9	13	22	73
2	20*	5	8	13	65
3	20*	8	7	15	75
4	30	11	12	23	77
5	20+	1	3	4	20

*One questionnaire from each of these sites was returned because of the wrong address resulting in missing data

+Difficulties were associated with the allocation of patients and distribution of questionnaires from site No.5 for a number of reasons that became apparent after all the preliminary arrangement had been made. These were principally in relation to acute staff shortage in the department and the presence of frequently changing agency staff. The poor number of returns from this site in comparison with the others therefore reflected these difficulties.

ii) Results from the examination of the factor structure and scale reliability of the tool

Following PCA with Varimax rotation thirteen factors were initially extracted with eigenvalues ≥ 1.00 . However as the resulting rotated component matrix did not permit useful analysis, the number of factors was reduced to 9 for the second matrix, when the lowest eigenvalue chosen was 1.330. Orthogonal rotation converged in 128 iterations and yielded a 9-Factor solution with the first factor accounting for 31.9% of the variance (Appendix 5).

The resulting 9 factors were labelled in relation to the statements that loaded most highly on them and the resulting structure is presented in Table 6.2.

Table 6.2 Description of factors to which statements were ascribed in the 9-factor solution following principal components analysis of the pilot survey data, together with the % variance explained

Factor	Description of factor	% of variance explained
Factor 1	General satisfaction with treatment received	31.92
Factor 2	Relationship with the therapist	7.7
Factor 3	Result of treatment	5.9
Factor 4	Organisation of treatment sessions	5.6
Factor 5	Expectations of care	4.6
Factor 6	Process of treatment	4.1
Factor 7	Symptomatic effect of treatment input	3.6
Factor 8	?Respect/empathy	3.5
Factor 9	? Temporal aspects of care	3.0

In order to test whether the 9-factor solution was the best fit, an 8 and 7-component solution was also examined (Appendix 5). In both of these cases the main difference was that the number of statements loading under the Factor 1, provisionally called General Satisfaction, were increased.

In the 8-factor solution the additional statements that loaded under Factor 1 were,

- The therapist gave me confidence that I was going to get better
- I was not always seen promptly for my treatment sessions
- Treatment sessions were too infrequent to get any benefit
- I was able to contact the department for help with any problems after discharge

All but the first of these four statements could logically be accepted in relation to this factor since they could be interpreted as contributing to an evaluation of the treatment intervention as a whole taking into account these 'organisational' elements. The first statement however was less easy to justify in this grouping.

In the 7-factor solution, statements additional to those which loaded under Factor 1 in the 8-factor solution were;

- The treatment sessions were too short
- The treatment was too rushed
- My therapist did not seem interested in me
- I did not have the undivided attention of the therapist during my treatment session
- I was not happy to be left to work on my own during the session

However the following statements were absent from the General Satisfaction grouping in the 7-factor solution,

- I am completely satisfied with all aspects of my visit to physiotherapy
- The therapist gave me confidence that I was going to get better

Therefore the fit of statements in Factor 1 (General Satisfaction) for the 7-factor solution was not as cogent as that of the 8-factor solution and this lack of focus was reflected throughout the other factor loadings of the 7-factor solution.

In all three factor solutions (7, 8, 9) two statements consistently loaded together as the last or penultimate small factor;

- I felt I could not discuss my problem with the therapist
- My therapist did not have a good bedside manner

This suggested that these statements represented attitudes that were not related to the main concepts which made up the principal factor loadings as had been initially hypothesised.

Of the 7-component and 8-component solutions, the 8-factor solution provided the better fit, however the 9-factor solution appeared to provide the best overall fit for the 7 principal factors as originally hypothesised for the questionnaire. Component loading was high (0.91-0.45) and indicated component independence with statements loading on a single component with few sizeable loadings on other components. Where these did load on another component (> 0.40) this could possibly be justified on logical grounds, for example, 'I am completely satisfied with all aspects of my visit to physiotherapy' which loaded 0.64 under the factor General Satisfaction also loaded high (0.52) under the factor Relationship with the therapist. Similarly, the item 'My therapist did not listen to what I had to say' loaded 0.58 on a small factor that could possibly represent a 'time' element, but also loaded more logically from a clinical point of view under General Satisfaction at 0.56.

The statements were therefore relocated in relation to the seven principal factors in the 9-factor solution but with the two statements that did not load in a logical fashion deleted;

- I felt I could not discuss my problem with the therapist
- My therapist did not have a good bedside manner

The decision to relocate items rather than delete them at this early stage of scale development was, following a discussion with the statistician, guided by theory as well as subjective experience and knowledge of the material. This was an exploratory pilot study with a relatively small sample size (< 2 subjects per item variable in the questionnaire) therefore below the level suggested by Comrey (1973) or Sapsford (1999) discussed previously in greater detail on page 124. Aware that the reliability of factors emerging from a factor analysis are dependent on the size of the sample, analysis can nevertheless be conducted on a small sample to describe the relationship between the variables (Bryman & Cramer, 2001). The results of the preliminary factor analyses in this study were therefore useful in providing some indication of the level of fit between the descriptions accorded the *a priori* sub-scales and the resulting factor structures. It was felt important to try and retain as many of the original item statements as possible at this early stage of scale development, rather than deleting all those that did not load as expected, which would have accorded with psychometric theory. These item statements had been drawn from the preliminary data collection phases of the research and were aspects of treatment that subjects had indicated as being important in relation to their

care. For these reasons, with the exception of the two items identified above that were deleted, as they appeared to tap a different construct to satisfaction, it was decided to relocate rather than delete certain items from the results of the 9-factor solution as follows.

Five statements that did not appear to load logically on the factors as produced in the 9-factor solution were re-located (refer to Table 6.2). These were;

- 'The therapist did not listen to what I had to say', moved from Factor 9 to Factor 1 (General Satisfaction)
- 'I did not have any of my treatment sessions cancelled' moved from Factor 9 to Factor 4 (Organisation)
- 'I was not always seen promptly for my treatment sessions' moved from Factor 8 to Factor 4 (Organisation)
- 'I was not happy to be left to work on my own' moved from Factor 3 to Factor 4 (Organisation)
- 'I was able to choose the appointment times for treatment' moved from Factor 2 to Factor 6 (Process)

The revised groups of statements are presented in Table 6.3 with the original questionnaire number followed by the statement. Re-located items are indicated by *.

In re-ordering the statements under 7 principal sub-scales two new categories namely, Process of treatment and Content of treatment, replaced the previous general category heading of Professional Care.

Table 6.3 Revised grouping of statements under the 7 principal sub-scales resulting from the 9-factor solution following principal components analysis of the pilot survey data

1. General satisfaction

Q.39 I am completely satisfied with the treatment I was given in this department

Q.42 The quality of service I received in this department could have been better

Q.16 I am completely satisfied with all aspects of my visit to the physiotherapy department

Q. 4 I should have got a better result from the treatment I was given in this department

Q. 3 I did not have confidence that the therapist knew what s(he) was doing

Q.24 The treatment was tailored to my needs

Q.17 The therapist explained my condition in great detail

Q.25 I was able to ask the therapist about anything connected with my treatment

Q.44 The treatment was fully explained to me

Q. 7 The therapist did not listen to what I had to say*

Cont...

Table 6.3 Revised grouping of statements under the 7 principal sub-scales resulting from the 9-factor solution following principal components analysis of the pilot survey data (cont.)

2. Therapist

- Q.29 The therapist put me at ease and was very kind
- Q.21 My therapist did not seem interested in me
- Q.32 I got on very well with my therapist
- Q.12 My therapist gave me encouragement and praise
- Q.36 I was made aware of my responsibilities in managing my condition

3. Clinical outcome

- Q. 8 I have made a full recovery as a result of treatment
- Q.35 I am now completely pain free as a result of treatment
- Q.20 The treatment has helped me in some ways but I am not completely better
- Q.40 I have regained full mobility as a result of treatment
- Q.11 The treatment helped me at the time but the effect did not last

4. Organisation

- Q.27 The treatment sessions were too short
- Q.33 Treatment sessions were too infrequent to get any benefit
- Q.41 I was able to contact the department for help if I had any further problems after discharge
- Q. 9 I did not have any of my treatment sessions cancelled*
- Q. 2 I was not always seen promptly for my treatment sessions*
- Q.15 The treatment was too rushed
- Q.38 I did not have the undivided attention of the therapist during my treatment
- Q.13 I was not happy to be left to work on my own during the treatment*

5. Expectations of treatment

- Q.10 I expected the treatment would get me better
- Q.18 I did not think the treatment would be able to help me
- Q.14 I expected the treatment to cure my problem
- Q. 1 The therapist gave me confidence that I was going to get better

6. Process of treatment

- Q.22 It was important for me to see the same therapist throughout my treatment
- Q.23 I did not know what the treatment would be able to do for me
- Q.28 The treatment has not helped me at all
- Q.30 The therapist did not answer all my questions
- Q.26 I had to wait a long time to get my first appointment for treatment
- Q.19 I was able to choose the appointment times for treatment*

7. Content of treatment

- Q. 5 The treatment was very comfortable and soothing
 - Q.34 The treatment was uncomfortable
 - Q.31 I expected the treatment to be painful
 - Q. 6 I expected the treatment to help relieve my pain
-

Cronbach's alpha was calculated for the total scale and for the 7 principal sub-scales shown in Table 6.3 as a test of internal reliability. The results are presented in Table 6.4. Nunnally

(1978) has suggested that in the early stages of research concerning the hypothesised measure of a construct, a level of reliability of ≥ 0.70 would suffice. This level is the one that was used in the current study.

Table 6.4 Coefficient alpha internal consistency reliability coefficients for the 7 principal sub-scales resulting from the 9-factor solution following principal components analysis of the pilot survey data

Sub-scale	Cronbach's Alpha
1. General satisfaction	0.91
2. Therapist	0.87
3. Clinical outcome	0.85
4. Organisation	0.79
5. Expectations	0.85
6. Process of treatment	0.67
7. Content	0.67

The results of the initial regrouping showed that five sub-scales achieved good alpha levels > 0.70 , with the sub-scales of Process of treatment and Content almost achieving the minimal acceptable alpha level.

Strategies were therefore employed to improve the lower alpha values of the sub-scales using the SPSS output for alpha reliability levels when each constituent scale item is deleted. This strategy resulted in the relocation of statements from Factor 6 (Process of treatment) as follows;

Q.22 'Important to see the same therapist' was added to Factor 2 (Therapist)

Q.28 'Treatment has not helped me at all' was added to Factor 3 (Outcome)

The following three statements were all added to Factor 1 (General Satisfaction)

Q.30 'Therapist did not answer my questions'

Q.26 'Had to wait a long time for first appointment'

Q.19 'Able to choose appointment times for treatment'

However, Q23. 'I did not know what treatment would be able to do for me' was eliminated, as alpha values of none of the sub-scales were improved by its addition.

The alpha values following the re-grouping of the statements are presented in Table 6.5.

Table 6.5 Coefficient alpha internal consistency reliability coefficients for the 6 principal sub-scales following the revision and re-grouping of statements used in the pilot survey

Sub-scale	Cronbach's Alpha
1. General satisfaction	0.89
2. Therapist	0.83
3. Clinical outcome	0.85
4. Organisation	0.79
5. Expectations	0.81
6. Content	0.73

Although the alpha values for the sub-scales of General Satisfaction and Therapist to which the statements from Process of treatment were transferred were reduced, they remained well above 0.7. It was judged that the new grouping made sense from a clinical and logical viewpoint and justified the acceptance of the slightly lower alpha values.

The alpha value for the Content sub-scale (0.67) had been improved to 0.73 by transferring Q.6 'I expected treatment to relieve my pain,' to the Expectations sub-scale where it had been hypothesised to belong. However this resulted in a very small scale of only 3 statements for Content. The alpha value of the Outcome sub-scale had not been changed by the addition of Q.28 'Treatment has not helped me at all'.

The addition of the 3 extra statements to the sub-scale of General Satisfaction increased the total number to 13 and the content suggested that it could be sub-divided into two sub-scales dealing with General Satisfaction and Communication respectively. It should be noted at this point that the *a priori* grouping of statements for 'Explanation and information' did not load as a discrete factor on the PCA, but that statements relating to these concepts loaded instead on Factor 1 (General Satisfaction). The 13 statements in Factor 1 were therefore divided into two sub-scales named General Satisfaction and Communication respectively.

The results of the regrouping are presented in Table 6.6, which also gives the alpha values for the two new sub-scales.

Table 6. 6 Statements in the General Satisfaction and Communication sub-scales showing the associated coefficient alpha internal consistency reliability coefficients for the two scales

General satisfaction (Cronbach's alpha 0.83)

- Q.10 I am completely satisfied with the treatment I was given in this department
- Q.42 The quality of service I received in this department could have been better
- Q.16 I am completely satisfied with all aspects of my visit to the physiotherapy department
- Q. 4. I should have got a better result from the treatment I was given in this department
- Q.24 The treatment was tailored to my needs
- Q.26 I had to wait a long time to get my first appointment for treatment
- Q.19 I was able to choose the appointment times for treatment

Communication (Cronbach's alpha 0.82)

- Q. 3 I did not have confidence that the therapist knew what she was doing
 - Q.17 The therapist explained my condition to me in great detail
 - Q.25 I was able to ask my therapist about anything connected with my treatment
 - Q.44 The treatment was fully explained to me
 - Q. 7 The therapist did not listen to what I had to say
 - Q.30 The therapist did not answer all my questions
-

Table 6.7 shows the sub-scales grouped under the principal categories of Therapeutic Encounter and Clinical Outcome relating to the Model of Patient Satisfaction (page 211) together with the General Satisfaction sub-scale.

Table 6.7 Coefficient alpha internal consistency reliability coefficients for the 7 sub-scales grouped under the principal category headings of Therapeutic Encounter, Clinical Outcome and General Satisfaction

THERAPEUTIC ENCOUNTER

Communication (Cronbach's alpha 0.824)

- Q. 3 I did not have confidence that the therapist knew what she was doing
- Q.17 The therapist explained my condition to me in great detail
- Q.25 I was able to ask my therapist about anything connected with my treatment
- Q.44 The treatment was fully explained to me
- Q. 7 The therapist did not listen to what I had to say
- Q.30 The therapist did not answer all my questions

Therapist (Cronbach's alpha 0.830)

- Q.29 The therapist put me at ease and was very kind to me
- Q.21 My therapist did not seem interested in me
- Q.32 I got on very well with my therapist
- Q.12 My therapist gave me encouragement and praise
- Q.36 I was made aware of my responsibilities in managing my condition
- Q.22 It was important for me to see the same therapist throughout my treatment

Organisation/management (Cronbach's alpha 0.792)

- Q.27 The treatment sessions were too short
- Q.33 The treatment sessions were too infrequent to get any benefit
- Q.41 I was able to contact the department for help with any problems after discharge
- Q. 9 I did not have any of my treatment sessions cancelled
- Q. 2 I was not always seen promptly for my treatment sessions
- Q.15 The treatment was too rushed
- Q.38 I did not have the undivided attention of the therapist during my treatment
- Q.13 I was not happy to be left to work on my own during the session

Professional care (Cronbach's alpha 0.732)

- Q. 5 The treatment was very comfortable and soothing
- Q.34 The treatment was uncomfortable
- Q.31 I expected the treatment would be painful

Cont...

Table 6.7 Coefficient alpha internal consistency reliability coefficients for the 7 sub-scales grouped under the principal category headings of Therapeutic Encounter, Clinical outcome and General Satisfaction (cont.)

CLINICAL OUTCOME

Expectations of care (Cronbach's alpha 0.814)

- Q.10 I expected the treatment would get me better
- Q.18 I did not think the treatment would be able to help me
- Q.14 I expected the treatment would cure my problem
- Q. 1 The therapist gave me confidence that I was going to get better.
- Q. 6 I expected the treatment would help relieve my pain

Clinical outcome (Cronbach's alpha 0.856)

- Q. 8 I have made a full recovery as a result of treatment
- Q.35 I am now completely painfree as a result of treatment
- Q.20 The treatment has helped me in some ways but I am not completely better
- Q.40 I have regained full mobility as a result of treatment
- Q.11 The treatment helped me at the time but the effect did not last
- Q.28 The treatment has not helped me at all

GENERAL SATISFACTION

General satisfaction (Cronbach's alpha 0.835)

- Q.10 I am completely satisfied with the treatment I was given in this department
 - Q.42 The quality of service I received in this department could have been better
 - Q.16 I am completely satisfied with all aspects of my visit to the physiotherapy department
 - Q.4 I should have got a better result from the treatment I was given in this department
 - Q.24 The treatment was tailored to my needs
 - Q.26 I had to wait a long time to get my first appointment for treatment
 - Q.19 I was able to choose the appointment times for treatment
-

The resulting small number of items in the sub-scale Professional Care were specifically linked by the association of pain with treatment rather than the broader *a priori* grouping that had been hypothesised. It was therefore doubtful whether this discrete aspect of the therapeutic encounter should be retained, since in practice there is usually some element of pain or discomfort associated with the treatment and the data suggest that some patients do in fact anticipate this. This sub-scale was therefore deleted.

Three other statements that did not load logically in the PCA, were also deleted. These were,

- Q23. I did not know what the treatment would be able to do for me
- Q37. I felt I could not discuss my problem with the therapist
- Q43. My therapist did not have a good bedside manner

The final scale therefore comprised 38 statements under 6 sub-scales (Table 6.8). The scale appeared to tap not only the concept of general satisfaction with physiotherapy as defined in this study, but also the discrete determinants of care as identified from the preliminary data collection phases of the research, thus supporting the content and construct validity of the tool.

Table 6.8 The 38-item satisfaction scale with coefficient alpha internal reliability coefficients for each of the 6 sub-scales

Component	No. items	Cronbach's Alpha
1. General satisfaction	7	0.835
2. Communication	6	0.824
3. Therapist	6	0.830
4. Clinical outcome	6	0.856
5. Organisation	8	0.792
6. Expectations	5	0.814

6.4 DISCUSSION AND CONCLUSIONS

In this pilot study the factor structure, reliability and validity of the newly developed questionnaire designed to measure satisfaction with outpatient physiotherapy was examined. Factor analysis produced 9 factors that provided the best fit for the data and resulted in seven principal sub-scales containing items similar to those hypothesised *a priori*. However the first factor, identified as General Satisfaction, which loaded on all three of the PCA factor solutions, included statements which had been hypothesised to relate specifically to aspects of Explanation and Information and therefore to be a discrete dimension of care. The PCA failed to extract a factor that could be interpreted as relating to Communication *per se*. Two variables consistently loaded together on the smallest factors in all three PCA solutions, 'I felt I could not discuss my problem with the therapist' and 'My therapist did not have a good bedside manner'. These statements indicated that they were tapping a different type of relationship with the therapist from those statements which loaded under Factor 2 (Therapist) in all three Factor solutions. This suggested that they might not be appropriate as a measure of patients' satisfaction with the therapist in the context of outpatient physiotherapy care.

The small percentage of variance explained by the factors in each of the three PCA solutions suggested that the underlying structure was multidimensional, which had been hypothesised. The high alpha values for the six sub-scales identified in the final scale indicated good internal reliability. In terms of validity, a single study cannot confirm the validity of the instrument and the new tool is in the early stage of development, however the factor structure and internal consistency of the scale supports the construct validity of the measure. The collection of material for the content of the questionnaire described in Chapter 5, was as representative as possible of the principal categories that had emerged from the data in the earlier stages of the study. A comparison with extant instruments and the satisfaction literature showed that general topic areas thought to be indicative of satisfaction with care were covered in designing the questionnaire, thus providing support for the content validity of the tool. Content validity is also supportive of construct validity in that the same procedures required to ensure the content are intimately related to defining the domain of variables in construct validity.

The survey conducted in the next stage of the study constituted the main field trial of the new tool and aimed to further examine the psychometric properties of the scale as well as providing data in order to achieve the third research aim.

CHAPTER 7

SURVEY TO EXAMINE THE LEVEL OF SATISFACTION WITH OUTPATIENT PHYSIOTHERAPY IN PATIENTS WITH ACUTE AND CHRONIC MUSCULOSKELETAL CONDITIONS

7.1 INTRODUCTION

In the previous chapter the development and pilot testing of the new survey tool were described. This resulted in a 38-item satisfaction questionnaire with six sub-scales showing good levels of internal reliability. In this chapter, which deals with the final stage of the research, a multi-centre survey was conducted using the new instrument, in order to achieve the third research aim.

Aim

The aim of the survey was to,

- i) Examine the level of satisfaction of patients with acute and chronic musculoskeletal conditions with their physiotherapy outpatient care.

The objectives for this stage of the research were;

- i) To test the psychometric properties of the new tool
 - ii) To test the following four hypotheses
- H1. Satisfaction with OP physiotherapy in patients with acute and chronic musculoskeletal conditions is a function of their evaluation of the therapeutic encounter and clinical outcome components of their care
- H2. The relative importance of satisfaction with the dimensions of the therapeutic encounter and clinical outcome varies between the acute and chronic groups
- H3. There is an association between high levels of satisfaction with the clinical outcome and the therapeutic encounter in patients with acute musculoskeletal conditions.
- H4. There is an association between low levels of satisfaction with the clinical outcome but high levels of satisfaction with the therapeutic encounter in patients with chronic musculoskeletal conditions.

7.2 METHOD

Design

Multi-centre survey, using a mailed self-completion questionnaire.

Subjects

Four hundred and twenty male and female subjects with acute and chronic musculoskeletal conditions, discharged within the previous 3 months from 14 participating physiotherapy outpatient departments.

Inclusion criteria

Subjects were recruited into acute and chronic groups for the study on the basis of the following criteria;

Acute: Subjects referred to out-patient physiotherapy with a diagnosis of fracture, or trauma sustained within the previous month from starting treatment.

Chronic: Subjects referred to out-patient physiotherapy with a diagnosis of degenerative spinal or peripheral joint disease with symptoms present for 6 months or longer.

Exclusion criteria

Subjects under 18 years
Non-English speaking subjects
Subjects with a diagnosis of cognitive impairment

Site selection

Three Health Regions from England were selected to represent all areas of the country. These were Northern & Yorkshire, West Midlands and South & West. (see page, 123) Within these three Regions the names of all hospitals were identified from the Medical Directory of Hospitals (1991). Those that did not have Accident & Emergency, Orthopaedic, or Rheumatology Departments were eliminated, as patient referrals from these departments were essential to the entry criteria of the subjects for the study.

Letters together with a reply slip were sent to the Physiotherapy managers in all remaining hospitals inviting their outpatient staff to participate in the survey (Appendix 6). They were advised that only those departments with ≥ 4 WTE staff were eligible to take part. This was to ensure that their discharge lists would be large enough to draw the potential sample of patients

for randomisation into the survey within the specified time frame. Follow-up telephone calls were made to those managers who had not replied within the two week suggested period to ensure that responses had been obtained from all hospitals before the randomisation process was carried out.

Of 29 physiotherapy departments meeting the requirements and willing to take part, 15 were randomly selected (see page, 123). Each department was numbered sequentially and numbers drawn from a hat with every third number chosen. The number of departments chosen in each Region reflected their total geographical populations so that the greater the population the more departments selected. Subsequently six were chosen from Northern & Yorkshire (pop. 6,359,305), five from the West Midlands (pop. 5,338,367) and four from the South & West (pop. 4,923,171).

Ethics approval

Ethics approval was obtained from the Multicenter Research Ethics Committee (MREC) in the first instance and subsequently from each Local Research Ethics Committee (LREC) of the Trusts involved in the study (Appendix 8). Once Ethics approval had been given, the participating physiotherapy managers were contacted with details of the study (Appendix 6)

The MREC required that in order to ensure patient confidentiality their personal details should not be divulged to the researcher. The questionnaires therefore were sent from and returned to the local physiotherapy departments. This necessitated a two-stage procedure that is detailed below. One site subsequently withdrew from the survey on learning about the modified protocol required by MREC, as the local Research & Development Department advised the physiotherapy staff that the procedure would involve too much staff time. The survey was therefore conducted from 14 sites.

Letters explaining the purpose of the survey and inviting subjects' participation in the study accompanied each questionnaire (Appendix 6). Subjects were advised that participation was voluntary so that the return of questionnaires constituted consent.

Selection of subjects

The following procedure for subject selection followed MREC recommendations in order to maintain confidentiality of patient details.

- Therapists at participating sites identified subjects meeting the entry criteria for the study from their discharge lists.
- A pool of eligible subjects with acute and chronic conditions was then drawn up.
- A total pool of patients *before randomisation* of at least 50 was required to allow for a reasonable choice, since the number of subjects *after randomisation* from each site was to be 30 (to minimise the extra burden on staff).
- Coding sheets specially designed by the researcher were completed by each site with eligible subjects entered under the categories of acute/chronic and identified only by initials, age and gender (Appendix 6). These were then forwarded to the researcher.
- The researcher randomly selected 15 acute and 15 chronic subjects from the lists using a table of random numbers and these selections were subsequently highlighted on the coding sheets.
- The coding sheets were then returned to the respective sites where they were decoded to identify subjects' details to whom questionnaires would subsequently be sent.

Sample size

Decisions regarding sample size were discussed in Chapter 2 (page, 124) and were guided by the methods of analysis to be used on the survey data, which included descriptive statistics, correlations, and differences between groups. A sample size of 300 subjects was judged to be achievable within the resources and time scale of the study and allowed for eight participants for each of the 38 variables in the questionnaire. Over-sampling was employed with an anticipated non-response rate of $\pm 30\%$, therefore a sample size of 420 (30 respondents from each of 14 sites) was calculated.

Procedure

Survey bundles were sent to the participating physiotherapy managers that included the following;

- Coding sheets with subjects identified post randomisation
- Protocol for Phase Two of the survey (Appendix 6)
- 15 questionnaires coded 'A' to be sent to subjects with ACUTE conditions (Appendix 4)
- 15 questionnaires coded 'C' to be sent to subjects with CHRONIC conditions (Appendix 4)
- 30 patient information letters (one to accompany each questionnaire) (Appendix 6)
- 30 stamped addressed envelopes (one to accompany each questionnaire)
- 15 follow-up letters (for non-respondents) (Appendix 6)
- 4 spare questionnaires, stamped addressed envelopes, and information letters if patients report non-receipt of original at follow-up.

A questionnaire with accompanying letter, signed by the researcher was sent to each subject. A record was kept of the patient's name, address, and questionnaire code by the participating physiotherapy department.

Subjects were requested to return the completed questionnaires within 2 weeks of receipt to their local physiotherapy department.

Follow-up letters were sent out from the local departments to non-responders 2 weeks after the initial mailing by the therapists who were able to identify the returns from the codes on the questionnaires.

Four weeks after the start of the survey all questionnaire returns were forwarded to the researcher from the participating sites.

Acknowledgement letters of thanks were sent to all participating departments (Appendix 6)

Analysis

The questionnaire data were analysed using SPSS Release 10 for Windows (Bryman & Cramer, 2001). The scoring of all negative questions was reversed before the data was subject to statistical analysis and missing values were entered as zero.

Analysis was conducted in relation to;

1. Examination of the questionnaire responses
2. Examination of the factor structure of the tool and scale reliability

1. Examination of the questionnaire responses

a) Analysis of the closed questions

Differences in questionnaire responses were examined by gender and condition using the Mann-Whitney test, and by using the Kruskal-Wallis test for age-group comparison. Box plots were also constructed to examine the range and distribution of scores by condition as a test of H3 and H4 (page, 248).

Crosstabulations and the Chi-square (χ^2) test were conducted on the expectations and outcome sub-scales in order to examine the clinical outcome model.

b) Analysis of open questions

Subjects' open comments were subject to content analysis and grouped under discrete category headings, as follows,

- The open comments were first transcribed verbatim and read through a number of times to identify main themes.
- The comments were then grouped under principal category headings reflecting these themes.
- Comments with multiple themes were coded in relation to the discrete categories that they comprised e.g. 'My treatment helped my condition...therapist extremely helpful and knowledgeable' was coded as 'Outcome/Therapist'.
- The comments were then examined to identify whether they were expressed in positive, negative or neutral terms.
- Coding sheets with the attributed statements grouped under the various categories were given to 2 independent judges to check the identification of the principal category headings and the fit of comments attributed to them.
- Agreement of 96% and 95% respectively was achieved with the judges coding, with some statements suggested as being appropriate to two categories. Only 2 statements, initially coded under 'Organisation', were identified by both judges as also belonging under the 'Satisfaction' heading;

'I received only 3 appointments in the department each time each time I was given a Tens machine. After the third visit I was told they could do no more for me. I was forgotten on the second visit & left for an hour & the department was closing. I had to leave my cubicle and look for someone to remove the machine.' chronic, female, aged 60-69 yrs., retired.

'I felt a few more sessions would have been beneficial - only had 7'. chronic, female, aged 70-79 yrs. retired.

However following discussion the original allocation of comments to category headings was retained without change.

c) Correlation and regression analysis of the survey data

Spearman's Rank Correlation Coefficient was used to examine the strength and direction of the relationship between the six principal dimensions of satisfaction prior to conducting multivariate regression analysis. The computed coefficients vary between -1 and +1 with either extreme indicating a perfect relationship, negative or positive respectively, between two variables. The complete absence of a relationship would result in a coefficient of zero. Missing values were omitted on a listwise basis, in which a case was excluded if there was a missing value for any one of the six variables involved in the equation.

Regression coefficients were calculated to determine the relative impact of the five independent variables (expectations, therapist, communication, organisation, and outcome) on the dependent variable satisfaction, using the stepwise procedure for the whole sample as well as for the acute/chronic and male/female sub-groups. Analysis was conducted on the ranked data in order to handle non-linear effects and in recognition of the ordinal nature of the data. In this procedure the independent variables were entered according to the statistical criteria in terms of the required F ratio value, with the order of inclusion determined by the contribution of each variable to the explained variance. The variables were then entered in steps with the variable that exhibited the highest correlation with the dependent variable being entered at the first step. As each new variable was entered the variables already in the equation were reassessed to determine whether they still met the necessary statistical criteria, if not they were removed from the equation (Bryman & Cramer, 2001).

2. Examination of the factor structure of the tool and scale reliability

Factor analysis of the 38 questionnaire items was used to identify independent dimensions of satisfaction using Principal Components Analysis (PCA) with Varimax rotation (see Chapter 6

page, 235). Principal components were then compared with the dimensions of satisfaction that had been postulated *a priori*.

The internal reliability of the sub-scales resulting from the PCA were examined using Cronbach's alpha which calculates the average of all possible split-half reliability coefficients.

7.3 RESULTS

The results will be presented in two parts;

Part A. Results from the analysis of the questionnaire responses

1. Responses from the closed questions
2. Responses from the open questions
3. Factors influencing and predicting satisfaction scores

Part B. Results from the examination of the factor structure and scale reliability of the tool

Part A. Results from the analysis of the questionnaire responses: 1. Responses from the closed questions

i) Response rate

Two hundred and ninety returns were received giving an overall response rate of 69%, of which 279 (66%) provided usable data. The response rates varied between the sites from 83% to 53%. Eleven questionnaires were incomplete/not filled in, and were not included in the analysis.

ii) Sample characteristics

It can be seen from Table 7.1 that there were almost twice as many women as men in the sample population and that almost half of the sample were in the 50-70 age group. The largest groups in terms of employment status were those who were retired (37%) and those in full time employment (32%). Five respondents checked a combination of two employment status answers as indicated by an asterisk. These subjects described themselves as students and in part-time employment

Table 7.1 Sociodemographic characteristics of the sample (n=279)

Subject characteristics	n	%
Condition		
Acute	135	48 %
Chronic	144	52 %
Gender		
Male	93	33 %
Female	173	62 %
No reply	13	5 %
Age		
18-29	19	7 %
30-39	29	10 %
40-49	52	19 %
50-59	66	24 %
60-69	61	22 %
70-79	38	14 %
80-89	13	5 %
No reply	1	0.4 %
Employment		
Full time	88	32 %
Part time	37	13 %
Not employed	31	11 %
Student	5	2 %
Retired	104	37 %
Combined*	5	2 %
Self employed	1	0.4 %
No reply	8	3 %
Total	279	100 %

*Respondents checked two employment status answers, for example, Part time and Student.

iii) Non-respondents

The number and characteristics of non-respondents are presented in Table 7.2

These were calculated by comparing the characteristics between respondents and non-respondents from available data on the coding sheets. This was only possible from 13 sites, as one site provided their own computer printout instead of the coding sheet supplied. Details of employment status were included on the questionnaires but not on the coding sheets therefore this data does not appear in Table 7.2.

Table 7.2 Number and Characteristics of non-respondents (n =141)

Subject characteristics	n	%
Condition		
Acute	75	53 %
Chronic	66	47 %
Gender*		
Male	79	56 %
Female	62	44 %
Age*		
18-29	17	12 %
30-39	27	19 %
40-49	22	16 %
50-59	25	18 %
60-69	22	16 %
70-79	20	14 %
80-89	8	6 %
Total	141	100 %

*Characteristics of non-respondents from 13 sites only.

For condition, the differences in percentages between respondents and non-respondents was not significant ($\chi^2 = 0.683$, $df = 1$. NS). However there was a significant difference for gender ($\chi^2 = 17.63$, $df = 1$. $p < 0.001$), in that males were over represented among the non-respondents (56% vs. 33%). Differences between age groups did not attain the minimum 5% level of statistical significance ($\chi^2 = 12.454$, $df = 6$. $p < 0.10$). Therefore while Condition can safely be compared as NS, results should be treated with caution with regards to Gender and Age.

iv) Unanswered questionnaires

Five unanswered questionnaires were returned of which 4 included comments. It was apparent that three of these subjects did not fit the entry criteria for the study and should not have been sent questionnaires. Two had only attended for two sessions of treatment each, and one was unable to complete the questionnaire because of communication difficulties. The fourth subject was treated by a student and did not want to complete it because of this.

v) Questionnaire responses

The means and standard deviations of the questionnaire responses on a 1-5 (strongly disagree-strongly agree) Likert scale by sub-scale variable are presented in Tables 7.3-7.8. Mean scores above 3 indicate that subjects were satisfied (agreed) or very satisfied (strongly agreed) with

their physiotherapy care. Scores on a 5-point Likert scale for each questionnaire statement are presented in Appendix 7.

a) Expectation sub-scale (Table 7.3)

Subjects had positive expectations of symptomatic improvement resulting from their treatment particularly in terms of pain relief, but were less sure of treatment effecting a cure for their problem. The therapist appeared to play an important role in engendering expectations of a positive outcome.

Table 7.3 Expectation sub-scale: means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree –5 strongly agree)

Expectation sub-scale statements	n=279		Mean response score	St. deviation of scores
	Responses	Missing		
Expected treatment to get me better	277	2	3.74	0.93
Did not think treatment would help	275	4	3.73	0.93
Expected treatment to cure problem	276	3	3.38	1.08
Therapist gave me confidence	275	4	3.87	0.99
Expected treatment to relieve pain	275	4	3.84	0.91
Total for sub-scale	278	1	3.72	0.59

b) Communication sub-scale (Table 7.4)

Subjects were very satisfied with the level of information and explanation they got concerning their treatment and generally appeared to have a good relationship with the therapist. There was less satisfaction with the level of explanation they received about their condition.

Table 7.4 Communication sub-scale: means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree- 5 strongly agree)

Communication sub-scale statements	n=279		Mean response score	St. deviation of scores
	Responses	Missing		
Did not have confidence therapist knew	275	4	4.23	1.07
Therapist explained condition in detail	278	1	4.05	1.01
Able to ask therapist about anything	279	0	4.36	0.70
Treatment was fully explained	274	5	4.22	0.73
Therapist did not listen	278	1	4.31	1.08
Therapist did not answer all my questions	278	1	4.13	0.92
Total for sub-scale	279	0	4.21	0.65

c) Therapist sub-scale (Table 7.5)

The affective qualities of the therapist were an important aspect of the therapeutic encounter with subjects being very satisfied with their therapist. However there was less agreement concerning the continuity of care.

Table 7.5 Therapist sub-scale: means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree-5 strongly agree)

Therapist sub-scale statements	<i>n</i> =279		Mean response score	St. deviation of scores
	Responses	Missing		
Therapist put me at ease	278	1	4.43	0.70
Therapist did not seem interested	276	3	4.30	1.00
Got on very well with therapist	279	0	4.36	0.75
Therapist gave encouragement and praise	278	1	4.10	0.85
Made aware of my responsibilities	278	1	4.04	0.77
Important to see the same therapist	279	0	4.04	1.03
Total for sub-scale	279	0	4.21	0.57

d) Organisation sub-scale (Table 7.6)

There was less satisfaction with the organisational issues of care particularly concerning the length and frequency of the treatment sessions. However subjects were particularly satisfied with the scheduling of their appointments and with the amount of supervision and attention they had during their treatment session.

Table 7.6 Organisation sub-scale: means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree- 5 strongly agree)

Organisation sub-scale statements	<i>n</i> =279		Mean response score	St. deviation of scores
	Responses	Missing		
Treatment sessions too short	279	0	3.56	1.04
Treatment too infrequent	276	3	3.69	1.05
Able to contact department if problems	277	2	3.75	1.08
Did not have treatment cancelled	275	4	3.99	1.25
Not always seen promptly	276	3	3.89	1.27
Treatment too rushed	276	3	3.91	1.06
Did not have undivided attention	275	4	3.93	1.08
Not happy to work on my own	272	7	3.93	1.02
Total for sub-scale	279	0	3.82	0.63

e) Outcome sub-scale (Table 7.7)

Subjects were generally dissatisfied with the level of symptomatic improvement they achieved from treatment, particularly in terms of pain relief. However treatment was felt to be beneficial, albeit short lasting.

Table 7.7 Outcome sub-scale: Means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree-5 strongly agree)

Outcome sub-scale statements	n=279		Mean response score	St. deviation of scores
	Responses	Missing		
Made a full recovery	276	3	2.64	1.25
Now completely free of pain	277	2	2.23	1.16
Treatment helped in some ways	278	1	2.47	1.17
Regained full mobility	277	2	2.69	1.26
Treatment helped but did not last	277	2	3.04	1.29
Treatment has not helped at all	276	3	3.83	1.09
Total for sub-scale	278	1	2.81	0.84

f) General Satisfaction sub-scale (Table 7.8)

Overall, subjects were satisfied with the way they were treated in the physiotherapy department, and felt that the treatment addressed their specific needs. However there was some dissatisfaction with the length of time before a first appointment and with the quality of service provided.

Table 7.8 General Satisfaction sub-scale: means and standard deviations of scores on a 5-point Likert scale (1 strongly disagree-5 strongly agree)

General Satisfaction sub-scale statements	n=279		Mean response score	St. deviation of scores
	Responses	Missing		
Completely satisfied with the treatment I was given	276	3	3.99	1.01
Quality of service could have been better	278	1	3.77	1.14
Completely satisfied with all aspects	276	3	3.91	1.08
Should have got a better result from treatment	275	4	3.81	1.10
Treatment was tailored to my needs	278	1	3.94	0.86
Had to wait a long time for first appointment	277	2	3.50	1.35
Able to choose appointment times	277	2	3.86	1.04
Total for sub-scale	279	0	3.82	0.70

Conclusion

It can be seen from Tables 7.3-7.8 that the highest mean scores and lowest standard deviations concerned the Therapist sub-scales. Lowest mean scores and highest standard deviations related to the clinical Outcome of treatment.

vi) 'Not sure' responses

The questionnaire data were examined with respect to the number and nature of the 'not sure' category of responses. Table 7.9 shows the statements that had $\geq 15\%$ of responses in the 'not sure' category. Those with responses $< 15\%$ together with the raw data of scores for the acute and chronic groups by gender and occupation are presented in the Appendix 7. It can be seen from Table 7.9 that respondents found statements within the Expectations dimension the most difficult to evaluate, particularly Statement No.13, followed by Satisfaction, Outcome of care and Organisation.

Table 7.9 Number and percentage of 'not sure' responses ($\geq 15\%$) in relation to item statements of the Expectations, Satisfaction, Outcome and Organisation sub-scales, ranked according to number of responses

Statement No.	Statement	Sub-scale	No. responses	%
13	I expected the treatment to cure my problem	Expectations	66	24
17	I did not think the treatment would be able to help me	Expectations	57	21
4	I should have got a better result from the treatment I was given in this department	Satisfaction	56	20
9	I expected the treatment would get me better	Expectations	54	19
7	I have made a full recovery as a result of treatment	Outcome	52	19
1	The therapist gave me confidence that I was going to get better	Expectations	48	18
30	The treatment sessions were too infrequent to get any benefit	Organisation	47	17
36	I was able to contact the department for help with any problems after discharge	Organisation	47	17
22	The treatment was tailored to my needs	Satisfaction	46	16
35	I have regained full mobility as a result of treatment	Outcome	43	15

vii) Examination of the differences in questionnaire responses according to gender

The Mann-Whitney test was conducted to compare the rating between male ($n=93$) and female ($n= 173$) groups in relation to the six sub-scales. The results were significant for the dimension of Expectations ($U= 6745.0$) at $p < 0.05$ for a two-tailed test, with males having higher expectations than females. No significant differences between the groups were found in relation to the other 5 sub-scales.

viii) Examination of the differences in questionnaire responses according to age range

The Kruskal-Wallis test was conducted to compare the scores between subjects by age group in relation to the six test variables. No significant difference was found.

ix) Examination of the differences in questionnaire responses according to condition

The Mann-Whitney test was conducted to compare the scores between the acute and chronic groups in relation to items in the 6 sub-scales. Results were highly significant for the dimension of Outcome (U= 6182.5) at $p < 0.001$; significant for Expectations (U=7551.0) at $p > 0.001$; and significant for Organisation (U=8183.5) and Satisfaction (U= 8396.5) at $p < 0.05$. Those in the chronic group reported lower satisfaction levels for each of these four dimensions of care.

x) Examination of the range and distribution of scores for the acute and chronic groups

Box plots (Figures 7.1 to 7.4) were constructed to examine the scores for item statements in the Therapist, Communication, Organisation and Outcome sub-scales in the acute and chronic groups as a test of H3 and H4 (see page, 248). The box plots represent the middle 50% of observations (the inter-quartile range) with the line in the box indicating the median. The whiskers extend upwards and downwards to the highest and lowest values respectively, with extreme values indicated separately. Figure 7.1 shows the comparison of the scores for statements in the Therapist sub-scale between the acute and chronic groups. Although the difference is not statistically significant there is a lower range of scores in the chronic group suggesting less satisfaction with the therapeutic relationship.

Figure 7.1 Box plot showing scores on a 5-point Likert scale (1=strongly disagree-5=strongly agree) for items in the Therapist sub-scale for the acute and chronic groups

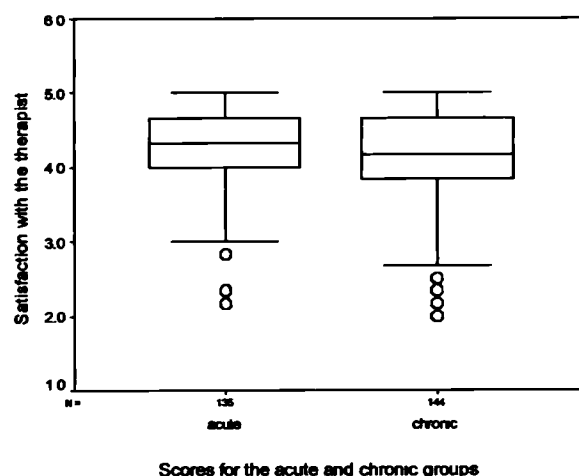


Figure 7.2 shows a comparison of the scores for items in the Communication sub-scale. The difference is not statistically significant.

Figure 7.2 Box plot showing scores on a 5-point Likert scale (1=strongly disagree – 5=strongly agree) for items in the Communication sub-scale for the acute and chronic groups

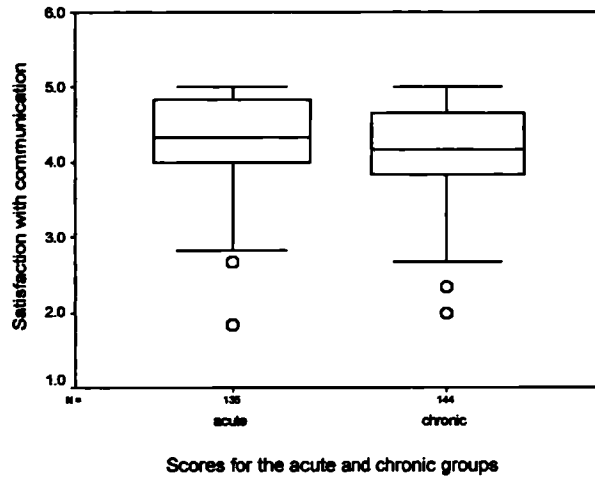


Figure 7.3 shows a comparison of the scores for items in the Organisation sub-scale. It can be seen that there is a greater range of scores in the chronic group and lower scores indicating less satisfaction. This difference is statistically significant ($p < 0.05$).

Figure 7.3 Box plot showing scores on a 5-point Likert scale (1=strongly disagree – 5=strongly agree) for items in the Organisation sub-scale for the acute and chronic groups

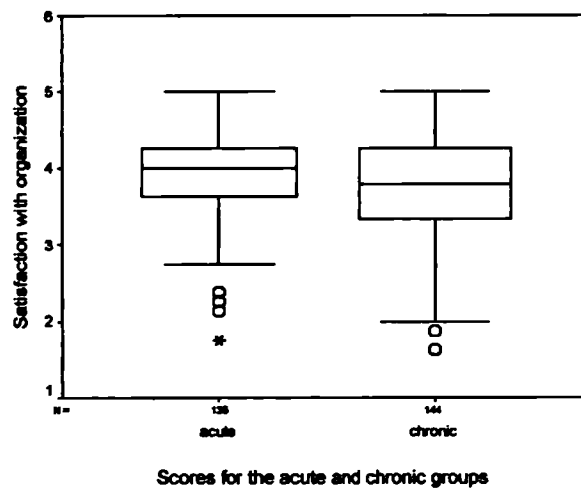
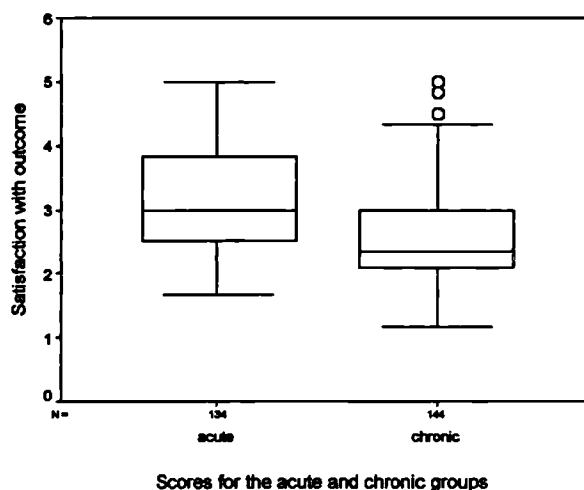


Figure 7.4 shows the comparison of the scores for items in the Outcome sub-scale. Less satisfaction was expressed by those in the chronic group and the difference between the groups is highly significant ($p < 0.001$)

Figure 7.4 Box plot showing scores on a 5-point Likert scale (1=strongly disagree–5= strongly agree) for items in the Outcome sub-scale for the acute and chronic groups



It can be seen from Figures 7.1 to 7.4 that the scores are lower in the chronic group for all categories relating to the Therapeutic Encounter (Therapist, Communication, Organisation), although these still represent high levels of satisfaction with scores around 4. However in relation to Clinical Outcome, scores for both groups were low, with the median at 3 for the acute group and < 2.5 in the chronic group, indicating less satisfaction with the result of treatment.

x) Examination of the relationship between Expectations and Outcome of care

Cross-tabulations and the χ^2 test were performed on the data to examine the relationship between statements in the Expectations and Outcome sub-scales as a test of the Clinical Outcome model.

The statements relating to each of these sub-scales are indicated below,

Statements in the Expectations of treatment sub-scale

- I expected the treatment would get me better
- I did not think the treatment would be able to help me
- I expected the treatment would cure my problem
- I expected the treatment would help relieve my pain

Statements in the Outcome of care sub-scale

- I have made a full recovery as a result of treatment
- I am now completely pain-free as a result of treatment
- The treatment has helped me in some ways but I am not completely better
- I have regained full mobility as a result of treatment
- The treatment helped me at the time but the effect did not last
- The treatment has not helped me at all

The fifth statement in the expectations sub-scale 'The therapist gave me confidence that I was going to get better' was not included in the cross tabulation analysis. Although it alludes to the generation of expectations formed in the course of treatment, it does not express a particular expectation in terms of symptomatic relief.

The relationship between these variables was explored using the Chi-square Statistic due to the few values taken and the many repeats in the data. In all there were 5 values for each variable ('strongly agree' to 'strongly disagree') but often only 2 or 3 values were observed, for example when no subjects disagreed with a statement. These many repeats mean that a scatter diagram is an inadequate representation of any relationship, and techniques based on scatter diagrams such as Spearman's Rank Correlation Coefficient would provide poor understanding. The natural way of presenting such data is to use a 2-way Frequency Table (Contingency Table) and the Chi-square Statistic, the Ordinal nature of the data being taken into account in interpretation of the table. A particular advantage of this approach is that it enables a wider variety of relationships to be studied and tested than is available with a Correlation Coefficient.

The contingency tables produced in the crosstabulation are presented in the Appendix 7.

Summary results of the χ^2 tests are presented in Tables 7.10 to 7.13.

It can be seen from Table 7.10 that there was no significant relationship in the acute or chronic group in terms of expecting and achieving complete pain relief. However, both groups reported that treatment did help them, but in the chronic group this was generally short-term relief only, whereas in the acute group there was a tendency towards more long lasting effect.

Table 7.10 Relationships showing significance levels between the Expectation variable ‘I expected the treatment to relieve my pain ‘ and the 4 Outcome variables controlling for morbidity, using the Chi-Square (χ^2) test

Variables	Acute group			Chronic group		
	χ^2	df	Sig.	χ^2	df	Sig.
1. I expected the treatment to relieve my pain						
Now completely free of pain	20.330	16	.206 NS	19.191	16	.259 NS
Treatment helped in some ways but not completely better	19.699	16	.234 NS	13.601	16	.628 NS
Treatment helped but the effect did not last	26.308	16	.050*	38.176	16	.001***
Treatment has not helped at all	27.404	16	.037**	36.249	16	.003***

NS = not significant *** p<.01 **p<.05 *p=.05

In Table 7.11 a significant relationship is shown in both groups between those who expected a cure for their problem and those reporting that they made a full recovery. In the acute group those who expected to recover did so, whereas those in the chronic group did not. Although a significant relationship is also shown in both groups in terms of regaining full mobility, those in the chronic group generally did not regain mobility whereas there were mixed positive and negative responses in the acute group. There were also mixed responses in the acute group in terms of achieving complete pain relief.

Table 7.11 Relationships showing significance levels between the Expectation variable ‘I expected the treatment to cure my problem‘ and the 3 Outcome variables controlling for morbidity, using the Chi-Square (χ^2) test

Variables	Acute group			Chronic group		
	χ^2	df	Sig.	χ^2	df	Sig.
2. I expected the treatment to cure my problem						
Made a full recovery	49.709	16	.000***	52.832	16	.000***
Now completely free of pain	44.521	16	.000***	20.437	16	.201 NS
Regained full mobility	35.042	16	.004**	31.587	16	.011*

NS = not significant ***p<.001 **p<.01 *p<.02

There was a significant relationship between subjects’ expectations of getting better and making a full recovery in both groups (Table 7.12). While this was generally achieved in the acute group it was not achieved in the chronic group. There was no relationship between expecting to get better and pain relief or improved mobility in either acute or chronic group.

Table 7.12 Relationships showing significance levels between the Expectation variable ‘I Expected treatment to get me better’ and the 3 Outcome variables controlling for morbidity using the Chi-Square (χ^2) test

Variables	Acute group			Chronic group		
	χ^2	df	Sig.	χ^2	df	Sig.
3. I expected treatment to get me better						
Made a full recovery	70.328	16	.000***	42.972	16	.000***
Now completely free of pain	25.4002	16	.063 NS	15.156	16	.513 NS
Regained full mobility	4.157	16	.086 NS	24.533	16	.078 NS

NS = not significant ***p<.001

It can be seen from Table 7.13 that a significant relationship was found in both groups in terms of whether treatment would help them. In both cases subjects reported that treatment did have a positive effect. Significant relationships were also found in the acute group with the majority reporting a long lasting effect of treatment, although not all subjects felt that they were completely better.

Table 7.13. Relationships showing significance levels between the Expectation variable ‘I did not think treatment would help’ and the 3 Outcome variables controlling for morbidity, using the Chi-Square (χ^2) test

Variables	Acute group			Chronic group		
	χ^2	df	Sig.	χ^2	df	Sig.
4. I did not think treatment would help						
Treatment helped in some ways but not completely better	28.048	16	.031*	19.282	16	.254 NS
Treatment helped but the effect did not last	46.270	16	.000***	22.115	16	.140 NS
Treatment has not helped at all	30.925	16	.014**	43.980	16	.000***

NS = not significant ***p<.001 ** p<.02 *p<.05

Part A. Results from the analysis of the questionnaire responses: 2. Responses from the open questions

Written comments on the questionnaire were received from 133 (48%) respondents. Sixty-seven were from patients with acute conditions and 66 with chronic conditions. Of these, 73 comments represented single themes, 37 had double themes, 1 combined 3 themes and 1 combined 4 themes. A further 21 general comments were made.

Of those comments that had double themes, 31 combined the category of 'Outcome' with another variable, so that the overall number of comments concerning the outcome of care was 56, making it the largest category overall. Comments on outcome were classified into those reporting positive ($n=14$) negative ($n=17$) or ambivalent ($n=25$) results from treatment.

The comments indicated specific incidences of dissatisfaction (15%) as well as more generally favourable affirmations of care (44%), although there were also 23% of comments which combined both positive and negative elements. A further 18% of comments were not value laden. The raw data are presented in the Appendix 7.

The largest number of single comments was in relation to the following categories;

Outcome of treatment $n= 25$ (19%)

Topics identified by subjects in relation to the outcome of their care included, relief from pain and stiffness, achieving only temporary relief, the presence of residual pain despite treatment, and recognition that although the condition would not be cured advice/treatment was helpful. Examples of comments are as follows and are reproduced verbatim (Key: (A) = acute (C) = chronic; M= male F = female)

- 'Very pleased with treatment, but still troubled at times with pain from trapped nerve' (C) M, age group 60-69 yrs. retired
- 'I am still walking with a limp and my knee is well below being back to normal and I still get pains in my knee joints'. (A) M, age group 60-69 yrs. full time.
- 'I know that I will never be cured of my rheumatism but the treatment helped for a time and the advice given about the painkillers have been helpful.' (C) F, age group 70-79 yrs. retired.
- 'Although my sprained ankle was not completely cured after physiotherapy I felt able to continue exercises at home and was made to feel confident that in time my ankle would be fully cured'. (A) F, age group 60-69 yrs, retired.

General Comments n=21 (16%)

Under general comments, topics raised included waiting times for referral to other hospital clinics, equipment not up to standard, inadequate NHS resources and comments about the structure of the questionnaire.

Examples of comments are as follows;

- 'I was referred to () Orthotics Clinic in October by my therapist and despite telephone calls I have not as yet received the appointment' (A) F, age group 40-49 yrs. part time.
- 'NHS not enough resources more time needed on areas of disability'. (C) F, age group 50-59yrs. full time.
- 'I believe that a more thorough investigation in depth might have helped to improve my condition. I am currently taking private acupuncture sessions in the hope that it will solve or erase my problem.' (C) M, age group 70-79 yrs. self-employed
- 'I don't think the statements allowed me to give the answers I would liked to have given' (C) F, age group 70-79yrs. retired.

Therapist n=18 (14%)

Comments relating specifically to the therapist were with one exception, favourable and related to the professional manner, helpfulness, and gratitude felt towards the therapist.

Examples of comments;

- 'The therapists were very helpful and answered my questions as required'. (A) F, age group 40-49 yrs. full time.
- 'My physio () was excellent, very friendly made me feel at ease by the end of my treatment I felt we were more like friends quite sorry to finish my treatment with her. She listened all the time and always concerned on my pain and suffering'. (A) F, age group 18-29 yrs. full time.
- 'Based on first physio I saw who was a locum and left, I saw permanent physio who was much better more personal, explained things and treated me with more dignity than the first who failed to explain what she was doing – exercises we () every 2-3 hours'. (C) M, age group 40-49 yrs. full time.

General satisfaction n=16 (12%)

Subjects expressed satisfaction in relation to the staff and treatment received, either separately or in combined comments as shown in the following examples;

- 'I found the staff very friendly the treatment was very good'. (A) M, age group 40-49 yrs. full time
- 'The treatment and staff where very good, and very helpful, they deserve nothing but praise for there kindness and attention they show there patients'. (C) F, age group 50-59 yrs. not employed.

General satisfaction n=16 (12%) (Cont.)

- 'Could not have had better treatment "well satisfied". Many Thanks'. (A) F, age group 70-79 yrs. retired.
- 'From the little time I spent in the dept. I believe a very professional job/service is being done/offered in difficult circumstances'.(A) M, age group 18-29yrs. full time.

Organisation n=14 (11%)

Comments on organisational issues were generally negative and dealt with issues about the limited number of treatment sessions given, discharge arrangements, and waiting times for treatment.

Examples of comments;

- 'I do think that after the set time (or average) treatment for the complaint your time is up.....'(A) M, age group 50-59yrs. full time.
- 'Time allotted was too short therefore all avenues not explored'. (A) M, age group 50-59 yrs. part time.
- 'I was only given a short time during which I could contact the therapist directly. After that the referral process had to be gone through again'. (C) F, age group 50-59 yrs. part time.
- 'The only reason for not being completely satisfied was the sessions were rushed, and better facilities both for patients and staff'. (A) F, age group 40-49 yrs. full time.

Examples of comments in the combined categories are as follows,

Outcome/therapist n=13 (10%)

The highest number of combined comments concerned the outcome of treatment and the therapist, which were all favourable towards the therapist even when the outcome of treatment did not result in the resolution of the problem.

Examples of comments are as follows;

- 'My therapist was () and she was excellent, both in communication and knowledge. Although I am not completely recovered my main complaint (slipped disc + trapped nerve) is now completely cured'. (C) F, age group 30-39 yrs. part time.
- 'I have chronic back pain which is very long term and I have to try to keep working to gain some pension. The physiotherapist helped me to learn to manage and live with it- I did not expect any cure-but I still keep hoping'. (C) F, age group 50-59 yrs. full time.

Therapist/Organisation n=5 (4%)

- 'I was very grateful for the treatment I received but I felt 4 visits I had to my mind were not enough I would have benefited from a few more other than that I thought it was great and a super lady'.(C) ?gender. age group 70-79 yrs. retired.

Satisfaction/ Outcome n= 5 (4%)

- ‘My problem is chronic with acute spells. Having suffered for many years this was the first experience of physiotherapy I have had. The service I personally received could not have been better in respect from all staff in the physio dept. I have certainly seen an improvement in my condition although not cured. I wish I had been referred years earlier’. (C) F, age group 40-49 yrs. full time.

Organisation /Outcome n=4 (3%)

- ‘I felt that the treatment should have continued for a few more weeks as I am still having a greta deal of pain & still do have when carrying on that wrist. Although it is now six months since my accident I am still not able to use the wrist as before my accident i.e. carrying opening lids and twisting’. (A) F, age group 50-59 yrs. full time.

Communication/Outcome n=3 (2%)

- ‘My therapist was on holiday during the middle part of my treatment. I had to explain the problem to 2 other therapists as a result. The reason I am not sure if the physio cured my problem is because I went on to have surgery on the knee and either or both could have been responsible for the improvements’. (A) F, age group 40-49 yrs. full time.

General comment/Outcome n= 3 (2%)

- ‘They gave me exercises to do at home I did not have any treatment. The exercises made it worse I was sent to a Back School. They said it was coming from my back I have now had a scan which I waited 13 months’ (C) ?gender. age group 70-79yrs. retired.

Therapist/Satisfaction n=1 (1%)

- ‘My therapist was very kind she helped me all the way everyone in the department was very kind and helpful’ (A) F, age group 70-79yrs. retired

Expectation/Outcome n=1 (1%)

- ‘I did not expect to be cured from my complaint (osteoporosis & arthritis) , I found some of the exercises to do at home far too painful. But I was grateful for the attention I received.’ (C) F, age group 70-79yrs. retired

Satisfaction/Organisation n=1 (1%)

- ‘I had polio as a child 3 years old my left leg will not take my weight but in the pool I have freedom although I cannot walk without aids I have complete freedom in the wonderful hydro pool it like freedom all my limbs are free its just wonderful I was so happy at was wonderful treatment excelent I really so need more sessions’. (C) F, age group 80-89 yrs. ?employ

Satisfaction/Therapist/Outcome n=1 (1%)

- ‘Overall I found the physiotherapy service I received to be full and comprehensive, with a very competent and helpful physio. I am grateful for treatment I received as I feel it has helped me immensely’. (A) F, age group 18-29yrs. full time.

Therapist/Expectation/Organisation/Outcome/ Satisfaction n=1(1%)

- 'My therapist was very kind and was considerate. I have neck trouble caused by whiplash 1958 so did not expect too much from the six sessions & consider this too short a period to give any lasting comfort. Very satisfied with my therapists endeavours'. (C) M, age group 70-79yrs, retired

Finally there were 4 comments in relation to completing the questionnaire,

- 'This form is not geared for my complaint Mono Salabic answer would be more easier to answer. Its confusing to read the Question and appropriate multi answer'. (C) F, age group 60-69 yrs. retired.
 - 'I find it difficult to answer questions. I didn't have physio. as such but some electro magnetic treatment which didn't help + the physio arranged via my Dr. for X Ray which confirmed that the problem was caused by osteo arthritis, which I doubt that treatment was for.' (C) F, age group 60-69 yrs. part time.
 - 'I don't think the statements allowed me to give the answers I would liked to have given'. (C) F, age group 70-79 yrs. retired.
 - 'I have had to answer Not Sure to many questions because I had/have no knowledge of what to expect or what could be done'. (A) F, age group 80-89 yrs. retired.
-

Part A. Results from the analysis of the questionnaire responses: 3. Factors influencing and predicting satisfaction scores

i) Factors influencing satisfaction scores

Spearman's Rank Correlation Coefficients were calculated to examine the strength and direction of the relationship between the six sub-scales prior to conducting multivariate analysis (Table 7.14). All correlations achieved statistical significance. The highest correlations were between communication and therapist (0.711) and between communication and organisation (0.698). The variables of expectations and outcome showed the greatest component independence with the lowest correlations overall.

Table 7.14 Correlation matrix for the 5 sub-scales relating to the therapeutic encounter and satisfaction with physiotherapy

Variable	Expectations	Therapist	Communication	Organisation	Outcome	Satisfaction
1. Expectations	1.000					
2. Therapist	0.269*	1.000				
3. Communication	0.281*	0.711*	1.000			
4. Organisation	0.220*	0.506*	0.698*	1.000		
5. Outcome	0.377*	0.315*	0.348*	0.405*	1.000	
6. Satisfaction	0.197*	0.609*	0.694*	0.693*	0.499*	1.000

* Correlation significant at the .01 level (2-tailed)

ii) Factors predicting satisfaction: regression analysis for the whole sample

It can be seen from Table 7.15 that 64% of the variance in satisfaction was explained by the five variables in the equation. Organisation was the most influential predictor of satisfaction with the highest Beta value (.336)

Table 7.15 Regression coefficients for relationships between the 5 independent variables and satisfaction

Variable	R	R ²	Beta	t	p
Dependent variable = satisfaction scale					
Organisation	.697	.485	.336	6.375	.000
Therapist	.755	.570	.200	3.811	.000
Outcome	.781	.610	.247	5.817	.000
Communication	.794	.630	.257	4.087	.000
Expectation	..798	.637	-.095	-2.363	.019

All variables were significant in predicting satisfaction although Expectations had the smallest impact and a negative value, indicating that lower expectations engendered greater satisfaction.

iii) Factors predicting satisfaction: regression analysis for the acute and chronic sub-groups

Regression analysis was conducted on the data to examine the relative impact of the Therapeutic Encounter and Outcome variables on satisfaction with physiotherapy in the acute and chronic groups. The results are presented in Table 7.16. The full regression output is in Appendix 7. Different models were produced for the acute and chronic groups (Table 7.16) with Therapist and Communication being the key predictors of satisfaction for the acute group (Beta .321 and .255) and Organisation in the chronic group (Beta .447). Expectations did not enter either model suggesting that these had been accounted for by the presence of the other variables and may have been derived during the course of treatment rather than before treatment started.

Table 7. 16 Satisfaction with physiotherapy in the acute and chronic groups regressed on the 5 variables of the Therapeutic Encounter and Outcome of care

Model	Variable	Standardized Coefficients Beta	t	p
Acute	Communication	.255	2.710	.008
	Outcome	.248	4.261	.000
	Therapist	.321	4.411	.000
	Organisation	.181	2.225	.028
Chronic	Communication	.319	4.592	.000
	Outcome	.199	3.552	.001
	Organisation	.447	6.411	.000

iv) Factors predicting satisfaction: regression analysis for the male and female sub-groups

Regression analysis was conducted on the data to examine the relative impact of the Therapeutic Encounter and Clinical Outcome variables on satisfaction with physiotherapy for the male and female groups (Table 7.17). The full regression output is in Appendix 7. It can be seen from Table 7.17 that different models were produced with all variables entering for males, but only 3 (Organisation, Outcome, Communication) for females. Therapist and Outcome were the strongest predictors of satisfaction for males (Beta .392 and .333) with Organisation and Communication for females (Beta .400 and .328). These results were highly significant. The absence of the Therapist and Expectation variables in the female model suggests that the elements of these had been accounted for by the variables that did enter the model.

Table 7. 17 Satisfaction with physiotherapy in males and females regressed on the 5 variables of the Therapeutic Encounter and Outcome of care

Model	Variable	Standardized Coefficients Beta	t	p
Male	Organisation	.176	2.225	.029
	Therapist	.392	4.960	.000
	Outcome	.333	5.299	.000
	Communication	.272	2.848	.005
	Expectation	-.147	-2.457	.016
Female	Organisation	.400	5.595	.000
	Outcome	.187	3.450	.001
	Communication	.328	4.551	.000

Part B. Results from the examination of the factor structure and scale reliability of the tool

Principal components analysis (PCA) with Varimax rotation and Kaiser normalisation was conducted on the main survey data to identify independent dimensions of satisfaction. Six factors were extracted with eigenvalues greater than 1.00 (Keiser's criterion) with the first factor accounting for 28.58% of the total variance. The factor structure is given in the Appendix 7. The factors were labelled in relation to the statements that loaded most highly on them (minimum loading 0.40) and are shown in Table 7.18.

Table 7.18 Factors with ascribed descriptors following PCA of the survey data, also showing the percentage of variance explained by each factor.

Factor	Description of factor	% of variance
1	General Satisfaction	28.58
2	General Dissatisfaction	8.35
3	Outcome	7.09
4	Organisation of treatment sessions	5.06
5	Expectations of treatment	4.27
6	'Satisfaction'	3.22

The statements loading under each of the designated factors are seen in Table 7.19

Table 7.19 Statements loading under the 6 factors following PCA of the survey data with the initial item grouping from the pilot survey in parenthesis (in bold)

Factor 1. General Satisfaction

The treatment was fully explained to me (**Communication**)
 I was able to ask my therapist about anything connected with my treatment (**Communication**)
 My therapist gave me encouragement and praise (**Therapist**)
 The therapist put me at ease and was very kind to me (**Therapist**)
 The therapist explained my condition to me in great detail (**Communication**)
 I got on very well with my therapist (**Therapist**)
 The treatment was tailored to my needs (**Satisfaction**)
 I am completely satisfied with the treatment I was given in this department (**Satisfaction**)
 I was made aware of my responsibilities in managing my condition (**Therapist**)
 I am completely satisfied with all aspects of my visit to the physiotherapy department (**Satisfaction**)
 The therapist did not answer all my questions (**Communication**)
 The therapist gave me confidence that I was going to get better (**Outcome**)
 It was important for me to see the same therapist throughout my treatment (**Therapist**)

Factor 2. General Dissatisfaction

The therapist did not listen to what I had to say (**Communication**)
 I did not have confidence that the therapist knew what she was doing (**Communication**)
 My therapist did not seem interested in me (**Therapist**)
 I was not always seen promptly for my treatment sessions (**Organisation**)
 I was not happy to be left to work on my own during the session (**Organisation**)
 I should have got a better result from the treatment I was given in this department (**Satisfaction**)
 I did not have the undivided attention of the therapist during the session (**Organisation**)
 The quality of service I received in this department could have been better (**Satisfaction**)

Cont.....

Table 7.19 Statements loading under the 6 factors following PCA of the survey data with the initial item grouping from the pilot survey in parenthesis (in bold) (cont.)

Factor 3. *Clinical outcome*

- I have made a full recovery as a result of treatment (**Outcome**)
- I have regained full mobility as a result of treatment (**Outcome**)
- I am now completely pain free as a result of treatment (**Outcome**)
- The treatment helped me at the time but the effect did not last (**Outcome**)
- The treatment has not helped me at all (**Outcome**)

Factor 4. *Organisation*

- The treatment was too rushed (**Organisation**)
- The treatment sessions were too short (**Organisation**)
- The treatment sessions were too infrequent to get any benefit (**Organisation**)
- I had to wait a long time to get my first appointment for treatment (**Satisfaction**)
- I was able to contact the department for help with any problems after discharge (**Organisation**)

Factor 5. *Expectations of care*

- I expected the treatment would get me better (**Expectations**)
- I expected the treatment would cure my problem (**Expectations**)
- I expected the treatment would help relieve my pain (**Expectations**)
- I did not think the treatment would be able to help me (**Expectations**)

Factor 6. *'Satisfaction'*

- I did not have any of my treatment sessions cancelled (**Organisation**)
 - The treatment has helped me in some ways but I am not completely better (**Outcome**)
 - I was able to choose the appointment times for treatment (**Satisfaction**)
-

It can be seen that two large factors emerged that were labelled General Satisfaction and General Dissatisfaction respectively and combined items from elements of the Therapist, Communication and Satisfaction sub-scales. These two factors each contained positively or negatively worded statements respectively with one exception. The statement 'The therapist did not answer all my questions' that loaded on Factor 1 (.523) also had a high loading on Factor 2 (.448) where it might more appropriately belong in further psychometric testing of the tool, being a negative statement.

Statements loaded under the Clinical Outcome, Organisation, and Expectations factors as hypothesised except for one statement, 'I had to wait a long time to get my first appointment for treatment.' This statement had originally been hypothesised to belong under 'Organisation'

following factor analysis of the pilot survey data, but had poor inter-item correlation with the Organisation sub-scale and was re-located to the Satisfaction sub-scale where the inter-item correlation was higher. It can be seen from Table 7.19 that it had re-loaded on the Organisation factor where it had initially been hypothesised to belong.

Of the 3 statements loading on Factor 6 two of these were;

- I was able to choose the appointment times for treatment
- I did not have any of my treatment sessions cancelled

had low inter-item correlation with their respective sub-scales (Satisfaction and Organisation) following the pilot survey but were retained to assess their performance with the larger sample size of the main survey. However since neither of these loaded appropriately on a main factor they could possibly be eliminated during further work on the tool.

The third statement ‘The treatment has helped me in some ways but I am not completely better’ could also be eliminated since similar sentiments are expressed by the statement ‘The treatment helped me at the time but the effect did not last’ which loaded as hypothesised on Outcome.

Cronbach’s alpha was calculated to estimate the internal reliability of the 5 principal sub-scales, that emerged following PCA of the survey data ($n = 279$) with items under Factor 6 eliminated (Table 7.20).

Table 7.20 Coefficient alpha internal consistency reliability coefficients for the 5 principal sub-scales resulting from PCA of the survey data

Factor	Cronbach’s Alpha
1. General Satisfaction	0.90
2. General Dissatisfaction	0.83
3. Outcome	0.82
4. Organisation	0.71
5. Expectations	0.59

The alpha values for the first three principal factors all achieved good levels of reliability > 0.8 and that for Organisation reached the 0.70 minimal level deemed to be acceptable for this stage of scale development (Nunnally & Bernstein, 1994). However alpha for the Expectations scale

was low and suggests that in further developmental work on the tool it might be improved by the addition of further items.

7.4 DISCUSSION

This study has successfully developed and employed a new tool to measure patient satisfaction with outpatient physiotherapy in both acute and chronic subjects. It was found that general levels of satisfaction with aspects of the physiotherapy process were high, although the perceived effectiveness of the treatment outcome was less satisfactory in both the acute and chronic groups. One of the strengths of the questionnaire was that it enabled patients to express their satisfaction/dissatisfaction with different aspects of the therapeutic encounter. This has been identified as a necessary feature of a useful satisfaction scale (Fitzpatrick, 1991a ; Carr-Hill, 1992; Williams, 1994). The psychometric properties of the tool will be discussed later, but the results from this first major field trial are very encouraging and point the way to producing a useful tool for the evaluation of outpatient physiotherapy services.

The study measured patients' satisfaction in ways that differed from previous studies of physiotherapy care (Taylor & May, 1995; Elliott-Burke & Pothast, 1997; Roush & Sonstroem, 1999; Goldstein et al., 2000; Beattie et al., 2002) by including patients from two morbidity groups, evaluating both the process and outcome of care and grounding the tool within a conceptual framework of satisfaction with physiotherapy. The variables included in the analysis were selected on the basis of their relevance to the patient satisfaction literature and drawn from the earlier phases of the study that investigated, in depth, patients' perspectives of the quality of care they received.

Multivariate analysis of this study produced a model showing a good fit for the data with 64% of the variance in satisfaction explained by the five independent variables, which compares favourably with other reports in the literature. For example, McCracken et al. (1997) examined satisfaction with treatment with patients with chronic pain. They used a new tool designed to include behavioural, emotional and verbal aspects of satisfaction and showed that trust in the provider, pain reduction and waiting time in clinic accounted for 60% of the variance. In a study by Ross et al. (1993), three dimensions of health care satisfaction; interpersonal care, technical quality and access accounted for 63% of the variance in overall satisfaction. In physiotherapy, Goldstein et al. (2000) identified a single factor of satisfaction following principal components analysis which accounted for 83% of the variance, while Beattie et al.

(2002) found that a 2-factor solution, relating to patient-therapist interaction and the system of care accounted for 50% of the variance.

Other effects might explain the residual variance in patients' satisfaction with care that were not captured by this study. Ben-Sira (1976:1980) showed that the affective elements of the doctor patient relationship were more important than the instrumental aspects to the patient. Non-verbal communication skills have also been found to be important in the clinical encounter and to be predictive of meeting patients' socioemotional needs (DiMatteo et al., 1980). Patients therefore expressed greater satisfaction when clinicians were sensitive to their emotions as expressed through cues of body posture and movement, and were able to distinguish between the art and the technical quality of care. It has also been suggested that dissatisfied patients are dissatisfied people and Linn (1975) found that those who were more satisfied living within their community were significantly more satisfied with their medical care. This suggests that some patients may never be satisfied with their care whatever dimensions are included in satisfaction instruments/surveys. Patients who tend to attribute the difficulties in achieving their goals or aims to outside influences, instead of their own limitations are less likely to achieve successful outcomes (Rotter, 1966; Mechanic, 1977; Walleston & Walleston, 1978; Wallston, 1992). Nevertheless it may be possible for these patients to develop a more positive attitude towards their care by encouraging them to focus on treatment goals which are attainable and therefore more likely to result in a successful outcome.

The results from this study therefore point the way to further research into other factors that might affect patients' satisfaction with their physiotherapy care, for example psychosocial influences or the role of significant others. Avis et al. (1997) suggest that aspects of the health care encounter such as relief or gratitude, fear of wasting the provider's time and confidence in the provider may affect patients' satisfaction, which can also change as the treatment progresses due to the temporal nature of the satisfaction evaluation.

Predictors of satisfaction with physiotherapy

In this study, all five variables (Expectations, Therapist, Communication, Organisation, Outcome) were significant predictors of satisfaction with physiotherapy reflecting the findings from the satisfaction literature (Hall & Dornan, 1988). However in contrast to the ranking of dimensions presented by Hall & Dornan (1988) in which humaneness and technical quality were ranked highest, organisational issues were the most significant predictors of satisfaction

with physiotherapy. This effect was apparent from the regression analysis for the whole sample as well as for the chronic and female sub-groups. While an in-depth examination of the possible reasons for this are outside the remit of the present study, the literature suggests either that a) for patients attending physiotherapy, the non-clinical aspects of care, involving their relation with the system rather than with the provider were more important, or b) organisational issues were being used as proxy measures of satisfaction with the whole care process.

In relation to a) above, organisational issues might be particularly pertinent to patients attending for physiotherapy because this usually involves attending for a course of treatment compared with a single visit to see a consultant or the GP. Subjects may therefore have drawn favourable contrasts between their experiences or preconceptions of hospital clinics where access to services has been shown to be one of the most problematic aspects of care (Rubin et al., 1993), compared with their experiences of physiotherapy. Hill et al. (1992) found that access and continuity was judged the least satisfactory dimension of care compared with technical quality, attitude to patients, information and empathy, in patients attending a rheumatology outpatient clinic, with the time waiting to see the doctor causing the most dissatisfaction. However, although patients expected delays they objected to not being told the reasons for the delay (Durrani et al., 1988). Jones (1988) has suggested that a substantial number of favourable events have an element of good communication and incidents which would normally be associated with dissatisfaction can be neutralised or turned into positive experiences by the way communications are handled. Communication problems could therefore have been contributory factors to the dissatisfaction reported by respondents with low scores on organisational issues in the questionnaire. This would support the interpretation that satisfaction scores for organisational issues reflected the non-clinical aspects of care.

A strong association has also been found in the literature between satisfaction and the length of consultation time, with patients being seen for less than 10 minutes reporting dissatisfaction compared with those having a consultation lasting more than 20 minutes (Kenny, 1995). Beattie et al. (2002) similarly found that time spent in patient care, together with the professionalism of the therapist and clinic staff, are more important for patient satisfaction than issues relating to access and facilities. They suggest that in the current economic climate with the emphasis on cost cutting and increased patient throughput, the time for patient/clinician interaction that appears to contribute to patient satisfaction could be reduced. Although that research was conducted in the USA, these sentiments echo those by Evason & Whittington

(1991) that drives to improve the efficiency of the NHS in the UK have not resulted in an improvement of services. In the interview phases of the current study there was a perception, particularly among subjects with chronic conditions, that unfavourable changes in physiotherapy practice had occurred in recent years in relation to length and frequency of treatment sessions. Subjects who had previously attended for the same or related problems had noticed that the course of treatment was more time constrained and that weekly attendance rather than more frequent sessions were the norm. Results from the open comments in the survey showed that when dissatisfaction was expressed in relation to organisational issues it was in relation to these aspects of their care. However there were high levels of satisfaction with punctuality in physiotherapy, in contrast to patients' experiences of other hospital outpatient clinics. This possibly reflects the diary system of timed appointments that operates in physiotherapy outpatient departments and allows patients be seen for their treatment sessions with minimum interruption of their daily routine.

In relation to b) above, that organisational issues were being used as proxy measures of satisfaction with the whole care process, Ware et al. (1983) noted that patients who complained about their care, regardless of what the complaint was about, rated the interpersonal manner of providers very unfavourably. They therefore questioned the extent to which unsatisfactory experiences with access and organisational issues of care produced unsatisfactory clinician/patient relationships, and whether patients blamed the clinician for long waits and other non-clinical issues. Durrani et al. (1988) found that the patients' reception in the outpatient department was an important aspect of their care and coloured their judgement regarding the rest of the treatment they received. Subjects attending for physiotherapy might therefore evaluate their whole episode of care in the light of the way in which they were dealt with on initial contact with the department regardless of the actual treatment subsequently received. However it has been found that patients especially those with complex conditions, do not describe their experiences in terms of single visits to one department but in terms of episodes of care in different departments/hospitals/clinicians (Cleary & Edgman-Levitan, 1997). Favourable or unfavourable impressions of care may therefore be transferred between departments and remain unaltered regardless of the subsequent care received. This supports the notion that social, psychological and environmental factors all have an affect on the course of illness and might therefore influence a patient's assessment of their care (Woolley et al., 1978). On the other hand it could be argued that patients' unfavourable experiences of care elsewhere were disconfirmed as a result of receiving physiotherapy resulting in high levels of general satisfaction. In terms of this

interpretation therefore, scores for the organisation sub-scale might be indicative of the level of satisfaction with the performance of the system as a whole, as opposed to satisfaction with the discrete elements of organisational issues *per se*.

The significant effect of organisational issues on satisfaction for women in the current study, possibly reflects their greater use of outpatient services, which is supported in the literature. More women than men have been found to be impaired by musculoskeletal disorders (Bradley & Tennant, 1991; Peters et al., 1994; Grahn et al., 1999), with those in the 16-44 age range known to be relatively high users of general practitioner services (Al-Bashir & Armstrong, 1991). In a study of patients' satisfaction with care in four general practices, Lewis & Williamson (1995) found that in two practices females were less satisfied with aspects of availability of care. Additionally in one practice women were less satisfied with all aspects of the consultation itself as well as the practice in general, indicating a clear gender bias in the service provided. In a comparative study of general practice, dental, and hospital care settings Williams & Calnan (1991) found women were less satisfied overall with general practice services, and with the organisational issues and facilities of in-patient care. Women were more likely to complain of rigid timetables and the lack of privacy than men, reflecting the differing needs, expectations, and utilisation patterns by gender. In a survey of patient satisfaction with physiotherapy, involving both inpatients and outpatients, Monnin & Perneger (2002) found that logistic scores for access, sign posting and comfort were lower for females although no reasons were suggested for this finding.

For males and those in the acute group in the current study, satisfaction with physiotherapy was related to their interaction with the therapist and with achieving a good clinical outcome. It has been suggested that males may be especially threatened by the prospect of debility due to their greater investment in physical prowess (Moos, 1984) so that making a good recovery may be more pertinent for them. The high scores accorded to the statements within the Therapist sub-scales indicated that these patients were satisfied or very satisfied with the relationship with their therapist. They may have associated this with achieving the optimum outcome of care that they expected. The impact of the clinician's interpersonal skills have been shown to be significant determinants of patients' satisfaction with the clinical encounter (Kenny, 1995) and can inspire in the patient confidence that the practitioner knows and understands his/her case (Cromarty, 1996). Consequently it is reasonable to suppose that in relation to the impact that the therapist and outcome had in these two groups, males might show some bias towards therapists who are predominantly young and female, also that

therapists find treating acute patients more rewarding, thereby resulting in better clinical outcomes. It is also noteworthy that expectations did not play a part in predicting satisfaction with physiotherapy for those in the acute group, suggesting that due to the sudden nature of their condition these subjects do not have time to form expectations of their care. This finding contrasts with Rotter's social learning theory (Rotter, 1966) which would predict that the importance of patients' expectations in determining satisfaction with their health care experience would be greater in the case of patients with little previous health care experience on which to draw. Neither does it accord with the proposed model (page 211) which predicted that it was the disconfirmation of pre-treatment expectations that resulted in the overall evaluation of care. However it should be recalled from the regression analysis, that expectations *were* predictive of satisfaction for the sample as a whole and exhibited the inverse relationship with a positive outcome of care that had been noted in the preliminary data collection phases of the study. The absence of expectations in the regression model for the acute group, as will be discussed later, was therefore not an indication that expectations were unimportant, but only that the variables that did appear in the model were more predictive of satisfaction than expectations, for that group.

Results from the regression analyses therefore supported the first two study hypotheses in terms of the variables that would predict patient satisfaction outpatient physiotherapy. The first hypothesis stated that patients' satisfaction would be a function of subjects' evaluation of the four proposed variables (Therapist, Communication, Organisation, Outcome) comprising the Therapeutic Encounter and Clinical Outcome models of care. Expectations provided the standard against which evaluations of a satisfactory/unsatisfactory episode of care were made. The second, that stated the relative importance of the variables would differ between the acute and chronic groups, was also supported. However the results from the regression analyses should be treated with caution as will be discussed later, because of the high correlation that was found between the sub-scales.

A test of the Clinical Outcome model

Patient satisfaction with care has been found to be strongly correlated with their perceptions that expectations of need fulfilment have been met (Abramowitz et al., 1987; Greeneich, 1993; Hill, 1997), although the role of expectations in the evaluation of care has also been questioned (Carr-Hill, 1992; Williams, 1994). There have been few studies that have attempted to explore the concepts of expectations and satisfaction with the clinical outcome of care, some exceptions being those by Woolley et al. (1978) and Staniszewska & Ahmed (1999). The

current study therefore sought to examine the relationship between expectations, grounded within the patients' perceived treatment needs, and specific clinical outcomes of symptom change resulting from their course of physiotherapy treatment.

In the interview phases of the study subjects had expressed a number of expectations in relation to their care that could be compared with the typology suggested by Thompson & Sunol (1995). Expectations were therefore 'ideal' (aspirational, preferred), 'predicted' (realistic and practical), 'normative' (deserved) or 'unformed'. The questionnaire statements subsequently provided examples of the first three of these. Thus statements were included relating to 'ideal' (expected treatment to get me better/ cure my problem), 'predicted' (treatment would help relieve my pain) and 'normative' (treatment would not be able to help). This latter statement, expressed negatively, referred to those subjects with chronic conditions re-referred for treatment by the doctor, who knew from past experience that it would produce little/no benefit. The inclusion of an Outcome dimension formed a departure from the majority of satisfaction studies in which outcomes in relation to medical care have been examined in only 6% of cases (Hall & Dornan, 1988). The continued lack of studies investigating the relationship between satisfaction and patient outcomes was also noted by Aharony & Strasser in 1993. Questionnaire statements about the outcome of treatment in the current study ranged from the extremes of making a full recovery to effecting no improvement at all, and reflected the spectrum of views expressed by patients during the development of the tool.

Results from the present study supported those found in the literature e.g. Kenny (1995) that although patients generally did not rate the clinical outcome of treatment very highly, they were satisfied with their overall level of care. Principal differences found between the acute and chronic study groups related to the extent to which treatment had resolved the problem and whether the effects of treatment were long lasting. However, the results showed a range of responses in relation to each of the crosstabulations between Expectation and Outcome statements, reflecting the complexity of these issues and highlighting the diversity of patients' treatment needs. The number of 'not sure' responses in relation to the Expectations dimension supports earlier study findings as well as those in the literature concerning patients' unformed or partly formed expectations (Fitzpatrick & Hopkins, 1983; Staniszewska & Ahmed, 1998). Most uncertainty was expressed in relation to treatment affecting a cure for the problem, which might represent an unachievable or unrealistic goal for a number of chronic patients who attend for physiotherapy. Winefield et al. (1995) found that patients with chronic conditions may regard a lack of deterioration in their condition (short of complete resolution) as an

acceptable outcome, which would accord with the notion of treatment paradox in which patients are generally satisfied with their care although not symptom-free (Woolley et al., 1978). Winters et al. (1997) have also shown that patients need not be totally free of pain to feel 'cured' (quotations in original). They defined cured as the disappearance or decrease in the complaint to such an extent that it did not inconvenience patients, they did not need treatment or it did not interfere with their work.

The number of 'not sure' responses to all four Expectations statements in relation to clinical outcome were almost equally divided between acute and chronic subjects. While it is conceivable that those with acute conditions could be lacking in the knowledge to make such judgements, chronic patients' experiences of care should have informed their expectations of outcome, according to the proposed model (page, 211). Patients who were not sure whether they had 'made a full recovery' or 'regained full mobility' were found to have checked a variety of responses in relation to their expectations of care when their questionnaires were re-examined. No consistent pattern emerged, except that there was some indication in both the acute and chronic groups that patients distinguished between expectations of outcome in terms of pain relief and functional improvement.

It could be argued that where patients were unsure of their expectations of treatment, a lack of communication existed between patient and therapist so that on initial assessment patients' goals in seeking treatment and possible outcomes of care were not fully explored. Burish & Bradley (1983) proposed four dimensions that make up an individual's subjective definition of their illness; i) causes, ii) time line, iii) identity, and iv) outcome. On the basis of these individuals form their own theories for their behavioural responses to illness. In the physiotherapeutic setting the opportunity exists for each of these areas to be addressed, resulting not only in assisting patients to construct a realistic representation of their problem, but also to engender positive expectations of their subsequent episode of care. The questionnaire statement 'The therapist gave me confidence that I was going to get better' alludes to an interaction that has allowed the patient to develop positive expectations of their care, whereas previously these may have been lacking or only tentatively formed. The finding that 17% of respondents were not sure whether the treatment 'was tailored to my needs' supports this view in addition to suggesting that there might have been some incongruity between the patient and therapist's beliefs about the efficacy of care given.

The difference in outcome between the acute and chronic groups reflected those found in other physiotherapy studies. McIntosh et al. (1994) included the outcome of treatment as one of their measures of service quality in a back pain rehabilitation clinic using a modified SERVQUAL instrument (see page, 100). The questionnaire statement asked patients if they were restored to their pre-accident (pain free) level rather than whether treatment had improved their functional ability, so that patients' expectations might have exceeded their experience of treatment. Low scores were reported for chronic patients and were explained in terms of treatment limitations in achieving this goal for this group. However, for non-chronic patients the scores were markedly improved indicating more successful treatment outcomes. May (2001) found that Outcome was one of the five dimensions identified by patients as being important in an episode of physiotherapy care. In an exploratory qualitative study into patients' satisfaction with physiotherapy for back pain, getting pain relief was the patient's chief concern, although this was not the only issue that was discussed. In findings similar to the current study only a few patients reported complete resolution of their problem, but despite residual symptoms many expressed overall satisfaction with their care. Those with chronic problems who accepted that their condition was not curable appreciated being taught self-help strategies to help them manage their condition (May, 2001).

While the results of this survey gave an indication of patients' satisfaction with the outcome of the physiotherapy input, the content of the treatment sessions they received was unknown. The finding that patients in the chronic group were least satisfied with the outcome of care is supported by the results of an analysis of review articles and controlled clinical trials by Feine & Lund (1997). These authors found that 'there is little evidence that any of the therapies under review cause improvements in symptoms of chronic musculoskeletal pain or in quality of life that outlast the therapy'. The specific therapies reviewed included ultrasound and thermal agents, acupuncture, laser, electrical stimulation, manipulation and exercise which are likely to have been used to treat the patients involved in the current survey. However Feine & Lund (1997) also found that physiotherapy in any form was associated with better outcomes than no treatment and that those patients who received more types of treatment did best. Early physiotherapy intervention has been found to, i) reduce recovery time and improve function (Gentle et al., 1984) and ii) to result in less time lost from work (Hackett et al., 1993). However, the referral source of study patients was unknown, which could impact not only on the time elapsing between the patient consulting the doctor and being referred for physiotherapy, but also the patient's initial wait to see the doctor. The tendency for physiotherapists to give acute referrals priority for treatment (Ratstall & Fashanu, 2001) and

the finding that acute musculoskeletal pain is often self-limiting (Peters et al., 1994) suggests the acute subjects would have been expected to report more satisfactory clinical outcomes than they did. Therefore while the fourth hypothesis was supported (high satisfaction with the Therapeutic Encounter but low satisfaction with the Clinical Outcome) in the chronic group, hypothesis three (high satisfaction with both the Therapeutic Encounter and Clinical Outcome) was only partially supported for the acute group.

These results indicate that the survey tool was able to successfully discriminate between the acute and chronic groups and identify the extent to which physiotherapy had been effective in the sample population. This suggests that the Expectation-Outcome scale could provide a useful and quick measure of the clinical outcome achieved by musculoskeletal patients and provide therapists with the patients' assessment of the progress made as a result of the physiotherapy intervention.

Internal reliability and validity of the tool

The dimensions of satisfaction identified by factor analysis in the main survey data approached but did not completely match all the dimensions postulated *a priori*. The resulting 6-factor solution showed that the independent structure of the Outcome, Organisation and Expectations sub-scales was reproduced with statements loading as hypothesised. However the attempt to measure Therapist, Communication and Satisfaction independently resulted in these dimensions being collapsed into two large factors that could be labelled 'General Satisfaction' and 'General Dissatisfaction', each scale having a high alpha value of 0.9 and >0.8 respectively, indicating good conceptual coherence of item content. Only three statements constituted the sixth factor, and related to the *a priori* sub-scales of Organisation ('Did not have treatment cancelled'), Outcome ('Treatment helped in some ways'), and Satisfaction ('Able to choose appointment times') respectively, but these did not group into an identifiable dimension. Considering the cohesion of the remaining 35 statements on five principal dimensions of care, these three could be deleted in further validation studies on the tool.

There had been an earlier indication that the Therapist, Communication, and Satisfaction scales were interrelated from the results of the factor analysis that followed the pilot survey, when a large factor labelled 'Satisfaction' consistently emerged for the 9, 8, and 7 factor solutions. Although a discrete factor had also emerged for statements relating to the therapist as hypothesised *a priori*, this was not the case for Communication, with statements relating to communication tending to load with those under the large satisfaction factor rather than as a

discrete entity. Lack of independence of the statements relating to the interpersonal (Therapist) and technical aspects of care (Communication) may correspond to the fact that therapists who are good at explaining things are also competent, or that patients are unable to distinguish separate components of the therapist's behaviour. However this latter point is unlikely as Roter et al. (1987) found that patients were able to differentiate between the technical and emotional aspects of care. It was therefore judged appropriate to retain the Therapist, Communication and Satisfaction sub-scales as independent dimensions for the main survey in relation to the conceptual models of satisfaction with physiotherapy that had been developed, in order to examine the relative importance of these variables on satisfaction with physiotherapy care. These three dimensions had been shown from the earlier interviews to represent aspects of care about which subjects formed opinions and were in the best position to evaluate. They had also been identified as discrete components examined in the satisfaction literature (Hall & Dornan, 1988). The inclusion of sub-scales for Therapist, Communication and Satisfaction as representing distinct dimensions of physiotherapy care also supported the content validity of the tool.

The high correlation between the Therapist, Communication and Satisfaction sub-scales suggested that these dimensions might not be orthogonal. Further, the appearance of the two large General Satisfaction and General Dissatisfaction factors contained positively and negatively worded statements ascribed to these three variables respectively, thereby incorporating aspects of both the interpersonal and technical aspects of care. However, the dimensions of Organisation, Outcome and Expectations were reproduced as hypothesised *a priori* indicating conceptual independence. These distinctions support the findings in the literature that patients do make separate judgements of the process of care and treatment outcome (Fitzpatrick & Hopkins, 1983) and that expectations have an independent effect on satisfaction (Linder-Pelz, 1982b). Hudak & Wright (2000) contend that treatment outcome and care should be assessed separately as they represent different phenomena. It was precisely this issue that was addressed through the development of the model of satisfaction with physiotherapy and by the design of the study questionnaire. Statements of outcome therefore permitted the detection of differential treatment effects through the subjects' evaluation of their change in health status and level of functioning, while the process of care dealt with aspects of the service that were external to the person.

The resulting structure of the tool suggests that the two large Satisfaction/Dissatisfaction sub-scales could operate as a brief summary measure of overall satisfaction with physiotherapy

care. One could therefore be satisfied with some of the positive elements and dissatisfied with others simultaneously, with a judgement of overall satisfaction or dissatisfaction resulting from the balance between the two. This interpretation reflects Herzberg's (1999) two-factor theory that was discussed earlier in the study. It will be recalled that the Therapeutic Encounter and Clinical Outcome models (pages 162 & 165) drew on Herzberg's theory in representing two complementary elements of care. The dimensions of Therapist, Communication and Organisation were included as elements in the Therapeutic Encounter model (hygiene factors) and subjects' evaluation of the symptomatic effects of treatment in Clinical Outcome model (motivators). The resulting factor structure of the tool suggests that the positive aspects of care incorporated in the General Satisfaction sub-scale would equate with patients' feelings of self-actualisation towards achieving their treatment goals (motivators). Items in the General Dissatisfaction scale on the other hand, represent items of 'hygiene' that could cause dissatisfaction and would not necessarily result in overall satisfaction with care even if they were improved. The inclusion of three items from the *a priori* Organisation sub-scale into the General Dissatisfaction scale further supports the hypothesised 'hygiene' element as represented by this factor.

The finding from this study that statements from the Therapist and Communication sub-scales should load on factors that could be identified as representing both motivator and hygiene factors is not inconsistent with Herzberg's theory. He recognised that although certain job motivators, specifically achievement and responsibility, operated substantially in a unidirectional manner other factors were not so unidirectional. He therefore stated that, 'the satisfier factors are much more likely to increase job satisfaction than they would be to decrease job satisfaction but that the factors that relate to job dissatisfaction very infrequently act to increase job satisfaction' (Herzberg, 1999. p.80). In relation to the current study therefore the General Dissatisfaction scale elements *would not in themselves* result in greater satisfaction with the outcome of care even, if they were all positive, but would contribute to a greater overall satisfaction *in conjunction with* the general satisfaction items. The absence of a separate factor for provider conduct (therapist) from the analysis of the main survey data supports the findings by Roush & Sonstroem (1999). In their study of satisfaction with outpatient physiotherapy, which also drew on Herzberg's theory, elements of provider conduct were included in both the enhancer (motivator) and detractor (hygiene) elements of their scale. Although the content of their scales is somewhat different from those in the current study, there is some accord with the general sentiments expressed by the items referring to the therapist as identified by Roush & Sonstroem (1999).

The resulting factor structure of the tool reflects the multidimensional nature of the construct of satisfaction (Ware, 1981; Pascoe, 1983; Cleary & McNeil, 1988) and thus the content validity of the measure. Tests of internal consistency support the evidence of construct validity with good alphas for the whole scale and four of the sub-scales. However criterion validity was not tested due to the lack of a currently acceptable criterion measure. The tool was able to discriminate between the acute and chronic groups as well as between the dimensions of the process and outcome of care, with contrasts particularly evident between the high scores for Therapist/ Communication, and lower scores for Clinical Outcome.

Limitations of the survey

Sample characteristics

There are a number of limitations with postal surveys. Although the overall response rate of 66% was judged to be good, there is a risk of bias towards respondents who were more satisfied with their care. It has been suggested that the generally high satisfaction rates attained by surveys might be caused through dissatisfied patients not completing the questionnaires (Kinnersley, 1996). Although there appeared to be an association between sites with poorer returns and fewer/negative open comments supplied by respondents, this may have indicated a spurious relationship with this particular sample. The withdrawal of one site at a late stage in the study resulted in a lower sampling frame than planned and a larger sample would have permitted increased confidence in the results.

Basic demographic information was not available for all non-respondents as one site did not use the coding form supplied, which required identification of the sample in terms of morbidity, gender and age. However, from the available data it appeared that non-respondents in the acute and chronic groups were almost equally represented ($n=75$ acute compared with $n=66$ chronic). The age range, gender and distribution of the acute and chronic subjects thus broadly conforms with the normal distribution in the population (Social Trends, The Stationery Office, 2001) and increases confidence that a representative range of views was elicited from the sample.

Subjects were selected for the survey in terms of specific musculoskeletal groups (acute trauma and chronic degenerative joint disease) in relation to answering the research question. However since these groups typically comprise those patients attending for outpatient

physiotherapy treatment (Hackett et al., 1993) there is reason to believe that the results may be generalised to all patients with musculoskeletal conditions attending for physiotherapy.

Regression findings

In interpreting the models produced for the male/female and acute/chronic sub-groups, the high correlation between the five independent variables indicated that the relative impact that any one had on satisfaction was highly dependent on the presence of the other variables that appeared in the model. For example, it was possible that the three variables Organisation, Communication and Outcome that entered the model for females were able to 'account for' elements contained within the Therapist and Expectations sub-scales that did not appear. The high correlation that had been found between the Communication and Therapist sub-scales indicated that elements of the latter could have been subsumed within the variable of communication. The entry of Therapist itself into the model would therefore not have added any further information. Therefore, although there was an *indication* that the Organisation score was the greatest predictor of satisfaction for females, it would be wrong to assume that this has been proven. This finding however suggests a fruitful area for further research. Similar scepticism could be applied to the interpretation of the models produced for the acute and chronic groups. The absence of Expectations as a predictor of satisfaction in either model suggests that elements of this sub-scale were being accounted for by the presence of the variables that did appear and which provided better predictors of satisfaction with physiotherapy.

7.5 CONCLUSION

This study has provided a preliminary view of some of the variables that might influence satisfaction with treatment in those patients with musculoskeletal conditions attending for outpatient physiotherapy. The resulting factor structure of the tool appeared logical in separating out the dimensions of Expectation, Outcome and Organisation from those of General Satisfaction/Dissatisfaction. This suggests the potential versatility of the tool for use either as a brief summary measure of overall satisfaction with physiotherapy care, or a short expectancy-outcome measure, as well as a total scale for evaluating the process and outcome of care. The tool appeared to be acceptable to the sample population and the number of open comments received suggested the topic area was one that was of interest and about which patients were willing to express an opinion.

Subjects were generally satisfied with the interpersonal, technical, and organisational aspects of care. However the lower reports of satisfaction with the clinical outcome of care, particularly in the acute group, indicates an area for further research. There is therefore a need to determine if the way physiotherapy care is given to patients affects their satisfaction and how clinical outcomes are associated with different treatment modalities and systems of care.

The survey constituted the first main field trial of the questionnaire. Although the results were encouraging they provided only partial evidence for the validity of the tool. Similar analysis needs to be conducted in other populations to verify that the resulting scale structure is robust before it is available for general use in the clinical situation. Once validated the tool could provide therapists with the means to evaluate their outpatient service as part of a continuous quality initiative programme.

CHAPTER 8

SUMMARY AND CONCLUSIONS

This study was undertaken since there has been little research into patients' views of their physiotherapy care in the UK. The timing of the research was particularly pertinent in view of the changes taking place in the NHS with government policies on Clinical Effectiveness (NHS Executive, 1996) and the setting up of a National Institute of Clinical Excellence (NICE) (NHS Executive, 1998). These issues directly affect physiotherapy practice because of the need to justify the effectiveness of therapy input and to ensure that services are run efficiently. In line with the NHS Plan (DOH, 2000) patients will now be increasingly involved in saying how the NHS is run. The NHS Plan clearly spells out their rights, as well as their responsibilities, in relation to the standards of health care that they can expect to receive. Quality initiatives currently being undertaken by therapists at departmental level will soon assume greater importance when, under the NHS Plan, every local NHS Organisation will be required to publish an annual account of the views received from patients and the action taken as a result.

Addressing the limitations of patient satisfaction research

Patient satisfaction is seen as an important component of care quality (Donabedian, 1992) and as noted in the Introduction investigations into patient satisfaction have burgeoned over the last thirty years. However the main limitation of research in this field has been the lack of a theoretical basis for the concept of satisfaction and of an agreed definition of the term (Locker & Dunt, 1978; Fitzpatrick & Hopkins, 1983; Williams, 1998; Sitzia & Wood, 1997). The current research has successfully addressed both of these limitations by building on the work of other researchers in defining the term satisfaction and providing an explanation for the theoretical underpinning of the construct.

An examination of the literature showed that researchers had defined satisfaction in one of three main ways that involved elements of subjectivity, expectations and perceptions (Mahon, 1996). Firstly, in terms of the attitudes and values that patients hold in relation to the disparate aspects of their care (Ware et al., 1978; Linder-Pelz, 1982a; Pascoe, 1983; Hsieh & Doner

Kagle, 1991). Secondly in relation to the fulfilment of expectations (Risser, 1975; Abramowitz et al., 1987; Greeneich, 1993; Bear & Bowers, 1998) or thirdly in meeting patients' needs (Hill, 1997). While these definitions of satisfaction permitted an operationalisation of the concept in terms of specific elements of care or to care in general, they often did not go further and address the philosophical meaning of the term that could provide the theoretical basis of the concept. Some exceptions were evident however, particularly in the nursing literature, where greater attention had been paid to analysing concepts in general (Rogers, 1989; Morse, 1995) or satisfaction in particular (Mahon, 1996; Comley & Beard, 1998).

An important first step in the current study was to examine the meaning of the term 'satisfaction' which necessitated a return to the original definition of the word. Satisfaction, derived from the Latin root 'satis facere' literally 'to do enough' permitted this to be conceived as an emotion that from an examination of its synonyms, represented a feeling of contentedness, gratification, well-being, achievement, fulfilment and resolution. It was thus argued that a state of satisfaction resulted from the fulfilment of a deficit or need that could result from an upset in the body's homeostatic balance. This upset whether physiological or psychological provided the *motivation* to satiate the emergent need in order to prevent the development of a psychopathological state. By drawing on need theory and the notion of a need-satisfier pair (Friedman, 1980) this definition of satisfaction could then be applied to meeting the multiplicity and hierarchy of needs that might exist for each individual (cf Maslow, 1970). The concept of satisfaction therefore represented a positive affective response, akin to an affirmation that something was 'OK', thereby indicating that it was perceived to fall within an individual's latitude of acceptance in accordance with assimilation contrast theory (Hovland et al., 1957). This conceptualisation could therefore explain the high levels of 'satisfaction' reported in the patient satisfaction literature in which patients are for the most part satisfied with their care.

The definition of satisfaction and the theoretical underpinning of the concept adopted for this research therefore viewed satisfaction as a positive response to meeting patients' perceived health care needs by restoring homeostatic balance and grounded the study in a sound theoretical base that had general applicability. The need-satisfaction link was conceived as being multidimensional with the concept of satisfaction comprising various and distinct dimensions (Ware, 1981; Pascoe, 1983; Cleary & McNeil, 1981; Keith, 1998). A phenomenological perspective was therefore adopted for the preliminary data collection phases

of this study in order to identify those dimensions of care that related the concept of satisfaction as defined, to the process and outcome of physiotherapy in an outpatient setting.

The development of conceptual models of patient satisfaction with physiotherapy

Conceptual models of patient satisfaction developed in the course of the qualitative phases of this study represented satisfaction as occurring along two continua rather than one and drew on Herzberg's (1999) two factor theory. Patients could thus be simultaneously satisfied/dissatisfied with different aspects of care. This not only reflected the multidimensional nature of the construct, but also explained the consistent finding from the qualitative stages of this research that patients evaluated elements of the physiotherapeutic intervention separately in terms of process and outcome.

The Therapeutic Encounter model explained the role of morbidity on patients' expectations and subsequent evaluation of the care process and identified patients into three principal groups in terms of reporting positive, negative or ambivalent outcomes. The model therefore permitted predictions to be made concerning the patient's response to treatment and reflected the influence of locus of control (Rotter, 1966; Wallston, 1992), self-efficacy (Bandura, 1997) and adaptation level theory (Helson, 1964) on the different stages of the care process. The Clinical Outcome model highlighted the role of the therapist in effecting change in the patient's health status and although the therapist's perspective was not explored in the present study it indicates an area for further research into the congruence between patient and therapist's orientations of care. Both models were subsequently combined, providing an explanation of the factors influencing patients' satisfaction with their physiotherapy outpatient care by comparing their experience with their expectations as a subjective standard. The definition and conceptual framework of satisfaction presented in this study therefore represents a significant contribution to understanding patient satisfaction with physiotherapy and the theoretical models provide a set of hypotheses that can be tested in future research.

The development of a new measure of patient satisfaction with outpatient physiotherapy

Satisfaction surveys have traditionally been the methods used to examine patients' evaluation of their care as they are inexpensive and economical methods of collecting a large quantity of data in a short period of time, although they have also been subject to criticism (Hyrkas et al., 2000). The most common problems are the highly positive results reported, the use of instruments with poor discriminative power (Carr-Hill, 1992; Williams, 1994; Avis et al., 1995; Kinnersley et al., 1996) and criteria that are set by management rather than by service

users (Sitzia & Wood, 1997). The extensive developmental work undertaken in this study to inform the content of the new measure of patient satisfaction with physiotherapy together with the psychometric testing of the tool went some way to addressing these limitations.

An important element in the design of the survey tool for this study was the patients' involvement in the item pool development. From an analysis by Sitzia & Wood (1997) of 195 satisfaction studies published in 1994 when the number of studies appeared to have peaked, Sitzia (1999) found service users involved in item generation in only 11% of quantitative studies. The disadvantage of relying on the opinions of health workers in addressing issues of content validity is that users, workers, and managers, can have different perceptions of which aspects are important to quality of care (Sitzia, 1999). It is therefore noteworthy that of the five new satisfaction tools developed for physiotherapy since 1994 that were reviewed in this study, only three (Marks, 1994; Elliott-Burke & Pothast, 1997; Beattie et al., 2002) involved patients in item pool generation. Aharony & Strasser (1993) highlight the lack of qualitative data analysis as a methodological approach for studying patient satisfaction. They suggested that a qualitative approach can lead to decisions about what to study from the patients' perspective, help understand how patients' form attitudes and causal attributions, control leniency effects (tendency to respond more positively to closed than open questions) and lead to data enrichment. The phenomenological approach undertaken in the preliminary stages of this research in order to inform the content of the tool, went some way to addressing the concerns expressed by Aharony & Strasser (1993). It also reflected a multi-lateral approach to item generation advocated by other commentators e.g. Morse & Field (1996) and de Vaus (1996). Whilst reference was made to the satisfaction literature and extant satisfaction tools, the majority of the item statements used for the measure developed in this study were those generated following the analysis of the interview data. These statements not only reflected the subjects' views of their physiotherapy outpatient treatment, but were also expressed in terms used by the subjects themselves.

In contrast to the satisfaction instruments that have been developed by therapists, albeit mainly in the USA (e.g. Roush & Sonstroem, 1999; Goldstein et al., 2000; Beattie et al., 2002) the tool developed in this study is unique in four ways. It permitted an examination of specific dimensions of outpatient physiotherapy under the NHS system of care, compared patients in acute and chronic musculoskeletal groups, included the dimensions of expectations and outcome and was based on a theoretical model of patient satisfaction with physiotherapy.

An important distinction has been made in the literature between satisfaction scales that refer to care in general and to specific episodes of care (Cleary & McNeil, 1988) with specific measures more accurately measuring services actually received (Pascoe & Attkisson, 1983). In this study the specific (micro) approach to instrument development was adopted in which individuals were asked to respond to statements that related directly to their care. This is in contrast to the general (macro) approach where statements refer to health care providers or services in general. The micro approach is therefore more pertinent to therapists seeking feedback from their service users of the extent to which they have met their treatment needs. The tool is also specific to delivery of care in the OP setting, in which physiotherapy generally constitutes the principal treatment in contrast to the multidisciplinary input of inpatient care. Since there was patient involvement in the development of the tool, the aspects of service that were identified for inclusion were directly relevant to the NHS system of care in the UK. Therefore statements relating to finances and accessibility/convenience that feature in instruments developed mainly in the USA (see Ware et al., 1976a) were not included. However, the sub-scale structure of the tool could form the basis for an instrument that, with the addition of items relating to cost and facilities could, following further psychometric testing, be extrapolated for use in the private health care sector.

In contrast to the studies of patient satisfaction with outpatient physiotherapy that have been reviewed (Ch.1, page 99) this study examined satisfaction in two specific morbidity groups, those with acute and chronic musculoskeletal conditions, on the basis of hypothesised differences that might exist in the factors affecting their satisfaction with care. Results from this study showed that, not only were there differences in relation to clinical outcome, but also differences in the predictors of satisfaction between the two groups. This suggests that by identifying those aspects of therapy that acute and chronic patients perceive as important, services can be more appropriately directed towards meeting their perceived health care needs. By setting achievable treatment goals patients' expectations of improvement in health status can be more realistically addressed, resulting in greater satisfaction with the clinical outcome of care. The results from this study further suggest that there may be value of looking at discrete diagnostic groups in satisfaction surveys. The survey results were analysed within the framework of four study hypotheses and resulting differences in satisfaction relating to morbidity and gender, highlighted the discriminative function of the measure as an indicator of the relative emphasis in treatment that should be accorded to these groups in future service provision. It could further be argued that the statements in the general satisfaction and dissatisfaction sub-scales that emerged following factor analysis of the main survey data,

represent fundamental elements of the therapeutic encounter that have wider applicability to all patients attending for physiotherapy.

The inclusion of an expectation and outcome dimension also formed a major departure from the content of patient satisfaction questionnaires (e.g. Taylor & May, 1995; Beattie et al., 2002; Monnin & Perneger, 2002). Although an association has been found between health status and satisfaction (Wooley et al., 1978; Fitzpatrick et al., 1983; Patrick et al., 1983), with those in better health expressing greater satisfaction, there has been a paucity of research on health outcomes in the patient satisfaction literature (Keith, 1998). It could be argued that the *raison d'être* of physiotherapy treatment is to achieve a positive change in the patient's health status, therefore an instrument that examines this aspect of care can provide important feedback on the effectiveness of the therapeutic input. However, unlike the general satisfaction/dissatisfaction sub-scales, the wording of statements relating to expectation and outcome sub-scales, as they currently stand, would be more appropriate to those patient groups in which complete resolution of the problem is at least a possibility, as in the current study population.

In summary, this study has made a unique contribution to understanding the concept of satisfaction and has developed models to explain the relationship between variables in the evaluation of patient satisfaction with OP physiotherapy. The patient satisfaction questionnaire that was developed provides a tool with potential versatility for use either as a total scale or as a short clinical outcome measure.

Implications for practice and research

i) The findings from this study indicate that in relation to the proposed expectancy disconfirmation model of patient satisfaction with physiotherapy, patients' expectations form an important part of the evaluation process of their treatment experience. Evidence from the qualitative data of this research has shown that while patients may form expectations about certain aspects of their physiotherapy treatment they may also have no specific expectations about others. In the latter case, particularly in those with acute conditions or those with no previous experience of physiotherapy, patients relied on the therapist to give them expectations in terms of their prognosis for improvement and recovery. On the other hand while patients may have specific ideas of what the treatment will entail they may also harbour unrealistic expectations of these and of the degree to which they will subsequently be helped. Unfulfilled or confirmation of negative expectations could then subsequently colour their overall

perceptions of the value of the intervention. Meeting expectations that accord with the patient's own perception of their problem and interpretation of its management are more likely to result in a satisfactory evaluation of their care. Therefore in terms of treatment effectiveness and patient compliance, eliciting patients' expectations at the beginning of their course of treatment would seem to be an essential component of the initial assessment process.

ii) While patients appreciated being given explanations about their condition and of various aspects of the treatment process, they differed in the extent of their information needs. Patients with chronic conditions in particular who have often been repeat attenders for treatment may have been given an explanation of their condition not only by the therapist on previous occasions but also during their outpatient clinic appointments. Their need for further information may therefore be minimal compared with the acute patient for whom the experience of trauma is new and often frightening. It is therefore important to establish both the amount and detail of explanation the patient requires so that treatment time is not unnecessarily taken up by providing redundant information. However it is also necessary to counter misinterpretations of information that the patient may have, whether from medical or lay personnel, as this could impact on their perception of treatment management and prognosis.

iii) There was clear evidence that the relationship between patient and therapist differed between the acute and chronic groups supporting the notion that therapists find it easier and more satisfying to treat acute patients for whom they are more likely to achieve a successful outcome (Condie, 1991). It is not so satisfying when the patient makes little progress or when it becomes evident that there is little that physiotherapy can offer so that patients become seen as 'problem patients'. Establishing the patient's needs, particularly the extent to which these might be psychosocial rather than physical, could point the way to a more patient-focussed and productive therapy experience, an early discharge or a referral on to a more appropriate agency.

iv) There was evidence from this research that principal areas of discontent in relation to organisational issues concerned patients with chronic problems. Specifically these related to the long wait that chronic patients had before starting treatment appointment and the perceived short course of treatment offered. The first issue highlights the need to re-examine the current system of waiting list allocation in which chronic patients are typically accorded low priority and to adopt more creative initiatives including for example, telephone triaging and/or provision of immediate joint care advice. In relation to the second issue, the current approach

in the management of chronic problems is to provide a short course of 'hands on' treatment with provision of advice and exercise for continuing management of the condition at home. However the symptomatic relief that most of these patients seek cannot always be achieved by this means. While recognising that it will not always be possible to effect complete resolution of symptoms with many of these patients, the trend towards education and advice with an early discharge may now have swung too far. More time spent in the initial assessment phase of the treatment programme could help identify those patients for whom a longer course of treatment might be more appropriate in meeting their biopsychosocial needs, thereby precluding the tendency for re-referral at a later date due to continuing problems.

v) The finding from the survey data, that there was least satisfaction with the clinical outcome of care, accords with the results from the interview data. This suggests that, either physiotherapy itself may not be completely effective, or that acute and chronic patients may be discharged at an earlier stage from treatment in anticipation that further improvement would occur with their self-management at home. The latter suggestion is probably more likely tending to occur in a response to cut waiting lists and reduce waiting times for treatment. However, in some circumstances this may be a false economy and as intimated in iv) above could result in re-referral at a later date if resolution of the problem to the patient's satisfaction has not been achieved. Regular auditing of patients' satisfaction with their outcome of care, with the use of a simple expectation/outcome measure as suggested by this research, could provide therapists with feedback not only on the effectiveness of their intervention from the patient's perspective, but also of their clinical reasoning in relation to managing the patient's case.

vi) Patients need to know that the services they receive are of a high quality and physiotherapists together with other health professionals have a responsibility to ensure that their own practice meets the government's current requirements for improving quality in the NHS (NHS Plan. DOH, 2000). Patient surveys conducted as part of a continuous quality improvement programme are therefore particularly important in providing therapists with feedback from patients about their experiences of physiotherapy services. However it is recognized that increasing demands are being placed on clinicians' time for example through research and clinical effectiveness initiatives, and that additional audit activities can be perceived as time consuming and a distraction from clinical work. With respect to the tool developed in this research, it is acknowledged that face validity together with the logistics of distribution and collation of the questionnaires by therapists would constitute elements of further validation studies that would be needed since these issues were not addressed in the

current study. However it is envisaged that these could be successfully accomplished in the course of further work and that the tool could be incorporated into general practice as part of a continuous quality assurance programme.

vii) In terms of patient acceptability, the questionnaire was designed with reference to expert opinion on the development of survey instruments to facilitate completion and maximize the return rate. A consistent format was used throughout that simply required the patients to circle the response option for each statement that represented their opinion. It was estimated that the questionnaire should not take more than about 15 minutes to complete, although this was not assessed during this research and would need to be checked in future trials. No comments were made by any of the respondents about the difficulty or the time required to complete the questionnaire and the good response rate of 66% suggested that it had general acceptability to the patient population. Of only two Open Comments that related to the questionnaire, one concerned the need for monosyllabic answers and the other for alternative item statements thereby supporting the face validity of the tool.

Limitations of the study

While the aims of the study which were to gain insight into patients' perspective of their physiotherapy experience and to develop a new tool were achieved some limitations to the study are acknowledged.

This was a relatively small-scale study and therefore generalisation of the results should be treated with caution, although many of the findings are supported from the general satisfaction and physiotherapy literature. When patients are interviewed their responses may include a combination of opinions as well as facts. Furthermore the temporal effects of conducting the interview after the event may mean that facts become distorted by the patients' subsequent reassessment of their experience. There is the possibility that patients will tell the interviewer what they think (s)he wants to hear or what is expected from them, particularly if contentious or sensitive areas are discussed. Opinions expressed may likewise represent a misinterpretation of facts or of beliefs not strongly held, but more spontaneously given in an 'off the cuff' manner. Nevertheless, it is ultimately the patients' opinions and beliefs about their physiotherapy treatment that formed the essence of the study and therefore attempts were made to reduce bias during the data collection phases and in the reporting of the results.

A combination of individual and group interviews with acute and chronic patients in the developmental phases of the study provided a form of data triangulation. The design for the multi-phase interviews in the main data collection stage included elements that provided for member checking and validation of the patients' earlier responses. The use of the term 'satisfaction' to guide the preliminary unstructured interviews gave an early indication of its limited discriminatory power so interviewees were subsequently prompted to evaluate discrete aspects of their care in their own terms. The finding that very few expressed these perceptions as 'satisfactory' or 'dissatisfactory' supported the definition of satisfaction proposed in this study as representing a general affirmation that needs and expectations had been met. Subjects were able to make discriminatory judgements about discrete aspects of their care when prompted, as evidenced by the multi-phase interviews in particular. This provided insight into the reasons behind their evaluations, thereby addressing one of the concerns relating to the concept of satisfaction identified by Williams (1994).

Although one major field trial cannot establish the validity of the instrument developed in this study and the lack of criterion validity could be seen as a limitation, good content and construct validity of the tool have been demonstrated. The internal consistency of four out of the five main sub-scales show more than acceptable levels of reliability for this stage of instrument development (Nunnally & Bernstein, 1994) and the scale structure provides the potential for flexibility in the application of the tool through the use of selected elements.

One of the main sources of bias in a mailed questionnaire survey results from a low response rate. Steps were taken to increase the response rate using techniques advocated in the literature, (Oppenheim, 1992; Fink & Kosecoff, 1998; Sapsford, 1999) and additionally employing over sampling to compensate for non-respondents. The resulting overall response rate of 65% therefore represents a good level of return (Dillman, 1982).

Exclusion criteria ensured as far as practicable, that only patients capable of understanding and filling in the questionnaire unaided were included in the sample. However it is acknowledged that the recruitment of English speaking patients only could lead to some limitations in the extrapolation of the results. Questionnaires were sent to a random sample of respondents drawn from diverse geographical locations to ensure a demographic mix as well as tapping patients' experience of physiotherapy within a variety of hospital settings, so that increased confidence could be placed in generalising the results.

The limitation of asking patients to respond to questionnaire items (albeit pre-defined in this study by input from the service users themselves) which could restrict the expression of their concerns, was offset by the addition of a section for open comments. The qualitative analysis of these comments provided further insight into the experiences and values that patients attach to their care when evaluating the service (Avis et al., 1995; Grogan et al., 2000).

Strategies for future research

1. Reliability and validity tests of the new tool

The questionnaire that was developed in this study was shown to yield reliable measurements and to have some content and construct validity although criterion validity was not assessed. Although the sample population of the study met specific inclusion criteria in order to answer the research questions, the conditions they represented comprise a large proportion of those seen in MS outpatient departments which increases confidence in the applicability of the tool to the general MS outpatient population. However further reliability and validity studies need to be undertaken to establish this and to test the psychometric properties of the instrument before it could be used to evaluate outpatient physiotherapy services.

a) Reliability

In further tests of reliability estimates of the tool two questions need to be addressed;

1. Are each of the sub-scales internally consistent?
2. Are the internal consistency estimates stable across studies?

To address the first question, the estimates of reliability that were used in the current study need to be repeated for each of the 5 subscale scores in any future studies using the instrument. Four estimates of internal consistency should be used; Chronbach's alpha, inter-item, item-subscale and sub-scale-subscale. The criterion level used in this study for new tool development was 0.70, although for more mature subscales estimates should be 0.80 or above (Nunnally & Bernstein, 1994).

In relation to the second question, the stability of reliability estimates need to be achieved through replication of studies using the instrument to establish the robustness of the scales in relation to time, setting, sampling and case mix (see below).

b) Validity

i) In terms of *content validity*, the generation of statements that comprised the questionnaire used in this study followed careful literature review supplemented by patients' opinion of their physiotherapy care, and the resulting factor identified was broadly similar to that found in

other satisfaction studies. Although the factor structure that emerged following the main survey departed somewhat from that hypothesised *a priori* this did not diminish the generally good reliability estimates of the subscales overall apart from the Expectations subscale. The low alpha accorded to this scale could have resulted from the small number of items it contained indicating that amendments to the content of this scale might need addressing. Increasing the number of items might improve the performance of the Expectation subscale in subsequent studies. Although the item content of this scale focussed on expectations of the clinical outcome of care in order to answer the research questions, considerations for further developments of this scale could include aspects of the process of care. Their inclusion would provide a greater range of potential outcome measures that could be assessed by linking them with existing process variables eg. organisational items. Subsequent validity and reliability estimates of survey data using the amended tool would then be needed.

ii) Construct validity of the tool was supported by the scores for the 5 separate subscales that correlated with the general satisfaction score but not so highly as to result in multicollinearity. If only the two General Satisfaction/Dissatisfaction subscales were to be used as a shortened version of the questionnaire as suggested in the Discussion (page 289) further tests of construct validity would be needed to establish replication of the 2-factor structure. This should follow validation studies of the whole tool first for use with a general MS outpatient population to establish that the original 5 subscale structure was retained. If following tests the 2-factor structure proves to be robust, the relative brevity of the tool could have obvious operational advantages to both therapist (for collation and analysis) and patient (completion time) as a general satisfaction measure.

iii) This study did not address criterion validity, as no comparable 'gold standard' was available at the time. However other researchers, for example Goldstein et al. (2000) and Beattie et al. (2002), have used either 1 or 2 items from their general satisfaction subscale as the criterion and correlated mean summary scores of all the items in the main scale with the scores on the global satisfaction item(s). Baker (1991) correlated an external assessor's scores of service provision with the patients' scale scores. However, recent validation of the MISS-21 for use within general practice in the UK (Meakin & Weinman, 2002) might serve as a creditable alternative to these methods for future tests of criterion validity of the new tool. Although the MISS-21 was designed to assess satisfaction with medical care there are similarities between this and the tool developed in this study in terms of content, although the items of the MISS-21 are necessarily referenced to the doctor. If it could be demonstrated that validity of the tool would be retained following modifications of wording by substituting

'therapist' for 'doctor', concurrent validity tests using the MISS-21 as a criterion measure for the new tool offers considerable possibilities for furthering patient satisfaction research in physiotherapy.

2. Applicability to other client groups

A tool designed to evaluate patients' experiences of their physiotherapy OP care offers potential for use with different patient populations.

- Studies could include those in discrete diagnostic groups for example, back pain, or those achieving either 'good' or 'bad' clinical outcomes, particularly as most dissatisfaction was expressed in this study with the clinical outcome of care.
- Results from the main survey had also indicated that gender roles might have a significant effect on individuals' satisfaction with discrete aspects of their care. Future research might therefore investigate not only the effect of gender roles on the therapeutic interaction but also on the different approaches to patient management that the therapist might adopt e.g. involvement in decision making, treatment planning, or goal setting, in relation to patients' satisfaction with their care.
- Although this study has been concerned with those patients who have completed their episode of care, further studies could investigate the reasons for those failing to attend or failing to complete their course of treatment thereby identifying possible causes of dissatisfaction with the service.

3. Further work

The tool also offers the potential for investigating aspects of the therapeutic encounter as well as the outcome of care, as identified in the proposed model of patient satisfaction with physiotherapy, with the possibility of manipulating the antecedents and covariants of satisfaction, eg. patients' expectations, therapeutic relationship, organisational change or clinical innovation. It could also be used as part of a professional development or quality assurance/audit programme for example when changes in personnel or structure occur within the department, to provide patient feedback on the quality of care provision.

Although in this research the survey was conducted 3 months retrospectively for logistical reasons, further studies could compare the results from administration of the questionnaire over different time periods. It could therefore be distributed immediately following discharge, or both at discharge and with a follow-up at 3 or even 6 months later in order to evaluate the temporal effects on patients' satisfaction judgements of their care.

Conclusions

Increased access to IT has meant that patients are now generally more knowledgeable about the availability and range of health services and products and are becoming proactive in identifying their treatment needs. Patients' expectations of the NHS, encouraged by recent government initiatives, have been raised not only in relation to the quality and timeliness of service provision but also in seeking redress when service provision is perceived to fail. If a service aims to meet patients' expectations then this assumes that it is cognisant of these expectations, that they are achievable and that there are the resources to meet them. It is at the stage of the initial encounter with the service that the opportunity exists for patients' expectations of care to be identified and clarified, and the ability of the clinician/service to subsequently meet those expectations to be made explicit. Satisfaction surveys demonstrating good psychometric properties can play a role in identifying those aspects of a service that are falling short of meeting peoples' expectations, and point the way to interventions that could be implemented to effect improvement. Regular national patient surveys are being carried out in all NHS acute Trusts as part of the Government's commitment to improving quality. Therefore in keeping with the aims of the NHS Plan, physiotherapy will likewise need to 'shape its services around the needs and preferences of the individual'.

This study has provided the starting point for this process.

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APPENDIX 1

- 1.1. Patient information sheet for participation in the individual interviews**
- 1.2. Patient information sheet for participation in focus group interviews**
- 1.3. Explanatory letter to focus group attendees**
- 1.4. Written consent form to participate in the research**
- 1.5. Declaration form completed by principal researcher**

APPENDIX 1.

1.1 Patient information sheet for participation in individual interviews

form 96 **OUT-PATIENT PHYSIOTHERAPY: THE PATIENT'S PERSPECTIVE**

EAST LONDON AND THE CITY HEALTH AUTHORITY

Information to Participate in a Research Project

We invite you to take part in a research study we think may be important. The information which follows tells you about it. It is important that you understand what is in this leaflet. Whether or not you do take part is entirely your choice. Please ask any questions you want about the research and we will try our best to answer them.

Physiotherapists try to provide all their patients with the best possible care when they attend the Department for treatment. In order to help us achieve a good standard we would greatly value your views as to whether this is being achieved. This is the purpose of the study and you are being asked to take part as you have just completed a course of outpatient physiotherapy treatment.

If you are willing to participate, a tape recording will be made of a conversation with you in which you will be asked to express your views and to raise any issues which were of particular importance to you in relation to your recent physiotherapy care. There are no right or wrong answers. The interview should last no more than 45 minutes. This can be conducted either at the Hospital or in your own home at a time convenient to yourself. Your written consent will be sought before proceeding and all information we receive from you will be used only for the purposes of this study. Neither you nor the Hospital will be identified by name and group results only will be reported.

You do not have to join the study. If you decide not to take part, or drop out, this will not put at risk your ordinary medical or physiotherapy care.

If you have any questions or would like to discuss the study further do not hesitate to ask.

Clinical Researcher:

Address:

Tel. No:

APPENDIX 1.

1.2 Patient information sheet for participation in focus group interviews

form 96 **OUT-PATIENT PHYSIOTHERAPY: THE PATIENT'S PERSPECTIVE**

EAST LONDON AND THE CITY HEALTH AUTHORITY

Information to Participate in a Research Project

We invite you to take part in a research study we think may be important. The information which follows tells you about it. It is important that you understand what is in this leaflet. Whether or not you do take part is entirely your choice. Please ask any questions you want about the research and we will try our best to answer them.

Physiotherapists try to provide all their patients with the best possible care when they attend the Department for treatment and in order to help us achieve a good standard we would greatly value your views as to whether this is being achieved. You have therefore been invited to take part in this research as you have recently completed a course of physiotherapy at (Hospital).

The part of the research in which you will be involved will take the form of a group discussion with about 8 people, who like yourself, have all recently been discharged from the Physiotherapy Department at (Hospital). The discussion will last approximately an hour and a half and will take place at (Hospital).

Your experiences and opinion of the service will assist us in developing a questionnaire about patients' perceptions of physiotherapy. This will then be used in a survey of patients attending a number of physiotherapy departments in hospitals throughout the South East of England. The results of the survey will be published in the physiotherapists' professional journal and help physiotherapists provide their patients with the best treatment possible.

We are very interested in what you have to tell us and in order that we do not miss anything important that is said during the discussion it will be tape recorded. However, to ensure confidentiality and in accordance with the East London and the City Health Authority Ethics Committee requirements, the tape will be destroyed on completion of the research. All information received will therefore only be used for the purposes of the study and neither you nor the hospital will be identified by name. Group results only will be reported.

1.2 Patient information sheet for participation in focus group interviews (cont.)

Joining the group is entirely voluntary, but having agreed to take part you will be required to give your written consent before the discussion starts. Should you decide to change your mind and withdraw from the research project you are of course free to do so, and this will not prejudice any further medical or physiotherapy treatment that you may have.

If you have any questions or would like to discuss the study further, please do not hesitate to ask.

Clinical Researcher:

Address:

Tel.No:



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

APPENDIX 1.

1.3 Explanatory letter to Focus group attendees

20th. March 1998

0171 377 7875

Dear

Re: Research project. 'Physiotherapy Out-Patients. An Examination of Acute and Chronic Musculoskeletal Patients' Perceptions of their Care'.

Further to my recent telephone call, I would like to thank you for agreeing to take part in this research, and I am now writing to give you some further information about the project and your involvement in it.

The research is being undertaken at The Royal London Hospital, Mile End, E1, and involves patients attending Hospitals in the East London & City and Merton, Sutton & Wandsworth Health Authorities. You have therefore been invited to take part as you have recently completed a course of physiotherapy at (Hospital).....

Physiotherapists try to provide all their patients with the best possible care when they attend the Department for treatment and in order to help us achieve a good standard we would greatly value your views as to whether this is being achieved. The part of the research in which you will be involved will take the form of a group discussion with about 8 people, who like yourself, have all recently been discharged from the Physiotherapy Department at (Hospital).

The group will be held in () on Friday 3rd. April at 11.30am.

Coffee will be available from 11.15am. and the discussion will last approximately an hour. A map of the Hospital is enclosed for your convenience.

We are very interested in what you have to tell us and your experiences and opinion will assist us in developing a questionnaire about patients' perceptions of physiotherapy. This will then be used in a survey of patients attending a number of physiotherapy departments in hospitals throughout the South East of England. The results of the survey will be published in the physiotherapists' professional journal and help physiotherapists provide their patients with the best treatment possible.

We hope you will enjoy taking part in the group, and in order that we do not miss anything important that is said the discussion it will be tape recorded. However, to ensure confidentiality and in accordance with the East London and the City Health Authority Ethics

1.3 Explanatory letter to Focus group attendees (cont.)

Committee requirements, the tape will be destroyed on completion of the research. All information received will therefore only be used for the purposes of the study and neither you nor the hospital will be identified by name.

Joining the group is entirely voluntary, but having agreed to take part you will be required to give your written consent before the discussion starts. Should you decide to change your mind and withdraw from the research project you are of course free to do so, and this will not prejudice any further medical or physiotherapy treatment that you may have. However I would ask you to let me know as soon as possible if you intend to withdraw so that someone else can be recruited in good time to take your place.

If you would like any further information about the research you can contact me on 0171 377 7875. This is an ansaphone number, so if you leave your message I will get back to you as soon as possible.

Please bring this letter with you when you come to the group.

I look forward to seeing you on 3rd. April.

Yours Sincerely,

Rosemary Hills MSc. MCSP
Clinical Researcher, Physiotherapy Department,
Royal London Hospital, Mile End

APPENDIX 1.

1.4 Ethics consent form to participate in the research

form 96

WRITTEN CONSENT FORM:

Title of research proposal:

REC Number: P/96/238/S

Satisfaction with out-patient physiotherapy in patients with acute and chronic musculoskeletal conditions.

Name of Patient/Volunteer (Block Capitals):

Address:

* The study organisers have invited me to take part in this research.	
* I understand what is in the leaflet about the research. I have a copy of the leaflet to keep.	
* I have had the chance to talk and ask questions about the study.	
* I know what my part will be in the study and I know how long it will take.	
* I have been told about any special drugs, operations, tests or other checks I might be given.	
* I know how the study may affect me. I have been told if there are possible risks.	
* I understand that I should not take part in more than one study at a time.	
* I know that the local East London and The City Health Authority Research Ethics Committee has seen and agreed to this study.	
* I understand that personal information is strictly confidential. I know the only people who may see information about my part in the study are the research team or an official representative of the organisation which funded the research.	
* I know that the researchers will/might tell my general practitioner (GP) about my part in the study.	
* I freely consent to be a subject in the study. No-one has put pressure on me.	
* I know that I can stop taking part in the study at any time.	
* I know if I do not take part I will still be able to have my normal treatment.	

1.4 Ethics consent form to participate in the research (cont.)

form 96

*** I know that if there are any problems I can contact:**

Dr/Mr/Ms _____

Tel.No _____

**Patient's/Volunteer's
Signature.**

Witness's Name.

Witness's Signature.

Date_____

The following should be signed by the Clinician/Investigator responsible for obtaining consent.

As the Clinician/Investigator responsible for this research or a designated deputy, I confirm that I have explained to the patient/volunteer named above the nature and purpose of the research to be undertaken.

Clinician's Name.

Clinician's Signature

Date_____

APPENDIX 1.

1.5 Declaration by principal researcher

Form 95

DECLARATION BY THE CONSULTANT OR PRINCIPAL INVESTIGATOR IN CHARGE OF PROPOSED RESEARCH: REC No.....

I ACCEPT RESPONSIBILITY:

1. To inform all relevant medical and nursing staff at each location where a patient/volunteer may be treated, that a subject is enrolled in a trial or experiment, what drugs (if any) or invasive procedures will be used (or not as may be) and what precautions they should take, if any. In some cases it will be necessary to give special training to nurses or junior staff to prepare them to undertake procedures. Finally, with the patient's consent, the GP should be informed about the trial in which the subject is enrolled, including information concerning any adverse findings.
2. To ensure that details of each procedure to be done or drug to be given are entered in the clinical notes and that the date and time when the procedure was done and/or drug given are subsequently noted.
3. To make three copies of the "Written Explanation to be Given to Potential Subjects" and the signed "Written Consent Form", including the signed "The Declaration by the Consultant or Principal Investigator in Charge of the Proposed Research". One copy of each should be kept by the patient/volunteer, one copy should be included in the patient's clinical notes and one copy should be kept by the Senior Consultant/Chief Investigator responsible for the Research.
4. To ensure that each subject is verbally warned not to take part in more than one study at any time.
5. To inform the Committee of any adverse or unforeseen circumstances arising out of this research.
6. For clinical research, to provide the Committee with one brief report of progress half way through the project and another at its completion.
7. To make every effort to tell the participants about the results of the study.

Principal Investigator

Signature

The original signed copy of "The Declaration ..." should be attached to the application form when it is submitted.

APPENDIX 2

- 2.1 Sample transcript of developmental interview (acute subject. Female)**
- 2.2 Sample transcript of developmental interview (chronic subject.male)**
- 2.3 Sample of coding sheets following content analysis of developmental interviews $n=8$**
- 2.4 Peer review of statements by subjects attributed to principal categories following content analysis of the developmental interview transcripts**
- 2.5. Developmental interviews matrix charts**
- 2.6 Sample transcript of focus group (acute subjects, $n=10$, suburban)**
- 2.7 Sample transcript of focus group (chronic subjects, $n=5$, inner city)**
- 2.8 Focus group matrix charts**
- 2.9 Peer review of statements by subjects relating to the topic categories represented in the matrix charts following content analysis of the focus group interview transcripts**

APPENDIX 2.

2.1 Sample transcript of developmental interview (acute subject. female)

- 1 I. Had you had physiotherapy before this particular episode?
- 2 S. Many years ago, but only due to pregnancy (also had hysterectomy and exercises given by a nurse
3 on the ward)
- 4 I. So, when you injured your wrist and you heard you had to come for physio, what did you think
5 that might involve?
- 6 S. Er....pain! (laughs) Well, I suppose I shouldn't listen to others, but I had a sister-in-law who had
7 damaged her hand and she used to tell me how she used to sit and cry through her therapy.
- 8 I. Oh, dear....So, how did you think of your problem before you started treatment? What sort of
9 problem was breaking your wrist to you...in terms of everyday activities?
- 10 S. Um...well, the hand was practically useless, 'cos I couldn't move it neither backwards or forwards
11 and I couldn't close my fingers, so I couldn't grip nothing.
- 12 I. So, at that stage, what did you think physiotherapy was going to be able to do for you?
- 13 S. Hopefully, get it all going.
- 14 I. Get it back to what sort of level?
- 15 S. Well, not knowing about physiotherapy, I more or less thought 100%.
- 16 I. Is that what you were expecting?
- 17 S. Yes.
- 18 I. Apart from talking to your sister-in-law, had you heard about physiotherapy from anyone else?
- 19 S. ...Um, one of my aunts has had several bits of physiotherapy but always on different things, and I
20 would say, although she's now 75, she's a very strong woman, so you wouldn't have heard any bad
21 reports from her.
- 22 I. Did you talk to her at all about the treatment, to try and get any information from her?
- 23 S. Well, I spoke to her, and she just give me on different things, mainly hers was back treatment,
24and....she assured me they wouldn't do anything that would be distressful, really.
- 25 I. But your sister-in-law said differently!
- 26 S. Well,um, having said this, she's one of them people that do cry at the least little thing.
- 27 I. Right. Well, what about the injury itself? What did you learn about that before you started
28 treatment?
- 29 S.....Nothing really. I wasn't told anything.
- 30 I. What about when you were in the clinic?
- 31 S. No, all he said to me was, I needed physiotherapy on it to get it going, but he said absolutely
32 nothing about the break, so I just assumed it must all be alright.
- 33 I. Right.
- 34 S. But he did say I had....I can't think of the name, its probably in my notes (RSD)
- 35 I. So, if he hadn't have referred you to physiotherapy, what would have happened to your hand?

36 S. Um, it probably would have stayed stiff, because you don't know what you're doing yourself, and
37 you are a bit, well, maybe not everybody, but I was a bit too nervous to try and move it too much
38 myself.

39 I. Were you expecting to be sent on for some sort of further treatment to your hand when you were
40 in the # clinic?

41 S. Um...not at first. I thought when I had the cast off, it would be a bit stiff, but with a few days of
42 freedom it would loosen up, but it never.

43 I. So you felt it might have got better by itself once the plaster was off?

44 S. At first, yes.

45 I. So what changed?

46 S. Um, well, when I first had the plaster off, straight away, the doctor said I would need therapy on
47 it.....which.....I think I had three before I went back three weeks later, and he said I would need
48 intense physiotherapy, because it was...some medical name.

49 I. When you first started your physio treatment, from your point of view, what did you think the
50 hand needed to get it better?

51 S....I would say, professional manipulation.

52 I. Right. What do you mean by that, exactly?

53 S. Well, someone who knew what to do...without...causing you any distress or hurt or...and I think
54 maybe help you feel confident and that.

55 I. You said earlier that you were hoping that you were going to get 100% better with the therapy, so
56 by the end of the treatment you were hoping that, to all intents and purposes, there would be nothing
57 wrong with your hand?

58 S. That's right. Perhaps a bit misshapen, that's where they had to reset it.

59 I. Would you have minded that?

60 S. What?

61 I. That it was a bit misshapen? Was that a big problem?

62 S. Not really. I'm used to it.

63 I. OK. Looking back on the treatment you had, what do you think were the things that helped most
64 to get it to recover, to get better the best?

65 S. Um, obviously while it was manipulated so that it bent backwards and forwards, um, it was very
66 helpful being given a sheet of exercises to do at home, er...and.....you know, if any advice come
67 along, follow that.

68 I. What about things that weren't particularly helpful, that didn't seem to make a lot of difference?

69 S. Er.... I think most things did. If they didn't seem to at first, as you went on with the treatment you
70 realised they weren't just useless things, they were done for a reason.

71 I. Can you think of anything particular that seemed as if wasn't making a lot of difference to start
72 with but later on it did?

73 S. Yes, playing with a clothes peg! (laughs) Opening and shutting the clothes peg, each finger in
74 turn. You think its a bit daft, till you realise its giving you strength back in your fingers.

75 I. Is there anything else?

76 S. No....

77 I. Can you remember all the different things that you had as part of the treatment? As well as the
78 manipulation, was there anything else?

79 S. Um...myself, I was doing the ice packs for the first couple of weeks, because it was still so badly
80 swollen, and...then I was...doing exercises myself which involved putting your hands together and
81 raising your elbows, putting the backs of your hands together and lowering your elbows, putting
82 some weight on it on a table, and seeing how high you could raise it, er....squashing a soft rubber
83 ball as hard as you could. I think that was about all I could remember doing.

84 I. Were there any other things that were done in the department that you couldn't do at home?

85 S. Um...more or less only the um...twisting...I don't know what you call it...twister thing, backwards
86 and forwards, and also gripping the thing that records your strength.

87 I. Yes. Did you miss any appointments? Did you have to cancel any throughout your treatment?

88 S. No.

89 I. If you had to cancel an appointment what priority would you have given to having your therapy or
90 having to cancel it?

91 S. Um...if possible I would have cancelled any appointment rather than my therapy...

92 I. So. When it came to your discharge, looking back on it, on your treatment, when you were saying
93 at the start you would have liked to have been 100%, in fact what % do you think you achieved with
94 the treatment?

95 S. Er...I would say about 90%.

96 I. So, what was the 10% that still wasn't quite there?

97 S. Er.....I still can't shut my hand properly.....and also find that still a bit tight feeling all around
98 the wrist, which I was told I may never lose anyway.

99 I. Right, who told you that?

100 S. The therapist.

101 I. So, do you still regard yourself as having a problem with that hand?

102 S.....With very small things, yes.

103 I. For example?

104 S. Well, say...at this time of year trying to handle things when you're putting in tacks, like drawing
105 pins. Er...if I drop a little...5p, trying to pick it up sometimes...and I still can't grip as I'd like to...

106 I. So, is that acceptable to you or not?

107 S. Um...yes. Because I think, slowly but surely it's coming my way.

108 I. So maybe with time that 10% will reduce?

109 S. Definitely. Hopefully.

110 I. Now that you have had some experience of having had physiotherapy, if you were to plan it for
111 yourself, what would you say would be the ideal set-up for the treatment? Like the content, the
112 timing, everything to do with the treatment you've had. If you had to set it up yourself, and say, in
113 an ideal world, this is how I would like my physio to be.

114 S. Um....obviously times to suit yourself..... and um, it's very nice having the one to one therapist
115 all the time, because they really know your problem, and.....the only thing I didn't like to much was
116 when the therapist had a week off, so do you, you know. Because....er...you cannot do yourself

117 what they can do, and although throughout the whole week I did the exercises, exercises really just
118 sort of, kept you at a standstill but didn't let you backslide.
119 I. Right. Anything else?
120 S. No. I think that was, otherwise it was all very perfect.
121 I. So, trying to think in terms of gauging overall satisfaction with your physio altogether, on a 0-10
122 scale, 0 means very dissatisfied, and 10 means very satisfied, you give a number out of 10?
123 S. Um, I would say 9.
124 I. Right. So what was that last little bit that wasn't quite so satisfactory?
125 S. Um...it's just having no therapy when your therapist is either off on holiday or sick.
126 I. Now, just think for yourself now, are there any particular aspects of the management or treatment
127 that stick out for you as being something that you remember as being particularly important or
128 relevant to you?
129 S. ...No particular thing. I think it was all quite important and relevant to get back to normality.
130 I. Comparing with what you might have expected at the start, and what you'd heard from other
131 people, how did that match up as it turned out?
132 S. Well, a lot better (laughs)
133 I. So, compared with what your sister-in-law had told you, about it being painful, how did you find
134 it?
135 S. Er, overall OK. A couple of times it got a little bit...but I was prepared to suffer if I wanted to get
136 it going, but not to the point where you could say it was unbearable.
137 I. And it never got to that stage?
138 S. No.
139 I. Is there anything else you would like to say, perhaps about how it was organised, could it have
140 been better organised?
141 S. No, I don't think so. I think they did an excellent job of the organisation and the appointment
142 system. I more or less always got the appointment time I wanted, which is a good thing.
143 I. What about the number of times you had to come? Were you expecting to come quite often?
144 S. Er...Yes. In fact I thought, I don't know why, that I would be coming more often than I did.
145 I. Did you? How often did you think you would be coming?
146 S. Um...maybe not so much in () but in length. Because when the doctor said "intense" I pictured
147 it being about an hour at a time, but I don't know why.
148 I. Right, yes. But how many times did you come up in the week? about 3 times?
149 S. 3 times at the beginning, and then in the last 3 weeks I only came twice a week.
150 I. And the length of time you actually spent in the department, how long did that turn out to be?
151 S. Twenty minutes.
152 I. How did you feel about that?
153 S....Yes, OK.
154 I. Did you feel enough was done in the 20 mins?
155 S.Um...well, I must admit she worked very hard in the 20 mins to make sure I got plenty of
156 movement going and..
157 I. So that didn't seem as if that was too short?

158 S. Um.....not when I got used to the idea.
159 I. Right. Well, what about at the start then?
160 S. Well, as I said, at the start I really felt...that I would get longer sessions. But never having physio
161 before I didn't understand how it worked.
162 I. Apart from just finding out as you attended for each session, were you given any particular
163 information about how the physiotherapy would be run? What was going to be happening to you
164 throughout the course of treatment?
165 S. Um...I don't think so, no...Just er...told to understand that they would be working the hand until
166 they got it going again.
167 I. Did you learn anything more about your condition, the break and the other condition of your hand
168 as you were coming up for treatment?
169 S. Um...not really, because I didn't learn about the break until I asked the therapist where it was
170 broken, and she was able to point it out. And, er...if I did ask questions she answered, so...
171 I. Did you find you needed to ask quite a few things?
172 S. Um, no not really. She was very competent, obviously....and the measurements that she's given
173 me, which I didn't know much about anyway, it was obvious she was doing a good job by getting
174 more movement each time.
175 I. What do you mean by competent, in that sense?
176 S. Well, obviously she knew her job, and...she...she was able to do it without causing any real pain.
177 I. Is there anything else that comes to mind you would like to tell me?
178 S. No.
179 I. OK then. Thank you very much for that.

APPENDIX 2.

2.2 Sample transcript of developmental interview (chronic subject. male)

- 1 I. Before this recent episode of physiotherapy had you ever had physiotherapy before?
- 2 S. Yes, in (), um...June '94, I had the accident in May '94 and then I went in June or July
- 3 '94
- 4 I. And what were you having treated then?
- 5 S. The same complaint, neck, neck and lower back, um with (name PT) he did a lot of um...what to
- 6 you call it, stretching?
- 7 I. Traction?
- 8 S. Traction, yes, I had a lot of traction for quite a long while on my neck, and when my neck cleared up
- 9 it seems to have (affected) me back, like.
- 10 I. How long did you have treatment for altogether?
- 11 S. I had 2 lots. I went to him the first...um....I don't really know how long (pat went and got his
- 12 appt.card to see)
- 13 I. Right, and did things improve after that lot?
- 14 S. Yes, the improved, um, quite considerable. And then. Um.... just recently, um, what happened, I
- 15 was getting pain here, when I stretched me hand out, and I told the doctor and she just said () And
- 16 then I had a couple of funny turns...like a blackout, um, split second and she sent me to the
- 17 Rheumatology, and when I was under Rheumatology, he said me neck was so stiff he sent me back to
- 18 physio, and to see Dr. () at () and, um, they put it down to blood pressure at the finish. But me
- 19 neck and that was so stiff, than when I went back there like, as I say to see (PT) she did all fingers
- 20 down the spine and twisting, and I had aum....soon tell you (patient goes and gets his physio
- 21 appt.card for dates)
- 22 I. (looking at card) Yes, so you've recently finished treatment?
- 23 S. Yes, yea.
- 24 I. So having had the physiotherapy the first time, you knew what to expect this time, did you?
- 25 S. Yea, yea, like, you know, as I say, it was, um, well I wouldn't have had no physiotherapy this time if
- 26 I hadn't have gone back to the doctor and been referred to Rheumatology.
- 27 I. You wouldn't?
- 28 S. Well, no, everything, like, just took it, it was er.... age and just, really er... .you know, getting
- 29 worse, and then, when I went up there she twisted me neck and that, but she (PT) actually worked
- 30 wonders, and possibly I should imagine I'm a thousand times better than I was, in the neck and in the
- 31 joints. And also, um... last year sometime.....I was sent up to, me own doctor sent me up to, um....
- 32 () to have a collar made, which I wear, you know, I wear one of a night to go to bed, but not,
- 33 not as long...not out, I used to wear it a lot at first, but it seems to have eased off now, I wear one, I've
- 34 got one down there (points to collar beside the chair) what I wear sometimes of a night, and (PT) as I
- 35 say, she give me a few exercises to do which seem to have (helped).
- 36 I. Mm. So before you started treatment this time, what was your main problem, as you saw it, how was
- 37 it affecting you most?

38 S. Well, when I get up,.... as I get up....I....it's hard, and then I do a little few shuffles, and then I've got
39 to stand and I'm all right, like.

40 I. What, you mean you feel a bit dizzy?

41 S. No, no, the bones don't seem to click in properly, like you know, and, as I say, that's of a morning,
42 of a morning, but, you know, it's only....it's something that....I've got to live with and that's, you know,
43 it's er, it's like that, you know?

44 I. What about pain, were you getting a lot of pain when you started treatment?

45 S. When I started treatment I] was getting a lot of pain in the neck, couldn't move me neck, and, you
46 know, as I say, (PT) put me on that traction and that eased it a lot, and give me a bit more movement.
47 And when he said, well really we can't do more, um, and that was it, like, for about a year or so, I don't
48 know, about a year or so, and the er...

49 I. And during that year was it almost pain free or?

50 S. Um, still getting pain but nowhere near as much as it was, like, you know, before.....It...it...it
51me neck stiffened up, you know, and er.....What happened, one day I was cleaning the
52 windows, me wife has, er, severe disability, you know, (wife has emphysema) and I was cleaning the
53 windows, and, I don't know, she called me, and I turned round quick, and for that split second, the
54 thing was black, and er, I went to....it happened again, so I went to the doctor, and that's when she sent
55 me up to the Rheumatology, you know? and they took a...um, a...scan, not a scan, what they test
56 women for babies?

57 I. Ultrasound?

58 S. Ultrasound, and all round the arm and everything, and, since then I've been on, um,....blood pressure
59 tablets, that's all, um....but as I say there was a lot of stiffness in the neck, you know....

60 I. So, what did the doctor tell you was wrong with your neck and your back? Did he give you an
61 explanation about that?

62 S. Um.....they said, when I first done it, they said I could have gone on for the rest of my life and
63 never knew I had arthritis, they said the sudden jolt...I was having a cup of tea in a car park and a car
64 went out of control...in a lay-by on the main road, and a car went out of control, and come right across
65 the road and into me, and I had me back to the door, and had all me sandwiches....you know....and me
66 neck went stiff....within....it took a few days....a week or so, and me back went on that night, me neck
67 ached a little bit, then it all went stiff, and that's when they sent me up to their lot, you know. They
68 took X-rays....and they said there's deterioration, like, you know, arthritis, and you know, they said
69 you've got injured the joints of your neck, you've got a lot of.....nodules growing which they put
70 down to the arthritis, like, you know, and also the bottom of the back, you know, and um.....and
71 since then I've had to go to Harley Street, and um.....took X-rays at Harley Street, and said it's the
72 same, that your neck.....they probably found, is it spondylitis in the neck, and arthritis in the back, you
73 know.

74 I. Is it helpful for you to have that information?

75 S. Um....I've not took a lot of notice of it, like, you know. To me, everyone who's getting old, er, gets
76 arthritis, this is er.....they said like, you know, he was explaining that I could have goneI left
77 school at 14 and never had a days illness or nothing, right up to that time, and they said you've got

78 severe arthritis. I said, what are you on about, severe arthritis, I never had no paid or nothing. It just
79 started straight away, like, you know?

80 I. So, before this recent episode of treatment, were your symptoms inconvenient to you? Did you feel
81 you needed some intervention at that stage, apart from the episodes of passing out?

82 S. Yes, um, me neck was very stiff, like, you know, it was getting awkward when you turned round. I
83 can turn round now, but me neck was about there (approx. half range rot.) and that was me lot, like.

84 I. So it was a nuisance?

85 S. It was a nuisance, and as I say, like (PT) worked with her fingers all down me neck, and she done
86 wonders. Possibly I think, she's done better than the, er, traction done, actually. She done wonders.

87 I. Yes. So at the beginning of the treatment this time, what were you hoping for, mainly, to achieve
88 with this course of treatment?

89 S. More movement in me joints. More movement in me neck, because it was stiff, the muscles were
90 stiff, and you was getting pain, like, when you went (home) you got pain, if I turn me neck now,
91 although....it....it....in me head it crunches and creaks, you know?

92 I. So, she was doing some mobilizing?

93 S. Mobilizing, yea. She was asking, like, do you feel this, and it was obvious that you'll feel a bit of
94 pain, and she done it a lot of good, she did it for quite a long while; different movements, and er, it
95 seemed to ache that night, but next morning you know.....you felt a lot better, yea. () and that
96 seems to have, um... done the job, like, you know, or not done it, I know it can't be cured, but it's
97 helped.

98 I. Mm. So you had things to do between your treatment as well, did you?

99 S. Yea, um, everyday, different exercises, turning me neck, put me head down and back and different
100 things, and twisting this, and, er, with this arm, because I was getting pain across the hand, and she
101 stretched that you, you know, and it's all helped, all this helped.

102 I. Did you have to cancel any of your treatments?

103 S. No, um, er....I didn't have to cancel. I made mine for 8 o'clock, and I had a phone call 10.15 because
104 there was a meeting, she had to go to a meeting, that's all.

105 I Now, obviously you're quite pleased that your symptoms have improved, is there anything else about
106 the treatment that particularly like or didn't like?

107 S. I thought it was efficient, you know, they said, like, you know, come at 2 o'clock, and if you got
108 there at 2 'clock you were seen at 2 o'clock, and that seemed very efficient, and as I say, to me (PT)
109 worked er....she worked wonders.

110 I. Because what she did had the effect?

111 S. What she done had the effect, like, you know, and er....you know she....yea it was nice, it was
112 er....quite good, er, in that respect, and, it seems to have done the trick, like, you know.

113 I. Did you ask her any questions about what she was doing or what effect she thought it might have on
114 you?

115 S. No, she, um, she told me, she explained, um....what she was going to do, like, you know, like where
116 do you get the pain, and she felt round me neck, and as she come down all the little bones in the neck,
117 to, you know, told her what I felt, and then when I felt pain she seemed to go to the other side of the
118 neck, and that pain stopped, you know?

119 I. Did she give you any further explanation of your problem than the doctor had? .
120 S. She said, like, you know, you were stiff, like in the neck and in the muscles around the neck, and in
121 the top of the shoulders, like you know, and er.....I don't know, it's, with the movement, as I say,
122 when, when she discharged me, she (said) carry on with them things, and er,... if you get any other
123 problems go back, that's all.
124 I. Right. And how long did you spend each time you went up there?
125 S. About half an hour.
126 I. What about the very first time you went up there, what happened then?
127 S. We sat down and had a discussion, and she explained things, wrote down all the....different things
128 like, you know?
129 I. What, for example?
130 S. Um, er, who sent me and why. I explained where the problem was and that, you know. And she
131 done an analysis like, you know, and she done a little bit of treatment, but not a lot, then I went back
132 about 3 or 4 days after.
133 I. Did you feel that was a long enough length of time to have your treatment, half an hour?
134 S. Yes, yes, because when she explained, and she done it, you know, after half an hour your neck and
135 you back 'knew', as I say, but on the morning, then er, you realise that you're a lot better than you was
136 the night before.
137 I. Right,. Now, you mentioned about the appointment times that it was good you were seen when you
138 had the appointments. Before you had your physio the first time, did you expect to be seen on time?
139 S. No. Same as the other appointments, like, they tell everyone to come at the same hour, you know.
140 I. So were you surprised that you were actually seen when they said they would?
141 S. Well, yes, within 5 minutes you were seen to, with 5 minutes of that time.
142 I. And what about organising the appointments for you, how did they do that?
143 S. When you finished your appointment, you went outside and see the physio and looked through her
144 book, and said I've got these appointments, (I'll have you) coming up on Friday, I've got these 3
145 appointments, that are vacant. I've got one here for 3 o'clock, is that suitable? If not, we'll have to go
146 on the following day, like, you know, so she looked in the book and gave you the appointment she had
147 in the book.
148 I. And how did you feel about that?
149 S. Yes, it's.....that's, you know, if you've got that appointment and you know, and it suits you, it's
150 better than getting an appointment coming and realising that you've got to be somewhere else like, you
151 know.
152 I. So when she said she felt you were ready for discharge now, were you surprised about that, or did
153 you think, well yes, I'm ready to be discharged myself?
154 S. Well, I thought she would have discharged me on the 4th one, and um, she said no, I want to see
155 you again, and you'll find it was just over a week, (looks at appointment card) a fortnight, and I went
156 back for the last one, and that's when she said, like, you know, er....that's it then.
157 I. Why did you think you were ready after the fourth one?

158 S. Because, um....to me I was, er.....not 100% but I was 100% better than I was, and I thought she
159 can't do no more, she's done her best, and her best has done wonders, but, you know, she just tried for
160 that last, that last bit.

161 I. And did it actually make a difference, that last bit?

162 S. Um.....I don't really know....she went for....to make sure it.....stabilized, like, you know, and she
163 just gave me another session....and that was it, you know. She gave me instructions that if anything
164 is....to go straight back up there.

165 I. Right, right. And how do you feel about that sort of arrangement, that you could....

166 S. Fine, fine, you know. If....provided you've got that, you can go back up there for....if things have
167 gone a little bit haywire, you know.

168 I. Instead of having to go back to your doctor,

169 S. Yea, 'cos I (don't know if I) would have to go back through the doctor.

170 I. Now, you've had two sessions of physio, so you've had some experience now. Looking back would
171 there have been anything, from your point of view as a patient, that you would have changed, or you
172 would have preferred if they could have done that, or that or whatever?

173 S. Not really, um, because you don't know, do you. Er....see....I know you go to physiotherapy and
174 um, and they say, well we're going to put you on traction, and you think that's the right thing, you
175 know, so you don't really know all their other little....um...bits that they can use. Yea, I know once
176 when I went up there and I could hardly stand and (PT) put me on....a TENS machine, and that
177 worked wonders, you know, but only once I went on it, otherwise with (PT) it was always traction.
178 This young lady she never used traction once, it was all fingers, or fingers and hands, like, you know.

179 I. Right. Was there anything about the way you were dealt with in the sessions that you want to
180 comment on?

181 S. No, not really. You went up there and they called you in, and you were seen to virtually straight
182 away, kind of thing, you know. I couldn't condemn nothing, nothing they done to me. It was top of
183 the shop quite honestly.

184 I. So, on a 0-10 scale, for example on a satisfaction scale, if 0 is very dissatisfied and 10 is very
185 satisfied, what number would you give do you think?

186 S. I'd give them a 9. 8 or 9, no hesitation.

187 I. So if it was 8 you were giving 8, what were the 2 out of 10 that were not so satisfactory?

188 S. Not really. It's hard to give someone an excellent if you know what's () Not really, um, to me they
189 was very, very good, you know, both of them really.

190 I. So, satisfaction for you meant what, exactly?

191 S. Satisfaction, um.....they done what I went there for them to do, er, ease the pain and stiffness in the
192 neck mostly, and they done it.

193 I. Now, from a patient's point of view is there anything else from your experiences of your treatment,
194 that you think it would be useful for us to know, as people who are trying to deliver a service?

195 S.

196 I. Just think about it for a moment.

197 S. Yea, um.....I don't really know. AS I say, um.....I don't know what physiotherapy
198 um.....

199 I. No, but you can just say if there are other things that, you think, it would be useful that we did, even
200 if you don't know what physiotherapy could offer.

201 S. Yea, I thought it was.....um.....it seemed a lot easier when she used her fingers than to sit there
202 and have your neck stretched, you know. It seemed, er....you know, because when you sit on that
203 machine it seemed hours although it was only 10 minutes, you know. Other than that, they done what
204 they thought was right, and it proved to be right, you know what I mean? The both got there in the
205 end, they both got the same result.

206 I. What about how long you had to wait before you had your first treatment? Did you have to wait a
207 long time?

208 S. Yea, that, that could be....yea. I don't know if you could hurry that up,
209 you know, that's....

210 I How long did you have to wait?

211 S.The first time.....um, booked in the first time, down the, um, Clinic in () and
212 they said we'll send for you. And I had a phone call from physio, like to say can I come in on, but it
213 had to be 2 months, or over.

214 I. And what about the second time?

215 S. The second time, the same thing, actually.I went to see Rheumatology and I thought they'd forgotten
216 about me and that was another 2 months before I had my physio. you know, but once you seem to be
217 on the books for physio you're....you're... mind you, as I say, um, I don't know how many
218 physiotherapists are there, but they're all, all busy all the time, so the only way they could have got it
219 down was to get more physios.

220 I. OK, is there anything else you would like to tell me?

221 S. Not really, as I say, I was well pleased with the way I was treated, and, you know,
222 I Did you feel you could talk to your physiotherapist easily, ask her anything?

223 S. Yes, you know, anything you wanted explaining, they would explain anything, and that was it, you
224 know. But it was better with her....because she was hands on....and you was talking to her and she
225 was explaining things, and asking you while she was doing it, but then with....the traction you're put
226 on traction then they go away and treat someone else, and they come back when, when the, er, buzzer
227 went, you know, so....you, you....you're not really, you're hardly really with them, you're just someone
228 sitting in a corner.

229 I. Not so much contact?

230 S. No, no contact that way. So I suppose it was better, the second time with (PT) with the hands on
231 and she was twisting me neck and pulling me neck, and you know, to me she got the same result, you
232 know.

233 I. Alright, then if there's nothing else, thank you very much.

APPENDIX 2.

2.3 Sample of coding sheets following content analysis of developmental interviews $n=8$

Key: The first number of the column identifies the transcript
The second number indicates the transcript line number
A = acute subject C = chronic subject

Perception/rationalisation of the problem.

1. 32. I just assumed it must be alright (A)
1. 10. The hand was practically useless..... I couldn't grip. (A) .
1. 51. (The hand) needed professional manipulation (A)
1. 41. I thought when I had the cast off..... it would be stiff but loosen up (A)
2. 13. Can't walk properly...can't run...I've got two bad (knees) now (C)
2. 60. I knew they couldn't do nothing for my knees (C)
3. 26. The dizzines.... made me go to see the doctor (C)
- 3.253. (Symptoms were) pain, aches and bones 'cracking' (C)
4. 28. I just took it, it was age (C)
4. 42. It's something that I've got to live with it (C)
4. 78. (I said what are you on about) never had no pain nothing (till accident) (C)
4. 96. I know it can't be cured (C)
5. 60. If it was on the other side I thought it was my heart (C)
5. 61. Thought it was my kidneys (C)
5. 62. It frightened me (C)
5. 55. Didn't know if it was a cold (C)
6. 4. I didn't think you'd get physiotherapy for that (# finger) (A)
6. 6. I thought they'd just take the plaster off and it would work (A)
6. 6. (As I've never had anything broken before) I assumed it would be better (A)
6. 9. It's only a dislocated finger (A)
6. 24. The trouble was there was no movement in the fingers (A)
6. 57. I thought in the end with use it would go completely back (to normal) (A)
7. 27. I couldn't use my arm to carry things..it was uncomfortable and awkward (C)
7. 42. Whether a nerve had stuck and needed moving (C)
- 7.198. They say it's your age..your bones start to get abit crumbly (C)
- 7.247. Rather wait and see (C)
8. 44. I know it's not going to improve (in that it can) be cured (C)
- 8.252. I'm not saying I know exactly what's going on (C)
- 8.252. After a few years you do have an idea when things are not good (C)

Expectations of treatment.

1. 53. Someone who knew what to do without causing distress (A)
1. 54. Help you feel confident (A)
- 1.159. Never having had PT before I didn't know how it worked (A)
1. 6. I thought it would involve pain (A)
1. 13. Hoped (PT) would get it going (A)
- 1.129. Important to get back to normality (A)
1. 15 .Not knowing about PT I thought (recovery of) 100%
1. 24. (I) expected to be referred to PT by my GP (C)
1. 52. I expected or hoped for some help with my back (C)
1. 65. I hoped the back would get better so I could do the knee exercises (C)
- 1.204. I wouldn't have been surprised to be put on some (equipment) (C)
- 1.205. (Because the Dr. said) I was expecting I might have had some other treatment.
(C)
- 1.210. I was only hoping I didn't get on this traction thing (my son didn't like it) (C)
- 1.232. If I had got worse I suppose I might have one on those other things (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

Expectations of treatment (cont.)

- 2.147. A lot of people come to hospital and their worst enemy is fear (C)
- 3.148. I go and see my Dr. and my BP goes right up (C)
- 3.157. It's fear of the unknown (C)
- 3.186. If someone's discharged but still has the complaint make a follow up to check (C)
- 3.217. I wouldn't know what I would want (C)
- 3.218. I expect people to tell me (C) .
- 3. 67. I thought the treatment would get rid of it (C)
- 3.131. Nothing frightening (C)
- 3.220. Whatever comes I'm satisfied (C)
- 4. 89. (Hoping for) more movement in my neck because it was stiff (and painful) (C)
- 4.175. You don't know all the other little bits they can use (C)
- 5. 66. I didn't know what they were going to do (C)
- 5. 68. Whatever they wanted to do I would have let them because it was so painful (C)
- 5.156. I wouldn't have known what to do (on my own) really (C)
- 6. 9. I was surprised to have 10 lots of PT for it (finger) (A)
- 6. 36. As long as you can get a reasonable grip its not so bad (A)
- 6. 71. I wasn't sure what to expect (A)
- 6. 72. Basically it was what you would expect (A)
- 6. 73. Really it's obvious what they would do (A)
- 6.201. I just wanted to get it better (A)
- 6.202. I wasn't interested in the ins and outs (A)
- 6.141. My attitude was as long as you can get it better (A)
- 6. 57. I thought it would eventually go completely back (the fingers) (A)
- 7. 42. I expected some sort of relief from it (C)
- 7. 46. I didn't expect it to get completely better (C)
- 7. 7. Thought PT would be similar to osteopath (C)
- 7. 10. Thought PT would be more intense (C)
- 7. 14. PT didn't last as long as osteopath (C)
- 7.114. The (PT) is trained to do it (treatment) you get on and do it (C)
- 7.167. PT could have gone on longer (C)
- 8. 42. All I really want is for somebody to help me manage this problem (C)
- 8. 45. I just want to be able to manage it so I can live my life around it (C)
- 8. 64. I know there's something wrong and with a bit of PT I might get on top of it (C)
- 8. 77. I wanted to be shown the best way of exercising (C)
- 8. 78. I needed somebody to guide me (C)
- 8. 80. I needed to knowsomebody was able to say, don't do those, but try this (C)
- 8.202. I was surprised (at the number of treatments per week) (C)
- 8.222. I was very surprised I got as much (treatment) as I did (C)
- 8.270. When you're in pain you seek anything to try and relieve yourself (C)
- 8.204. (Expecting) to be seen once a week not more (C)

Perceptions of treatment

- 1.143. I thought I'd be coming more than I did (A)
- 1. 69. If things didn't help at first....you realised they weren't useless (A)
- 1.172. Obvious she was doing a good job by getting more movement each time (A) .
- 2.140. (Half an hour was about right) because I don't know what else she could have done (C)
- 2.220. I think she covered all I could think of anyway (C)
- 2. 90. The exercises (helped most) I was well pleased with that (C)
- 3. 97. She was trying to remove the pain (C)
- 3.103. She used to make me do the exercises (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

Perceptions of treatment (cont.)

- 3.107. It actually works (C)
- 3.157. You knew what was coming (C)
- 3.130. Basically it was exercises then the massage came after (C)
- 4. 86. She actually done wonders (C)
- 4.201. It seemed a lot easier when she used her fingers than to sit there and have your neck stretched (C)
- 4.202. When you sit on that machine it seems hours (C)
- 4.224. It was better with her because it was hands on (C)
- 4. 99. Seemed to ache that night but next morning felt a lot better (C)
- 4.224. You're put on traction then they go away, you're just someone sitting in a corner (C)
- 5. 77. Didn't think at first it was doing anything (C)
- 5.136. Exercises I'm having are the first for years, so that's right (C)
- 5.101. Some things, I thought this is going to do nothing (C)
- 5.105. They know what they're talking about (C)
- 5. 94. She done me some good (C)
- 5.122. I thought it was long enough (C)
- 5.123. If longer you get bored (C)
- 5.124. What she was doing I enjoyed that (C)
- 5.162. Thought PT was for arms and legs not around there (chest) (C)
- 5.194. I've been treated well (C)
- 5.195. Everything they said they done (C)
- 5.164. I thought what treatment could they give me for this (C)
- 5. 76. All the exercises she done me I didn't think at first it was doing anything (C)
- 5. 77. She told me I must do them myself (C)
- 5. 80. Every time I came up it was getting better (C)
- 6. 74. I was surprised you needed 9 treatments for a broken finger (A)
- 6. 93. All she really did was come back and see if it had got better (A)
- 6.150. They did everything they could (A)
- 6. 151. I thought it was reasonable (A)
- 7. 14. Different type of thing to the osteopath (C)
- 7. 72. The pulling seemed to make it feel better (C)
- 7. 25. PT had to sort the problem out (C)
- 7.116. It's not very comfortable having your neck pulled (is it really necessary?) (C)
- 7.131. Accepted what PT would do in treatment (C)
- 7. 88. Felt PT felt she had done enough (C)
- 7. 87. They can only do a certain amount of work on you (C)
- 7. 88. They know how far they can go (C).
- 8.100. (We) worked together to find something that worked for me (C)
- 8.157. I think the first two tractions helped (C)
- 8.181. I just go with my instincts I think that's a very good guideline (C)
- 8.194. (The exercises) just reinforced what I knew (C)
- 8.195. Confirmed that it (exercise) can help (C)
- 8.229. If you feel people are confident...they actually know what they're doing (C)
- 8.232. If it's negative, the attitude, it doesn't help the situation (C)

Information required

- 1.168. I didn't learn about the break until I asked the therapist (A)
- 1.150. I ask questions (C)
- 3. 39. I asked my doctor (C)
- 3. 39. I learned little things myself (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

Information required (cont.)

- 7.228. Not everybody knows all parts of the body (C)
- 7.208. Some people need more explanation (not necessarily old people) (C)
- 7.223. Say it in plain English (C)
- 7.237. Don't want too much (information) (C)
- 7.249. Not too specific (C)
- 7.261. I don't like people going into details particularly medical or surgical (C)
- 8.137. If I don't understand I will ask (C)
- 8.136. Please explain what's going on (C)
- 8.173. I have the right to be told exactly what's going to happen (to my body) (C)
- 8.135. I tend to get hold of things and read them, I need to know (C)

Information received

- 1. 66. Very helpful being given a sheet of exercises (A)
- 1. 98. (PT said) tight feelings I may never loose (A)
- 1. 34. (The doctor) did say I had RSD (A)
- 2.194. Knowing I could carry on at home doing the exercises, that was better (C)
- 2.104. PT said you've got some arthritis of the spine (C)
- 2. 35. Dr. said I had arthritis in more or less everything (C)
- 2.100. (About the condition) I wasn't really taking that in (C)
- 2.108. Each time I took a pamphlet from the rack...I thought very handy (C).
- 2.122. I asked the PT (about bone scan) and she explained what Dr. was talking about (C)
- 2.113. I found out you get good and bad days (from the pamphlets) (C)
- 3. 69. The PT explained to me what it was (C)
- 3. 69. (About the condition) It doesn't get better (C)
- 3. 70. (About the condition) We know we've got to live with it (C)
- 3.140. (About the condition) Knowing you've got it , nothing's wrong (C)
- 3.141. You've got to exercise and that's it (C)
- 3.142. She told me to do these things (C)
- 3.144. If someone can tell me ...they can't cure it but can relieve it, that's good (C)
- 4.115. She explained what she was going to do (C)
- 4.120. She said you were stiff (C)
- 4.122. When she discharged me she said carry on with them things (C)
- 5. 89. She told me not to overdo it (C)
- 5. 96. She told me I had a lot of stress (C)
- 5.136. I think I learned more from the lady than from the doctor (C)
- 5.214. (She told me) what to do if it comes back (go to GP) (C)
- 5.189. She explained things (C)
- 5. 89. I exactly know what to do (C)
- 6. 61. You have to know how to exercise it only when they tell you (A)
- 6. 85. I was told by the Doctor when you get home practice with your fingers (A)
- 7. 89. (PT told me) if i needed to go back, get in touch (C)
- 7.124. She did say what she would be doing and how it would work (C)

Compliance

- 1. 66. If advice come along, follow that (A)
- 2.145. I was doing at home what she showed me there (C)
- 3. 57. I do the exercises they told me, basically (pain) goes (C)
- 3.142. It's your choice if you do them, you get rid of the pain (C)
- 6. 65. After a while you really have to do it yourself (A)
- 6. 67. The more you practice the better (it) becomes (A)
- 7. 87. It's not only 20 mins. they're giving, don't think that's it for one week (A)
- 7.255. I haven't always got time to do exercises (C)
- 8.195. By continuing it does alleviate some of the pain (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

Outcome

- 1. 58. (I expected) perhaps the hand would be misshapen (A)
- 1. 95. 90% better (A)
- 1. 97. (but) still can't shut my hand (A)
- 2. 16. It was a lot better once I'd finished (C)
- 3.250. (Satisfied because) I went in with a complaint and came out happy (C)
- 3.252. It solved my problems (C)
- 3.258.10 out of 10 it was terrific for me (C)
- 4.191.They done what I went there for them to do (ease the pain and stiffness in the neck) (C)
- 4. 30. I should imagine I'm 1,000 times better in the neck and joints (C)
- 4.111. What she done had the effect (C)
- 4.112. Done the trick (C)
- 4.158. I was not 100% but 100% better than I was (C)
- 4.159. I thought she can't do more (C)
- 5.148. I feel 100% to when I first came here (C)
- 5.174. I would give it 10 (out of 10) because I am satisfied (C)
- 5. 64. Physio cleared it (C)
- 5. 94.The lady who done it, she done me good (C).
- 6.147. I don't think there's anything to be dissatisfied with, I suppose you could say that's 10 out of 10 (A)
- 7. 99. I've got used to it (C).
- 7.101. I'm not as good as my normal (C)
- 7.101. 8 out of 10 (C)
- 7.167. I felt it may have gone on a bit longer....another 2 weeks or so (C)
- 7.178. The only good part about it, I could get back in touch (C)
- 8.156. I wasn't so disappointed because it relieved a lot of the pain (C)
- 8.157. It's relieved a lot of the pain I had sitting (C)
- 8.242. (8 out of 10) because of waiting 8 weeks for an appointment (C)

Therapist

- 1.175. She was very competent obviously,(knew her job, was able to do it without causing any real pain) (A)
- 4.159. She's done her best (C)
- 4.159. She just tried for that last bit (C)
- 5.106. She was very good, very good, the lady I see (C)
- 5.189. She spoke to me very nice (C)
- 7.120. I felt she knew what she was doing (C)
- 8.100. She took on board what I said (C)
- 8.131. (Having different PTs was fine) they knew what they were doing (C)
- 8.191. They were concerned enough about me (C)
- 8.192. They wanted to do their best (C)

Perception of physiotherapy

- 3.124. People think PT is moving bones and massaging things (C)
- 5.162. I thought PT was for your arms and legs and all that, not for (chest) (C)
- 6. 4. I didn't think you'd get physiotherapy for that (# finger)

System

- 1.114. Appointment times to suit yourself (A)
- 1.114. One to one therapist all the time (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

System (cont.)

- 1.116. When therapist has a week off so do you (A)
- 1.143. I thought I would be coming more than I did
- 1.146. About 1 hour a time (A)
- 2. 51. I thought I'd got forgotten...particularly getting appointment for specialist first (C)
- 2. 77. Therapist was on holiday for one week which set me back a fortnight (C)
- 2.181. I had (treatment) one to one (C)
- 2.187. You get used to one person (C)
- 3. 90. I went once a week for treatment (C)
- 3.163. I understand why I had to wait 10 weeks to see a therapist (DNA notice in Dept.) (C)
- 3.229. (Seen) within a couple of minutes (C).....
- 3. 49. I waited 8-9 weeks for PT (C)
- 4.107. I thought (the treatment) was efficient, come at 2.00 seen at 2.00 (C)
- 4.150. If you've got an appointment and it suits you better than one coming (in the post which may not) (C)
- 4.215. I thought they'd forgotten about me (2 months before appointment received) (C)
- 4.218. They're all busy all the time (C)
- 4.218. The only way to get the wait down is to get more physios (C)
- 4.141. Seen within 5 minutes (C)
- 5.182. I knew I'd be in here 1.0 and out at 1.30, no hanging around (C)
- 5.185. I didn't have to wait (for treatment) (C)
- 5.206. Takes a long time to get an appointment (C)
- 5.223. Timing was perfect (C).....
- 5.224. When you phone (you) get straight through (C)
- 5.225. (Staff) go out of their way to get the therapist (for you) (C)
- 5.228. (Staff) always seem to help (C)
- 6.158. Any other service in the hospital they say 10.30 but it doesn't mean 10.30 (A)
- 6.161. (Having an appt. on time) is important because you can go to work (A)
- 6.171. You see the same person all the time (A)
- 6.124. With physio (appointment's) dead on, if it's 8.30, it's 8.30. (A)
- 7.142. I was just expecting once a week (C)
- 7.183. There wasn't that hanging about for hours before she saw me (C)
- 8.242. Waiting 8 weeks for an appointment at the onset (was unsatisfactory) (C)
- 8.244. It would be nice if I could call on PT when and if I needed it (C)
- 8.204. Expecting 1 a week, surprised to get 2 a week because they were fully booked (C)
- 8.290. I never had one cancelled appointment (C)

Information from doctor

- 1. 31. All he said was I needed physio (A)
- 3. 34. My GP is quite good, he said it was cervical spondylosis (C)
- 4. 68. They said there's deterioration, like you know, arthritis (C)
- 5.128. The doctor said (the condition) could be (due to) a number of things (C)
- 6. 34. They said they didn't think I'd get full use back (A)

Value of treatment (keeping appointments)

- 1. 91. If possible I would have cancelled any appointment rather than therapy (A)
- 2.129. (Not cancel) unless there was something up at the hospital to do with it (C)
- 3.164. If I've got an appointment I keep it unless something's desperately wrong (C)

2.3 Sample of coding sheets following content analysis of developmental interviews (cont.)

Value of treatment (cont.)

- 5. 82. (If I'm better) someone else could be coming and having treatment (C)
- 5.206. I know how precious it is, it takes a long time to get your (appt.) (C)
- 6.128. (If you have to cancel) you can always phone and rearrange it (A)
- 7. 80. It would have had to be something really bad for me to cancel (C)
- 7. 80. I just don't like cancelling things (C)
- 8.167. (Treatment is a priority) I don't believe in messing things around (C)

Access

- 6.105. I only work 5-10 mills. from here, more awkward if I worked outside the borough (A)
- 7. 31. The only problem was getting there and coming back (C)
- 7.167. The only trouble was trying to find the physio (C)
- 7.137. Made it much easier to go to the surgery (than up to hospital) (C)

APPENDIX 2.

2.4 Peer review of statements by subjects attributed to principal categories following content analysis of the developmental interview transcripts.

Copies of the coding sheets on which all respondents' statements relating to each of the 13 emergent category headings were submitted to 4 judges for peer review. Their instructions were to;

- Read through the coding sheets and identify any statement(s) that was not representative of the principal category heading
- Indicate to which other category the identified statement best belongs and write this on the sheet next to the statement
- Add any additional comments as necessary

1. Perception/rationalisation of the problem

Of 31 statements grouped under this category 94% agreement was reached with alternative categorisation suggested for the following statements.

2 statements → Perception of physiotherapy

- I didn't think you'd get physiotherapy for that (# finger) (mentioned by 2 judges)
- The only thing you can do is practice with your fingers

2. Expectations of treatment

Of 55 statements grouped under this category there was 75% agreement, with suggestions for alternative grouping of the following statements.

4 statements → Information required

- A lot of people come to hospital and their worst enemy is fear
- It's fear of the unknown
- I expect people to tell me
- I wouldn't have known what to do (on my own) really

4 statements → System

- If someone's discharged but still has the complaint make a follow-up to check
- (Means) you're not forgotten as a patient
- Gives patient more faith in what he's doing
- I was surprised at the number of treatments per week

3 statements → Perception of problem

- I was surprised to have 10 lots of physiotherapy for it (finger)
- As long as you can get a reasonable grip its not so bad
- I thought it would eventually go completely back (fingers)

1 statement → Perception of treatment

- I was surprised I got as much (treatment) as I did

1 statement → Outcome

- I just want to be able to manage it so I can live my life around it

2.4 Peer review of statements by subjects attributed to principal categories following content analysis of the developmental interview transcripts (cont.)

3. *Perceptions of treatment*

Of 54 statements in this category there was 80% agreement with suggestions for alternative categorisation of the following statements.

4 statements → *Outcome*

- After the day wore on and the next day I could feel the difference
- Seemed to ache that night but next morning felt a lot better
- She done me some good
- Every time I came it was getting better

4 statements → *Therapist*

- She used to make me do the exercises
- They know what they're talking about
- They did everything they could
- If you feel people are confident...they actually know what they're doing

2 statements → *Expectations*

- I was surprised you needed 9 treatments for a broken finger
- PT had to sort the problem out

1 statement → *Information (required)*

- I think she covered all I could think of anyway

4. *Information required*

There was 100% agreement with 18 statements under this category

5. *Information received*

There was more ambiguity here between *what* was told and how this affected the subject's perception of their problem *as a result* of what was told. Also the effect of the information received on what would happen during treatment. But general logical links can be seen between the researcher's interpretation and the judges' suggestions. Of 31 statements relating to information received there was 55% agreement, with alternative categorisation of the following statements.

6 statements → *Perception of problem*

- (About the condition) It doesn't get better
- (About the condition) We know we've got to live with it (mentioned by 2 judges)
- (About the condition) Because I knew exactly what it was (mentioned by 2 judges)
- (About the condition) Knowing you've got it, nothing's wrong
- You've got to exercise and that's it (also under next section)
- I exactly know what to do

4 statements → *Perception of treatment*

- She explained what she was going to do
- She explained things
- She did say what she would be doing and how it would work
- You've got to exercise and that's it (also under previous section)

2.4 Peer review of statements by subjects attributed to principal categories following content analysis of the developmental interview transcripts (cont.)

5. Information received (cont.)

1 statement → information from doctor

- I was told by the doctor, when you get home practice with your fingers

1 statement → System

- (PT told me) if I needed to go back, get in touch

6. Compliance

Of 9 statements in this category there was 56% agreement with alternative categorisation suggested for the following statements.

3 statements → Perception of treatment

- After a while you really have to do it yourself (mentioned by 2 judges)
- The more you practice the better it becomes (mentioned by 2 judges)
- It's not only 20minutes they're giving, don't think that's it for 1 week

1 statement → Outcome

- By continuing it does alleviate some of the pain

7. Outcome

Of 22 statements there was 68% agreement with alternative suggestions for the following statements.

4 statements → Perception (of treatment)

- 8 out of 10, I felt it may have gone on a bit longer....another 2 weeks or so
- I wasn't so disappointed because it relieved a lot of the pain
- It's relieved a lot of the pain I had sitting
- 8 out of 10 because of waiting 8 weeks for an appointment

1 statement → Information

- (I expected) perhaps the hand would be misshapen

1 statement → System

- The only good part about it I could get back in touch

1 statement → Therapist/Perception

- I was not 100% but 100% better than I was, I thought she can't do more

8. Therapist

There was 82% agreement with 11 statements relating to the therapist, with suggestions for alternative categorisation of the following statements. There was a logical link between the subject's perception of the therapist in order to make a value judgement.

2.4 Peer review of statements by subjects attributed to principal categories following content analysis of the developmental interview transcripts (cont.)

8. *Therapist (cont.)*

2 statements → Perception

- She's done her best
- She just tried for that last bit

9. *Perception of physiotherapy*

There was 100% agreement with the 3 statements in this category

10. *System (Organisation of treatment)*

Of 36 statements in this category there was 92% agreement, with suggestions for alternative categorisation of the following statements.

2 statements → Perception

- I thought I'd got forgotten...particularly getting appointment for specialist first
- Therapist was on holiday for 1 week which set me back a fortnight

1 statement → Therapist

- You get used to one person

11. *Information from Doctor*

There was 100% agreement with the 5 statements in this category, however there is a need to clearly identify the information received from the doctor and that from the therapist in future interviews.

12. *Value of treatment*

Subjects were asked how they would prioritise their appointment for physiotherapy thereby giving an indication of the importance of physiotherapy for them. There was an 88% agreement with 8 statements in this category with suggestions for alternative categorisation of the following statements.

1 statement → System

- (if you have to cancel) you can always phone and rearrange it (mentioned by 2 judges)

13. *Access*

There was 100% agreement with the 4 statements in this category

APPENDIX 2.

2.5 Developmental interviews matrix charts. 1) Responses under the category heading Perception of Problem n= 8

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Acute. Fear of arthritis Chronic. Resignation because of age.		I knew they couldn't do nothing (2) 60 I just took it, it was age (4) 28 I know its not going to improve (8) 44	They say its your age (7) 198
ADL. Loss of function	The hand was practically useless, I couldn't grip (1) 10 There was no movement in the fingers (6) 24	Can't walk properly, can't run (2) 13	I couldn't use my arm to carry things (7) 27
Symptoms		So painful I couldn't move (2) 13 No pain till the accident (4) 78 Couldn't make out what it was (chest pain) ? kidneys (5) 61	Dizziness, pains, aches and bones cracking (3) 26
Initial thoughts on what will happen next	The hand needed professional manipulation (1) 51	After a few years you have an idea when things are not good (8) 252	Whether a nerve had stuck and needed moving....but rather wait and see (7) 42
Outlook. Assumptions re. Prognosis.	I thought when the POP off it would be stiff but loosen off (1) 41 I thought they would take off the POP & it would work (6) 6		

Key to all matrix charts:

- i) Score e.g. n=8 (top of chart) indicates number of interviewees who commented out of a possible maximum n = 8 on the category.
- ii) Numbers in brackets indicate the transcript number, with the number following identifying the transcript line number

2.5 Developmental interviews matrix charts (cont.) ii) Responses under the category heading Expectations of Treatment n=8

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Acute. Recovery Chronic. Relief of symptoms	Hoped PT would get it going/ I thought 100% recovery (1) 13 I just wanted to get it better (6) 201	I expected or hoped for some help with my back but not with my knees (2) 62 Hoping for movement in neck / it was stiff & painful (4) 89 Just wanted to manage it so I can live my life around it (8) 45	I thought the treatment would get rid of the symptoms (3) 67 I expected some sort of relief from the pain, I didn't expect it to get completely better (7) 42
PT treatment 'an open book' What it would involve	I wasn't sure what to expect (6) 71 Never having had PT I didn't know how it worked (1) 159	You don't know all the other little bits they can use (4) 175 I didn't know what they were going to do to relieve the pain (5) 66 I wouldn't have been surprised to have been put on some equipment (2) 204	I wouldn't know what I would want (3) 217 Thought PT would be similar but more intense than osteopath (7) 7
Anticipate treatment will be painful	I thought it would involve pain (1) 6	I needed to know which exercises cause pain ...don't do them (8) 80	
Return to normality	Important to get back to normality (1) 129 I thought it would eventually go completely back (6) 57		
Compassion in treatment	Someone who knew what to do without causing distress (1) 53		Nothing frightening (3) 131
Organisation of treatment		Expecting to be seen once a week not more (8) 204	

2.5 Developmental interviews matrix charts (cont.) iii) Responses under the category heading Perceptions of Treatment n=8

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Therapist's Input	Obvious she was doing a good job by getting more movement each time (1) 172 They did everything they could (6) 150	I think she covered all I could think of (2) 220 She actually done wonders, I thought she can't do more (4) 86 She done me some good (5) 94 30' was right, because I don't know what else she could have done (2) 140 I thought it was long enough (5) 122	It actually works (3) 107 Felt PT felt she had done enough (7) 88
Length of treatment session	I thought I'd be coming more than I did....about 1 hour a time (1) 143		They can only do a certain amount of work on you (7) 87
Most helpful modality	Manipulation of the wrist and exercises (1) 65/66 Exercises (6) 56	The exercises helped most (2) 90 Exercises I'm having are the first for years so that's right (5) 136 Confirmed exercises can help (8) 195	(She gave me) exercises (3) 109
Scepticism	If things didn't help at first you realised they weren't useless (1) 69	Didn't think at first it was doing anything (5) 77	
Benefit of treatment	The more you practice the better it becomes (6) 67 Exercises helped to strengthen the fingers (1) 74	Seemed to ache that night but next am. felt a lot better (4) 99 Seemed a lot easier when she used her fingers than to have your neck stretched (4) 201 Every time I came up it was getting better (5) 80 What she was doing I enjoyed that (?exs/mobs) (5) 124 I think the first two tractions helped (8) 157	The pulling seemed to make it feel better.... But wasn't comfortable (7) 72 She used to push your discs...it made the pain go (3) 110/111
Number of attendances	I was surprised to have 10 lots of PT for my finger (6) I thought I would be coming more often (1)	I was surprised at the number of treatments per week (8) 204	Seen once a week for 3 weeks as expected (7) 146 Seen 5 times and satisfied because of improvement with treatment (3) 245

2.5 Developmental interviews matrix charts (cont.) iv) Responses under the category heading Information Received n=8

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Explanations of procedure / Problem. ? Education		She said we can't do anything for the knees, but we'll see if we can do something for the back (2) 61 She explained what she was going to do (4) 115 She explained things (5) 189	She did say what she was doing and how it would work (7) 124 She said she was going to try and relieve the pain (3) 142/143
Instructions on exercise	Very helpful being given a sheet of exercises (1) 66 You have to know how to exercise it only when they tell you (6) 61	Knowing I could carry on at home doing exercises that was better (2) 194 When she discharged me she said carry on with the exercises (4) 122	She told me to do these things (exercises) (3) 142
Explanation of symptoms (from PT)	PT said the tight feeling I may never loose (1) 98	PT said you've got some arthritis of the spine (2) 104 She said, you were stiff (4) 120 She told me I had a lot of stress (5) 96	PT explained to me what the problem was (3) 69
Explanation of problem (from Dr.)	They said they didn't think I'd get full use back in the finger (6) 34	They said there is deterioration, like arthritis (4) 68 Dr. said the condition could be (due to) a number of things (5) 128	My GP is quite good, he said it was C. Spond. (3) 34
Explanation of symptoms (from Dr.)	Dr. did say I had RSD (1) 34	Dr. said I had arthritis in more or less everything (2) 35 Explanation from the specialist (8) 25	

2.5 Developmental interviews matrix charts (cont.) v) Responses under the category heading Information Required n=5

Subcategory	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
'Patient pro-active'	I didn't learn about the break until I asked the PT (1) 168	If I don't understand I will ask (8) 137 I asked PT about bone scan and she explained what the Dr. was talking about (2) 122	I ask questions (3) 150 Don't want too much info. (7) 237

2.5 Developmental interviews matrix charts (cont.) vi) Responses under the category heading Compliance n=6

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Instruction	If advice come along follow that (1) 66 The more you practice the better it becomes (6) 67	I was doing at home what she showed me there (2) 145 By continuing, it does alleviate some of the pain (8) 195	I do the exercises they told me, basically the pain goes (3) 57 I haven't always got time to do the exercises (7) 255

2.5 Developmental interviews matrix charts (cont.) vii) Responses under the category heading Perception of Physiotherapy n= 3

Subcategory	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Patients' own ideas	I didn't think you'd get PT for that (# finger) (6) 4	I thought PT was for arms and legs not for chest (5) 162	People think PT is moving bones and massaging things (3) 124

2.5 Developmental interviews matrix charts (cont.) viii) Responses under the category heading Perception of the Therapist n = 5

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
'Competence'	She was very competent, obviously knew her job, was able to do it without causing any pain (1) 175	Having different PTs was fine they knew what they were doing (8) 131	I felt she knew what she was doing (7) 120
'Manner'		She was very good, very good the lady I see...she spoke to me very nice (5) 106	
'Quality of care'		She's done her best (4) 159 They wanted to do their best (8) 192	
'Respect / interest'		They were concerned enough about me (8) 191	

2.5 Developmental Interviews matrix charts (cont.) ix) Responses under the category heading System n= 8

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Punctuality	With PT it's dead on, if it's 8.30 it's 8.30 (6) 124	I thought treatment was efficient, come at 2.00 seen at 2.00 (4) 107 I knew I'd be here 1.00 out at 1.30 no hanging around (5) 182	(Seen) in a couple of minutes (3) 229 There wasn't that hanging around for hours before she saw me (7) 183
Waiting for appointment		I thought I'd got forgottenparticularly as I got an appointment for specialist first (2) 51 I thought they'd forgotten me (2 months before appointment received) (4) 215 Takes a long time to get an appointment (5) 206 Waiting 8 weeks for an appointment (was unsatisfactory) (8) 242	I waited 8-9 weeks for Pt (3) 49
Frequency of attendance		Expecting once a week, surprised to get twice a week because fully booked (8) 204 I had some idea I'd be coming 2/3 times a week (from previous treatment) (5) 114	I went once a week for treatment (3) 90 I was just expecting once a week (7) 142
'One to one' treatment	One to one therapist all the time (1) 114 You see the same person all the time (6) 171	I had treatment one to one (2) 181	

2.5 Developmental interviews matrix charts (cont.) ix) Responses under the category heading System (cont.)

Subcategories	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Continuity	When the therapist has a week off so do you (1) 116	Therapist was on holiday for 1 week which sets me back 2 weeks (2) 77	
Negotiating appointment times	Obviously times to suit yourself (1) 114 She asked me what times would be best (6) 111 If you have to cancel you can phone and re-arrange (6) 128	If you've got an appointment that suits you better than one in the post (which may not) (4) 150 (she said) if you needed an appointment we'll see if we can fit it in (8) 210	
Discharge arrangements		She told me to go back to the GP if it comes back (5) 214	(Suggest) a 6 month follow-up would give the patient a little bit more faith in what he's doing (3) 142/143

2.5 Developmental interviews matrix charts (cont.) x) Responses under the category heading Access n = 4]

Subcategory	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Convenience	I only work 5-10 minutes from here, awkward if I worked outside the borough (6) 105	The only problem was getting there and back, and finding the Physio. Dept. (2) 31, 167 You get through straight away (when phoning the Dept.) (5) 224	Much easier to go to the GP surgery than up to the hospital for treatment (7) 137

2.5 Developmental Interviews matrix charts (cont.) xi) Responses under the category heading Result of Treatment n = 8

Subcategories	Acute. No Treatment	Chronic. Previous treatment	Chronic. No treatment
Acute: ROM Chronic: Symptom relief		They done what I went there for (to ease the pain & stiffness in the neck) (4) 191 Physio cleared it (5) 64 It relieved a lot of the pain I had sitting (8) 157 The back was a lot better (2) 16 I would give it 10/10 because I am satisfied (5) 174 8/10 because of waiting 8 weeks for an appointment (8) 242	It solved my problems (3) 252 I'm not as good as normal (7) 101
Overall satisfaction score	I don't think there's anything to be dissatisfied with, I suppose you would say 100% (6) 147	I was not 100%, but 100% better than I was (4) 158/9 I feel 100% to when I first came here (5) 148	10/10 it was terrific for me (3) 258 8/10 I felt it may have gone on a bit longer....2 weeks or so (7) 165,167
Rating of improvement	90% better (but) I still can't shut my hand (1) 95, 97		

2.5 Developmental Interviews matrix charts (cont.) xii) Responses under the category heading Value n = 6

Subcategory	Acute. No treatment	Chronic. Previous treatment	Chronic. No treatment
Value of treatment. Priority over other day to day issues	If possible I would have cancelled any appointment rather than therapy (1) 91	Would not cancel unless there was something up at the hospital (2) 29 I know how precious it is, it takes a long time to get your appointment (5) 206 (Treatment is a priority) I don't believe in messing around (8) 167	If I've got an appointment I keep it unless something's desperately wrong (3) 164 It would have had to be something really bad for me to cancel (7) 80

APPENDIX 2.

2.6 Sample transcript of focus group (acute subjects, n=10, suburban)

Key: Numbers 1-10 indicate the participants and the reason for attending physiotherapy

F= female M= male

R = researcher

1 # shoulder (F)

2. # wrist (F)

3. # upper arm (F)

4. Dislocated elbow (F)

5. # wrist (F)

6. Ruptured Achilles tendon (M)

7. Subluxed shoulder (F)

8. Double # ankle (F)

9. # ankle (F)

10. # arm (M)

1 R. To start off with, think back to when you got your appointment for physiotherapy, when
2 you were waiting to come to treatment, what were you feeling at that time, what went
3 through your mind as to what might be ahead of you in terms of the treatment you were
4 going to get.

5 I. Actually I was dreading it, it was painful, my shoulder was painful, I was rather dreading
6 it, but its amazing what a difference, straight away, you know. She put me at ease
7 because she said to me "Lie down", and that was what I feared because I couldn't put
8 any pressure on my shoulder .She lifts it up for me and puts it on a cushion. I thought this
9 is lovely this treatment, I know I'm going to get better, and she really assured me. I was
10 thankful, too, all the rest of the time I came. I think it was so necessary because you
11 were frightened because you were hurting, frightened to move different ways and it was
12 amazing the amount of things they told you to do and showed you that I was able to do but I
13 was frightened to do that at home until she had told me.

14 R. Was anyone else frightened of coming?

15 3. I was a bit scared of what was going to happen. I think I was apprehensive

16 R. What were you apprehensive about?

17 3. Because I thought it was actually going to hurt, the physiotherapy was going to hurt and
18 it didn't.

19 2. It did me

20 R. Did you think it was going to hurt you?

21 2. well I guessed it would because my hand was hurting so much. I had my wrist done in,
22 think it was September, and they took the plaster off five weeks after and I didn't have
23 any treatment until around February and I was in great pain all the time. I found the
24 treatment was good except that some of it, the working it, made it really bad. It's still
25 not better.

26 R. So if people weren't frightened about coming, what were your feelings about coming
27 before you started?

28 10. I just didn't know what to expect to be honest. I wasn't scared, I didn't think it
29 would hurt but I had no idea what they were going to do. I couldn't move my arm at all,
30 my muscle had wasted away and I had no idea how they were going to fix it. Obviously
31 it all unfolded and it was amazing how it all worked if you stick at your exercises, it got
32 better so quickly. But I can't say I was afraid – I didn't think it was going to hurt, I
33 didn't think they would make you do anything that would make you hurt yourself, but it
34 was a revelation.

35 R. Why did you think that it wouldn't hurt and where did you get that impression from?

36 10. I just didn't think they would do anything that was going to make you hurt yourself.
37 Obviously they make you do exercises, but steadily and they always said that pain is your
38 guide, if it ever hurts stop. So, no I didn't think it would hurt.

39 R. What other feelings did people have?

40 9. For me it was relief I couldn't walk so it was so it was someone to try and help me walk
41 again because I was still on crutches, and I think it was grateful that someone was going to
42 help you because it was so painful. Like this gentleman said what they do and how they
43 help you so quickly is I found really helpful.

44 8. I had been in plaster for four months and therefore my muscles had become terribly weak
45 and all I was looking forward to going to physiotherapy to get going again. I think I was
46 immediately given a few exercises to do and some dates to return to physiotherapy.
47 There was nothing strange about it and I knew very well what was going to happen.

48 5. I was the same actually. I was in plaster for eight weeks and I couldn't wait to get the
49 plaster off so I was looking forward to it and I found it a great help.

50 R. Had you any idea what was going to be ahead of you?

51 5. Not really, no.

52 4. I knew actually because I had been a couple of years before for different treatment, so I
53 knew what to expect.

54 R. How did knowing what to expect make a difference, because this was the second time
55 you had had treatment, compared with the first time?

56 4. The second, when I dislocated my elbow, because I am left-handed as well, just to be
57 able to stretch my arm out again was very good. The first lot of treatment I didn't feel
58 was any good at all.

59 R. No, but how did knowing what was likely to happen affect your treatment the second
60 time as you had experience of it before, did it make a difference?

61 4. Not really, no.

62 R. So it was a new experience again the second time –

63 4. Yes, it was a different part of my body.

64 6. I hadn't heard anything about what to expect. When the physio started I had had eight
65 weeks in plaster and had put no weight on my leg all that time, so I was looking forward

66 to getting some mobility back, that was the main loss. I hadn't suffered any pain really,
67 not with the injury or during the eight weeks, just loss of mobility was the problem.

68 R. Sometimes people hear other people talking about experiences they have had and it sort
69 of tends to colour your view. Had that happened to any of you, had you heard other people
70 speaking about what they had had done?

71 4. I was told I would probably never be able to straighten my arm again, by various people.
72 I can, almost.

73 7. I was the same as this lady, popped my elbow out, but I was luckier than most of you as I
74 didn't have any plaster or anything. I just had a chest sling. I fell down and knocked it
75 sideways.

76 3. I was going to say I thought the physiotherapy was going to be painful because when I
77 actually broke my arm at the shoulder I didn't have my arm in a plaster at all. And from
78 two days after I did it and I had to have an operation to put pins in to put it together, I
79 was told by the Consultant who did the operation that I must move it, that I must do
80 pendulum exercises and certain exercises, and they obviously hurt so soon after the actual
81 operation. So I expected progression from that, that the next lot would equally be as
82 painful.

83 R. So that is how you were expecting it to be?

84 3. Yes, but it wasn't.

85 R. All right. So moving on now to when you actually had the treatment and I would like
86 you now to discuss among yourselves, you don't have to direct your comments to me, it
87 would be quite helpful if you would talk to each other about how you perceived the
88 treatment experience as I call it. Your relationship with your therapist, what happened
89 to you, how you felt about it, what was going through your mind as the treatment
90 progressed in terms of your injury; those sorts of things. So your perspective and your
91 thought behind your comments in connection with the actual treatment you had. Some of
92 you had just a few sessions, some of you had many more sessions. Tell us what you
93 thought.

94 8. Did you have your treatment here?

95 6. Yes, I had treatment here.

96 8. Why were you in plaster for four months?

97 6. I think they had to, because they didn't operate on the tendon they just put me in plaster
98 with the toe pointing so that the tendon would heal by itself.

99 8. I wasn't pinned because I have osteoporosis and they couldn't touch me, and that was
100 really very bad. I had no pain, either, it just that you mobility gets completely lost.

101 R. I would think people had different ways of having their problems initially treated, but I
102 am more interested in you physiotherapy once you started to come up for your treatment.

103 5. I thought they were marvellous. I had two. One for about a month and then she left and
104 another one came in and they were both very good.

105 R. Can you explain why you felt like that, why you felt they were marvellous?

106 5. Well they made you feel at ease and they were very attentive, and I thought they were
107 really grand.

108 R. Attentive in what way?

109 5. Well if you weren't doing the exercise properly, they would come over and stand over
110 you and show you how to do it, they were very good.

111 7. I found the same, they were very, very good. I just had the one young lady, but she was
112 very, very good.

113 R. Explain a bit more what you mean by "good".

114 7. Well, she made me feel at ease and she just helped me with my arm, putting my arm on
115 the... gently stretch it

116 4.. Gently stretch it.....

117 7. Did you have a little machine? Oh, she put a little machine on my arm and that did
118 marvels for me. I thought so anyway. She was very, very kind.

119 4. What was the machine doing, then?

120 7. I think it was doing something to the muscle. It was something like a deep heat. I
121 couldn't feel it. She put some cream on and it was just going round and round.

122 ? I didn't get that one.

123 1. She joined in with everything. There were two others and myself and her and everything
124 we had to do she was doing, she was making us do it and she was doing it with us, every
125 stretch...every time I went well I can do it marvellous with my right hand but the bad one
126 was the left one and I felt as though I would hurt it, but she just said just gently do the
127 same as I am doing it. We kept going week after week and in next to no time we was
128 throwing a ball this way and that. It was fantastic I think the way she did it. I thought, I'm
129 sure I'm not doing myself harm because it was the ball joint, Mr () had told me
130 I wouldn't be able to put my arm straight up, and this is the hand I can practically get it up
131 now. The only thing I can't do, and that is to tie my pinny up at the back. When I put a
132 pinny on, I tie it here. I think it's a good thing, don't you? Either he ties the pinny up or he
133 does the work.

134 7. I don't have an excuse. I think she was very, very good.

135 R. So you were part of a group, a class?

136 7. Yes, there were two or three of us.

137 10 For the first month once a week was with a group and then on my own as well. I was
138 going in twice a week with the same physio. She was very caring and a good
139 communicator as well - got over exactly what she wanted to very well so you knew

140 exactly what you were doing at home with your exercises. Very good - it did the trick.
141 It worked very quickly. I got better very quickly.

142 R. Now that's an interesting point that has been raised about the communication side of the
143 therapy and you were saying that she demonstrated what you needed to do. Let's talk a
144 little bit about the communication aspect of the therapy because that can mean a lot of
145 things, communication.

146 3. Well I think it goes both ways because I felt that my physiotherapist asked all the
147 questions of me, how I was feeling, how it was going and then each week she would say
148 "How has it gone with the exercises, and she would tailor the exercises of that particular
149 week or for the next week or whatever, depending on how my exercises had gone and
150 how I was feeling and there was one period when I got very depressed because I didn't think
151 I was making any progress and so we targeted that particular area and it worked.
152 But each time she listened to what I had to say and then we worked on that. So from
153 that point of view she listened to what I was saying and I think that's quite important that
154 they do, that they listen to what you have to say and that they actually take notice of how it's
155 going with you and that makes a big difference because it gives you confidence in them and
156 all of the exercises were explained so clearly.

157 10. -and praise as well - you praise a child for doing something well and even as an adult it's
158 important. I know it sounds silly

159 1. It is amazing

160 10. you like to hear that you are getting there, which is good

161 4. I went out chuffed each time I came, I felt I had done a bit more

162 3. You felt motivated to carry on

163 6. I think I had the same experience most of the time except for one session- I mean it was
164 possible that I hadn't been doing enough exercise and she told me, in no uncertain terms.
165 I think it was difficult initially to find the level at which to exercise. I was probably a
166 mixture of overdoing it some days and then not being able to exercise the following day,
167 when I first started. Up until the point where I could walk and just walking was good
168 exercise for me, I wasn't sure of the right level to exercise at.

169 R. And how did you find that in the end?

170 6. I think eventually, as someone said before, the guide is whether it hurts or not, I think I
171 found that if I pushed it to a point where it was uncomfortable then that was the right
172 level, beyond that was a problem. But that was the right level, just gently to get it to that
173 stage and then it would become more comfortable next time without overdoing it.

174 R. How did some of the others feel about the amount of instruction and encouragement you
175 were given?

176 8. Very little, I got very little of that. Showing a few exercises to start with and I must
177 admit I was very ambitious about it anyway so I worked very hard, and my

178 physiotherapist I think acknowledged that because it was reported to me by another
179 patient that she had said to another physiotherapist "Oh yes, that one she is working very
180 hard". I did it anyway. I wanted to do it and I did. I found the facilities very poor
181 because really the one thing that did me a lot of good would be the exercise bike but
182 apart from that the little exercises that I can do at home, and I was glad to be shown
183 them because they were quite obvious, I didn't to have explained anything about it
184 because once you are shown an exercise you know what it is doing, and I found I was very
185 disappointed frankly. For one thing too many cancellations. I was initially supposed to
186 attend twice a week, but then either the physiotherapist goes on holiday or there is a
187 holiday generally that things stopped and the transport does not always turn up. I also
188 found it rather hard that you are supposed to exercise from 10.0'clock but you have to be
189 ready for the ambulance at 8.00 so you are half-dead by the time it has taken you half
190 way round () and () which when you are not very fit tells. And it's
191 really too little, but just the exercise and a few steps and a trampoline. I mean they
192 were good exercises such as they went but they are all things that I can do for myself and
193 after a short time you are told that you can only attend once a week. Well frankly once a
194 week is not much when you are trying to get going again and your leg is practically dead.
195 At that point you get thrown out because you have had your lot.

196 4. That's true actually.

197 8. I was very upset about that and pointed out that I had been in plaster rather longer than
198 anybody else because most people have six weeks and I had four months and I now go
199 to () and I really do work hard and now I get some results. Before that I didn't
200 and couldn't even walk down the road to the bus stop. The improvement was very
201 slight. I mean I did work very hard on it and I tried but no, I didn't think very much of it
202 quite frankly. All very well-meaning but there was one thing that I was given on my leg,
203 a sort of envelope and it was supposed to screw you tight and that opened up again. Only
204 between these movements, about three minutes, about half an hour you get that about twice
205 or three times and nothing happens. It's just ridiculous because the thing isn't really
206 working properly.

207 4. I only got, with the first time with the degenerative discs which is sort of in the back of
208 the shoulder, I was put on a machine, sort of strapped up -it was horrible, terrible, and I only
209 got relief really for about fifteen or twenty minutes afterwards.

210 R. It was uncomfortable when it was on, painful when it was on....

211 4. Well it was uncomfortable, it wasn't painful. I was just strapped up like a.....and
212 just left to sit there. As I say I sort of got relief for fifteen or twenty minutes afterwards.
213 Then I was just told there was nothing more they could do for me.

214 R. This lady raised quite a few interesting points which I will come back to in a moment, but
215 just before we leave the communication side, are there any other impressions that people

216 would like to talk about in that line. I mean with communication it is obviously the
217 actual talking to the therapist, how they indicate what they are going to do to you, what
218 about any other information or instruction that you got from your therapist that you thought
219 was important.

220 7. Mine was very good. She told me what to do and how to do it and she was prepared to
221 praise you and that makes you feel better about things.

222 R. What about finding out more about your problem perhaps, and making it easier for you to
223 understand exactly what had happened to you? Understanding the nature of your injury,
224 were you given any

225 4. It was explained how it connects up together

226 7. I didn't have that

227 9. I did. I went in one of the cubicles and she had the thing up of the ankle and she
228 explained it all on that and I found it really interesting what she was doing and what I had
229 got to do. Because the Achilles tendon had gone and I had hurt my knee as well so we had
230 quite a bit of work to do and I found she was really good, really explained and told me what
231 to do as well.

232 R. Now the people that didn't have any explanation, looking back on it now, did it occur to
233 you at the time that that was something missing?

234 7. No, that never occurred to me.

235 2. I came here for my neck and my arm and a different physiotherapist and she was very
236 good and taught me all the exercise, what to do. I did them at home. Then I came here and
237 I had to do the exercises for the people here and I found them all very good. I have no
238 grumble about them. I did the exercises at home which I could do, and I had one of
239 those bicycles so I was able to do that and I got quite a few gadgets that I can use. So I did
240 what she told me to. But I found them all very good.

241 6. I think I found out earlier what the injury was. I think probably the first night when I
242 was in hospital I had asked exactly what it was.

243 R. So you asked the doctor?

244 6. Yes

245 8. I saw my X-ray

246 4. That was enough

247 R. Now a lady here mentioned facilities can you say a little bit more -you said you thought
248 the facilities were not good, can you explain why that was so important to you.

249 8. Well, because I expected physiotherapy to do..... I mean they haven't a treadmill. There
250 is a stepper but it was pointed out to me that that was much too hard for me and I tried it
251 once with one step up and found it so hard I gave up. I don't know if it can be made
252 lighter or not because nobody ever told me anything about it. I just went on my own
253 once and tried it and it seemed obvious I couldn't do it, but we have three steps like a little

254 staircase and you can go up and down, up and down until you are blue in the face and I
255 had what they called a "theraband" a thing that you stretched your foot against to strengthen
256 the ankle and you had the trampoline which is really not very strong. Then they had
257 ball games which I found an absolute waste of time - I am not very good with ball
258 games and I sat out of those most of the time because I couldn't really see that, you
259 know you all stand in a circle and you wait for the ball to be thrown at you but it might
260 never come, I mean it does come but I didn't find that a very useful exercise quite frankly.
261 Standing up and sitting down many time, and standing on one leg and as physical exercises
262 they are all right. I didn't have much talk with my physiotherapist. She was a very nice
263 girl - I just said good morning to her, and cheerio and there wasn't much chat about it.
264 Frankly I didn't expect that because I knew exactly what was wrong with my leg and all I
265 need is to strengthen it.

266 R. Did anyone else have similar experiences to this lady, a bit of a mismatch between what
267 you were expecting to be good for you and not perhaps getting that?

268 5. No

269 (General. No)

270 7. I took it they knew what they were doing. I'm not a physiotherapist.

271 3. I must be honest - I didn't expect to have any machines. I expected that it was
272 strengthening basically the muscles that had wasted you could use almost anything to
273 build it up. She said use tin cans to move your arm backwards and forwards because it's
274 the resistance and so I felt that almost anything that I did that was going to build up the
275 muscles regardless of whether there was a machine or not and certainly my
276 physiotherapist said yes, anything you can do like that which is why I was quite happy.
277 Whatever I had at home I used to do that physiotherapy so I didn't expect any machines as
278 such.

279 6. And using the sessions mainly to come in and review what you were doing

280 3. Exactly

281 6. I had the same, I didn't expect much in the way of well I didn't think any machinery was
282 necessary to start with. Simple exercises would help and I could feel the progress quite
283 quickly.

284 8. It was partly my own fault I suppose because I don't get round to exercising at all very
285 much so I relied very much on these sessions and felt I needed more, but that's of course my
286 own fault. I'm on my own and had so many things to do and the day goes by and you
287 haven't done anything you know.

288 3. I think that is true, if you've got somebody at home that encourages you at home it
289 makes a big difference as to whether you do or not.

290 8. I haven't anybody

291 3. No, I think that's....

292 8. I go from one job to another and finally find it's time to go to bed, you see
293 3. No, even my children would nag me if they hadn't seen me doing exercises and I think
294 that is quite important.
295 R. Obviously you got quite a positive attitude towards the exercise and helping yourself.
296 What do the others feel about that part of the therapy. You come up here, you get a certain
297 amount of treatment from the therapist, and then when you leave it is up to you.
298 7. It is up to you, nobody else can do it for you can they.
299 4. Just told to carry on
300 7. They told me that
301 (Nods of assent)
302 R. Did you find that reasonable
303 (Sounds of assent)
304 R. Before you started treatment did you expect that that was how it would go that you would
305 have to do some work on your own
306 (General Yes)
307 4. Well I'm a window cleaner, so I didn't have to exercise, I just carried on working.
308 R. Now, we have been talking about the communication side and this is an area that has
309 been researched quite a lot in terms of doctors and patients and their interactions. Now
310 again, thinking about your therapy sessions, apart from communication is there any other
311 aspect of that that was important to you or stood out for you, either in terms of your
312 therapist as such, what she did, how she appeared or what you were expected to do
313 10. For me it progressed naturally. As it went on it got better and she sort of gauged me
314 each week. I think some of those ball games we did maybe showed her that you had a
315 bit more strength each week and you couldn't do that at home but may be showed her by
316 how hard or how high you could bounce it. I don't know whether she was using that for
317 herself or whether it was physiotherapy, as she was only doing it once a week. I think it
318 progressed naturally and in the end everything worked, so I wasn't really expecting
319 anything different each week, maybe to be told yes, that's better and push it a bit harder
320 each week.
321 R. Some of you had more than one therapist and some of you had just one therapist. The
322 people who had more than one, did that worry you at all or make any difference to you that
323 you didn't have continuity perhaps?
324 6. .No. I start therapy in November and she left at Christmas. Then we had () after
325 Christmas and it didn't make any difference really. They carried on just the same as the
326 others.
327 R. What about the others that had more than one?
328 6. I had more than one but there was no problem changing over. A little bit of information
329 that I gave them again about what had been done and what I was doing in the past, but he

330 had records of what exercises you had been doing and there wasn't any problem in that
331 respect.

332 R. Anything about the therapist herself or himself that you think was a particularly
333 important part of helping you to improve

334 4. Being friendly, yes

335 1. In fact she joined in

336 9. Didn't make you feel silly

337 R. How do you think they might have made you feel silly?

338 9. I think the first time I came my foot was so swollen I had to have a slipper on, and she
339 just took it as a matter of course, it worried me probably more than her. She just took it
340 as normal and put you at ease, she did a massage on it and you could see a difference by
341 the time you left, and I came up twice a week and had the same girl () every time. I
342 found that really good. She didn't make me feelit was encouragement and you could
343 see a difference each time you came. You did your exercises at home and could see the
344 difference next time you came. None of my appointments were ever cancelled -I just kept
345 coming twice a week for a couple of months.

346 R. Does anyone else get that feeling of perhaps feeling a bit silly on occasions?

347 (Several. No)

348 10. You are asked to do some daft things, like lie on a massive ball and roll all over the
349 place but you just get on with it.

350 9.- wobble board -

351 10. no, not at all. You know it's going to make you better and that's the main thing. If you
352 look stupid so what. I didn't bother me at all. I really wanted to get strong again so I didn't
353 care what I was doing really, hanging from the ceiling didn't matter.

354 4. That's the most important thing isn't it, getting mobile again and being able to move.

355 R. So the times you felt perhaps you weren't getting on so well, how did the therapists try
356 and get you over that?

357 4. Didn't tell her

358 10. My most discouraging moment was after I had seen the doctor (you have to see the
359 doctor every month or so) who was not so positive at one point, saying well I wouldn't
360 be able to this again or that again, and I went along and told her this and she said "Well,
361 no let's be more positive than, you might be able to. Let's keep working at it, you never
362 know." And I can actually. What he said I couldn't do, I can do. She was great. She
363 was very positive that day, because I saw her that afternoon and I felt a lot better after
364 coming out from seeing her than I did from seeing the doctor, the specialist.

365 R. Did anyone else have that sort of experience?

366 (General. Yes)

367 2. I was thinking about my elbow. It was not better, you see, and I was thinking, I wasn't
368 really listening.

369 R. So the fact that you are not, or you don't feel you are better...

370 2. It's not better, no. The doctor did say I would probably have it operated on. But it was
371 supposed to be fractured there and that's the part that's causing me trouble.

372 R. So how do you feel about the physiotherapy you had. Was it helpful?

373 2. Yes it was because she got me on one particular one and it was very painful and I
374 thought to myself well if I'm getting pain I'm getting better.

375 R. Now coming on to when your treatment was coming to an end, did you in your mind
376 feel, yes, I've accomplished everything and this is a good as I am going to get, or No, this
377 hasn't really done me as much good as I thought. What were your feelings at the end of
378 your treatment when you were told, this is the last day we are going to see you, you are
379 discharged now. How did you feel about that?

380 7. I was quite happy. Not because there was anything wrong. I was just thinking I hadn't
381 got to come to the hospital again.

382 4. I was taking goodness knows how long to get here, and then you were in there for about
383 five minutes -

384 R. Only five minutes?

385 4. Well five or ten minutes it was actually. On my spine it was about fifteen -twenty
386 minutes, the elbow was in all only about five minutes. Like in and out basically. Mind
387 you I wasn't complaining. It was very quick. She did explain though that if you do too
388 much on it, if you push it too much in a certain amount of time....

389 R. So was the time factor another important thing to all of you?

390 7. I think mine was about between ten and fifteen minutes. I never really counted but it was
391 about that time. I felt a bit better after she had done, massaged it and so on

392 4. They hold it in a way, and stretch it in a way that you can't do it on your own.

393 8. I had an hour therapy.

394 R. But at the end of the day.

395 8. I was very disappointed and I put it to her why she couldn't keep me a bit longer. She
396 said, no sorry everybody has so much time. She actually said that she considered that
397 she had given me longer than normal. I couldn't see that considering many cancellations
398 during the course, but I couldn't tell because either she was ill or she was on holiday or it
399 was a public holiday so I got robbed of quite a few.

400 6. I had half hour sessions, almost always half hour sessions. I think towards the end we
401 discussed on the last day that I would go away and carry on the exercises I didn't think that
402 was it as far as condition wise. It was going to improve beyond that and it has improved
403 beyond that. I asked specifically about exercises before sport because that was how I
404 did it in the first place and was given a handout on some stretching exercises that I

405 should do. I think that was all I needed for the last session. They said if I had any
406 problems or felt it wasn't any better I could come back and enquire then. It wasn't
407 necessarily the end of it if I didn't feel it was going right.

408 R. Did you feel you could have had some comeback on that? Does it have to be the last
409 day today, can I have a few more?

410 6. I didn't think about that.

411 4. I was just told, with the spine I was told that there was nothing more they could do for
412 me. With the elbow I knew that was getting better anyway because I was being able to
413 use it.

414 1. I felt that every week I was happy about it, I could do things a bit easier. On the last
415 time I was told to just continue things at home because there seemed to be a few more
416 strangers coming into the room and I thought they were going to be busy they've got no
417 time to keep telling me what I know what to do now, and that's fair enough. I get a pain
418 now and don't say I'm 100% now, but I'm moving it all the time. He put the fear of
419 God in me at first because he said you should really have the ball joint.....but at your
420 age it wouldn't be advisable because the bones couldn't have stood the wires. So we
421 just have to see how we go from there. But I was very thrilled at the idea that I had
422 managed to do all that without all that business. Once she started on me and did a bit
423 more each week I was very proud of myself and now I continue it at home. I don't think
424 they could do any more by my coming back again My daughter knows the first exercise and
425 now she makes sure I do them all.

426 3. On my last visit, I didn't think it was going to be the last but we discussed it and she said
427 I don't think I can do anything else. You're doing the exercise and you have to keep doing
428 them. How do you feel about stopping? I said I was quite happy with it. It wasn't
429 "You've got to stop", it was discussed and we agreed that it wasn't any point in me coming
430 any more. But she said if I had any problems or if I thought of any point such as if I was
431 going to do something and suddenly think should I be doing that, then give me a ring and
432 she was quite happy and quite positive about saying well if you need any advice in the
433 future you can ring.

434 7. Said the same to me (agreement from others).

435 3. So you felt even when you had gone away it wasn't the end

436 R. Does that give you more confidence to try a bit more for yourself?

437 3. Well, yes because you felt that if there was something that you were unsure about....

438 R. You could come back and ask...

439 3. Yes, you could if you were unsure of it.

440 R. Did that happen to the others?

441 9. Yes, I had that. She said I could ring up any time so you felt it wasn't the end of the line
442 there was someone there if you did get stuck.

443 10. Same for me
444 2. I didn't have that. What happened with me was the last day I had a bad migraine and I
445 wasn't able to go for the last appointment so I didn't go back because she had said it was the
446 last day.
447 4. She told me it was the last one
448 2. My hand won't go like that. I can't do that with it like I can this one and I'm in constant
449 pain with it and there are certain things I can't do with this hand, and I am right handed.
450 R. Drawing this to a close. Just one last question for you to think about. I want you to
451 think back on the total experience and try to identify the most important thing in the whole
452 of the coming up for therapy, having exercise, the most important thing for you that made it
453 either a satisfactory or an unsatisfactory experience. So if you had to pinpoint you would
454 say I remember all my therapy because that was the most important thing for me in the
455 whole of the treatment experience.
456 6. Finding the right level of exercise for me, it had to be. As soon as I found out the right
457 level to exercise at on my own, then there was none of the up and down swing that I had
458 right at the beginning.
459 R. I would like everyone to give me an answer on this, so if you would just think about it.
460 Was there a key factor that struck you as being important?
461 4. The first time, I think. The first appointment I had and actually afterwards being able to
462 stretch my arm out a lot more than I could and just progressed from there, so it was the first
463 one.
464 8. The exercise bike, because I could see how important that was because I could see that it
465 was helping my muscles to come back again.
466 7. I think it was the machine when she put it on that seemed to help a lot my elbow. It
467 seemed to ease it and I seemed to be able to move it a lot better.
468 10. The most important thing for me, (I'm a musician) was getting my right arm working so
469 that I could play again. So she worked at that specific area. I'm a trombonist so I needed
470 movement and she worked at that first. That was crucial and I could get back to work.
471 She sorted that out first, within a month, then I had to keep coming back for three
472 months. That was all I had in my mind, I had to get back to work as soon as
473 possible so that was a crucial thing and she did work on that. Once I was back doing
474 that it was the turning point really. After about a month, then she worked on
475 strengthening the rest of it, further up so that I could get my arm in the air. I was very
476 motivated anyway, to get back, but that was the most important thing for me.
477 4. I needed to pick that ladder up.
478 2. I think the exercises were good for me because I wasn't using the hand. I felt if I used
479 it I might do some damage to it, so I was using my left one. When I got the exercises I

480 found that I was able to move my hand and do what I should do. As far as I am concerned
481 it is good for me, the exercise – it did do me good.

482 5. Same with me, actually. I couldn't use my hand for two months, and then I had the
483 plaster on and it was still stiff and that. I am right handed so I was in a terrible state trying
484 to do things left-handed, so I couldn't wait. After about two or three weeks I was finding I
485 could use it, not very much, but I was getting there.

486 R. ...and that was the most important thing

487 5. yes, because I couldn't write or anything

488 2. I had to eat left-handed

489 4. I was quite lucky being left handed because when you are left handed in this society you
490 tend to use your right hand quite often anyway, so I can window clean with my right hand as
491 well as my left

492 2. Couldn't comb my hair.

493 4. Brushing my teeth was the worst

494 R. What was the most important moment for you?

495 1. Well, first of all she was so gentle with me and it didn't hurt it which was marvellous.
496 Then she showed me these three exercises, wrote them down for me. We did them a few
497 times and that was all it was that session. I had built up such a fear that it was
498 marvellous and I knew those three exercises which seemed to be quite simple ones, so I
499 practised those for a week until I went back and we gradually advanced from there.
500 That's what I think is so amazing, she gave you confidence to carry on, "it's not going to
501 hurt you, where there's pain there's no gain" she used to say.

502 10. I really think it was marvellous the way they concentrate and you feel as if you are the
503 only one. When she approaches you when you first go in, she went to each one of us and
504 asked how this was and felt it and said, well if you do this a little bit more... and then we
505 did it all in the group. Two other ladies joined in. One of them was a nurse and she
506 managed to do the same as I was doing and I thought, well there you are, if she can do it so
507 can I.

508 R. Now I am briefly going to sum up what we have been talking about and while I am doing
509 that just think if there is anything else that hasn't been covered that has just occurred to you
510 that we need to know about. We talked first of all about what you might have been
511 expecting when you first got your appointment and there was some expression that some
512 people were perhaps a bit afraid that it was going to be a painful experience. Generally
513 speaking people didn't have much idea except if they had had some therapy before and then
514 they knew roughly what it was going to be. When you started your therapy then, how the
515 therapist put you at ease and you found it wasn't as painful as you had expected and she
516 explained to you exactly what you had to do and you then went off and practised on your
517 own and that with encouragement and the fact that you weren't made to feel silly and the

518 improvements were pointed out to you so that you were encouraged to progress. Those
519 were all important factors and that whether you had one therapist or more than one didn't
520 seem to be a problem because the information was passed on to the next therapist seeing
521 you. There were a few comments about the length of time you had your treatment. That
522 didn't seem to be a particularly bothersome thing, whether it was five minutes , or perhaps
523 half and hour or an hour, so it would appear that the amount of time you had you felt was
524 reasonable for whatever was being done to you, your treatment. At the end of the course
525 when you were being discharged, generally speaking it was negotiated. It wasn't just
526 "You're finished now, off you go", but that you had things to carry on with, and there was
527 some indication that you could refer back to the therapist so that you didn't feel completely
528 cut off, which was an important point for you.

529 We have just gone round thinking about what was the key factor for you in the whole
530 experience, what made it most important for you. Do you generally agree that that is what
531 we have talked about this morning?

532 (General assent)

533 R. Having said that, is there anything else now that has suddenly come to mind. Somebody
534 thinks "Oh, yes, I remember". Anything else you think it important for us as therapists to
535 know which would improve a physiotherapy experience for a patient. Something you had
536 which you think is important we know is always done.

537 (Pause)

538 R. Can't think of anything. Generally apart from this lady, others are generally reasonably
539 satisfied, but you haven't quite got better and you are doing a bit better now somewhere
540 else.

541 Winding up. General thanks to all participants.

APPENDIX 2.

2.7 Sample transcript of focus group (chronic subjects, n=5, inner city)

Key: Numbers 1-5 indicate the participants and the reason for attending physiotherapy

F = female M= male

R = researcher

1. PT to arms (F)
2. PT to neck, shoulder and arm (F)
3. PT to neck.(F)
4. PT to right shoulder (M)
5. PT lumbar spine (M)

- 1 R. Think back to when you first got your appointment to come up for treatment, what was going
2 through your mind at that time. What were you expecting, what were you hoping PT was going to do
3 for you?
- 4 2. When I received the appointment I thought, 'Oh. good, I'll go up there and get rid of all this pain.
5 can't wait to get up there get this sorted out. And I think I'll come out a normal, perfect woman.
- 6 R. What did any of the others think?
- 7 1 The same. You hope for at least relief from it. You know just ease the pain at least
- 8 3. Just to make it a bit easier. Because when you're in pain you try anything don't you, really.
- 9 (General sound.. of agreement)
- 10 3. But I thought I would have had to wait a lot longer, I was surprised, because normally you've got a
11 few months wait haven't you?
- 12 2. That's true, yea, there wasn't a long wait.
- 13 3. So, I was very pleased, because I could hardly move my neck, at one time.
- 14 R. What did you feel? What were you thinking about? (To No 4.)
- 15 4. Well I thought, going to the physio, getting the treatment, urn, I felt, as most of them, say that you
16 so happy that in a few weeks after a few treatments it will be much better. That's the feeling I got.
- 17 3. After the first treatment, I thought to myself, well it's not done me any good, you think to yourself,
18 Oh. I've done that, yea, but then (laughs) in a couple more treatments it's working. it's surprising, it's
19 marvellous, really.
- 20 4. I had the same feeling. At first I said, my goodness it doesn't seem as if this is going to be any
21 better, you know, but after the third I noticed that ...it was making a.....good improvement, you know,
22 with the exercises I was doing. And I felt that when I actually received the heat treatment, the
23 ultrasonic treatment, it made the arm feel really good, it more or less, sort of...eradicated, um,
24 the...pain but though it was still there after quite a few hours, you know, I felt it still there, even now. It
25 seems to be right in the joint. (Pat. then describes when he was working for BT doing wiring in a very
26 confined space, for four years, then patient developed pains in his shoulder. Noticed pain in his

27 shoulder when playing cricket, bowling. Better with rest, but came on night-time sleeping on it.
28 Aggravated by batting at cricket. Felt like a nail pressing so he applied pressure over the shoulder and
29 it helped. Went to the Dr. Dr. said it was arthritis, but the patient said it wasn't because he knew what
30 arthritis was, he said it was the bone and the muscles. Like elastic losing its elastic, and the joints
31 used to lock.)

32 R. What about you? What were you expecting? (To No.1.)

33 1. Not an awful lot. I had polio when I was 3, so I didn't really expect any difference, because I know
34 what was causing mine, you know, and I didn't really get any benefit from it, to be honest. But as they
35 said before, you try anything, you know, you can't not try it, because it just might help.

36 R. So when you said you knew all about it, where did you get that information from?

37 1. What? Regarding what was wrong?

38 R. Yes. From the Dr.?

39 1. No, I just know my own body. From the age of 3 I've been experiencing different things from the
40 polio, the effects of the polio, and I know it's the deformity of the pelvis and the spine, and I know it's
41 knock on problems from that, so.. .and it's not something that can't be put right, the body's in the
42 wrong shape, it's not as it should be, so..um, it's just something that's going to happen anyway. But
43 when you're in a lot of pain you will try it won't you? You have to try it. No, I wasn't really expecting a
44 lot from it, to be honest.

45 R. And what did you think when you got the appointment? What were you hoping?

46 5. Well I was hoping, um,.....more for the traction treatment which is what I'd had before, where
47 you're actually stretched like on a rack, um, to sort of pull the spine a bit, because that I thought was
48 the treatment I should have for this condition where the spine is actually pressing or is in some way
49 wrong, and it releases the tension a bit as well. But, in fact, um.....that wasn't what I had. But that
50 was something I had before so I thought I would have more of that. Um...in fact it was much more
51 specifically related to particular area, you know, getting into the joints and actually just massaging in a
52 particular way, not in the normal sense of massage, but just um, specific treatment to a particular joint
53 for particular purpose in a very precise, you know, not for the muscles, obviously that is something
54 different, but for the actual you know spinal ...joints. So it was slightly different from what I expected,
55 but, um...I can now see and understand the principle behind the treatment because it was fully
56 explained to me by the PT um..it was to relieve stress on one joint at a time, perhaps, and then to sort
57 of massage the nerves and that makes it feel better, ..um...and I found it helpful.

58 R. Now you mentioned something quite important there about the information and explanation you
59 were given about your problem by the PT, now what about the rest of you? As you started your
60 treatment and you were treated with various modalities, what information or explanation were you
61 given by your therapist?

62 3. Well, my PT, she showed me the X-Rays, well not actually the X-Ray but what they said on the X-
63 Ray, and um, she said it was genetic, like in the and she showed me...what d'you call the bone?

64 R. The spine?

65 3. No! (laughs)

66 R. The model?

67 3. Yea, the model, and, er, she showed me the two vertebrae that were stuck together, and she
68 explained it all to me, she said it's just there, it can't be altered, all you can do is just have the physio.
69 Yea, but it was alright though. I was pleased she told me what it was. She said it would never go away.
70 It was wear and tear, and getting old, you know, it was just one of those things.

71 R. Why was it helpful for you to know?

72 3. Well, I just wanted to know really. I said to myself, if there's something going on there, I just want
73 to know what it is. Because I have had treatment before, but that was a long time ago, but that was that
74 side of the neck (left) but she said there's nothing there, it's this side (right), so evidently it was
75 probably, that side (left) was affecting that side (right). I mean, I still get a bit of pain, but I just do the
76 exercises and it goes away. Well it don't actually go away, but it's not so bad. (laughs).

77 (slight pause)

78 R. So knowing what's going wrong with you, that's important for the rest of you to know?

79 (General 'Yes' from all participants)

80 1. We like to know why it's being done, what they...what point they've got...what...what is the point
81 to what they're doing, you know what I mean, because otherwise...it just seems pointless anyway.

82 (General 'yea' from participants)

83 3. I think if they tell you if you, know it's not going to get better, altogether, you accept the little bit of
84 pain you do get, that's how I look at it.

85 2. Yea, obviously you like to search all avenues to see, as you say, in the end they say, well you're
86 stuck with it, and there's nothing else we can do, but at least you've not sat indoors wondering what it's
87 all about,

88 (General agreement 'that's right' from all participants)

89 2.. . and then you can live your life according to your disability, but if you don't go and find out, you'll
90 be forever, 'I wonder if I should go?' 'I wonder what it is?' ruin half your life. So, at least whether it's
91 good news or bad news, you know, and you can adapt your way of life around it. You know. But when
92 I came up here I had um what's that spine complaint? um.....

93 R Spondylosis?

94 2. and then I had this sort of neck...couldn't move it that way (demonstrates trying to turn head to
95 right) (others show acknowledgement by 'knowing' laughter) ...so I had to turn my body round. So I
96 lived with it, (?must be age) and then one morning I woke up with this horrific electric shocks in my
97 arm, and I couldn't get out of bed because of the pain in my shoulder, (pat re-iterates the experience
98 again) of course I went straight to the Dr. and said, 'Is this what they call..... I spoke to someone, and
99 they said you must have what they call frozen shoulder, so I said, Oh. I need help here, the pain is
100 horrific, I didn't know what to do with my arm. Then I came here, and the PT said, because of this

101 (problem in neck) this is being caused (shoulder pain) by this (neck). But I thought myself, if this
102 (shoulder) is being caused by this (neck) this would have started coming on slowly and not when I
103 went to bed Thursday night, woke up on Friday morning.

104 1. It was but you wasn't aware of it, it was.....

105 (1,2 & 3 all talk together at this point essentially saying it could happen that way. 2 said 'It happened
106 to me')

107 2. I couldn't believe it, and I came here,.....and as I said, I can't wait to get to that therapy, you
108 know to do something about this, because it was ruining my life, this pain.....but to me it seemed
109 the therapist was asking me what I could do and not what I couldn't doshe'd say 'lift your arm',
110 I mean you know your own limits, and that was it. I thought, I don't want you to do this, I want you to
111 help me with what I can't do.

112 (sympathetic laughter from 3)

113 2. (reiterates what she said).....she said 'can you do that?' and then she'd write that down, I thought,
114 when are you going to say, what can't you do? Yea, but when she was doing it, she was doing it for me
115 and then she said, 'that's much better', but I can't see how it's much better unless she comes and lives
116 with me and helps me arm round. So, I was...! must be honest...a bit disappointed. '

117 R. What, in the outcome?

118 2. In the whole thing. Yea. Because he was....! can't do me zip up at the back, I have to drag every
119 thing round here (to the front) she held one hand on here (shoulder) and one hand on here (forearm)
120 and she's got a way of turning it that you then take your a round, but you don't let them let it go or
121 you'll get a broken arm, and then when she put my arm back she said it was much better, but I thought
122 you've got your arms on it, how is it much better (etc as before) and this is why I was disappointed,
123 actually.

124 3. But what happened to me was, I fell asleep, in the arm chair one Saturday afternoon, and I woke up
125 and from me knee right up to me face I was numb.

126 4. Oh. my goodness.

127 3. I thought I'd had a stroke, I thought to myself, 'Good God' so I was shaking all this stuff out and it
128 all came back....

129 2. all the circulation

130 3. ...in the hand, that's where it finished up.

131 2. It's like a nerve, the nerves run right through you...and seizes up.

132 R. Thinking now about your relationship with your therapist, what were important points or aspects of
133 the interaction you had with the therapist?

134 3. She was very friendly, and she did tell me everything she was doing, which helped a lot. I
135 appreciated that I think she was very nice, was very good.

136 1. She was nice, but I also felt like I couldn't say.....I felt like she didn't want me to
137say too much, if you know what I mean?
138 Not that I do say too much.

139 3. I do!

140 (General laughter)

141 1. But I felt that she just sort of, you know.....when I was trying to explain things, and she just, 'Well I
142 don't want to know about that now, just this', you know? And I thought, yes, well I want to know
143 about that now, you know? This is what....but she seemed to have her own thing set in her own mind
144 and that was the way we were going, you know? And yet, what I was saying was relevant to the way I
145 was you know the condition, really. And I felt it needed to be known by her to-know what she was
146 doing with me. But she was very nice, I can't say she wasn't a nice person, you know, she was OK, but
147 I thought we didn't communicate as well as we should have really.

148 R. And was that throughout the treatment or just the first time?

149 1. No, it felt more comfortable at first, and that seemed to happen after, really. You know, after the
150 first couple of times. I felt she thought she knew me better than I knew me, you know? I mean
151 medically, she obviously knows more than I know, but I know...I'm here, I'm inside it, and I'm really
152 'aware, as you say, (to 2) you know, your own body, you know what you're feeling what you can do,
153 what you feel you can push yourself to, and that kind of thing.

154 3. My physiotherapist, I mean if I asked her anything she'd go and get a bit of paper and she'd write it
155 down, that's when she went and got the model and showed me the neck and everything.

156 2. Yea, I never had that. No, no. My one was, I found was very 'matter of fact' and you know, 'I've said
157 it and this is how it is, and this is how it goes', and I said, but I can't....I want to say to her, like, can
158 you just listen to me, 'Is this going to be like this for ever, I need to be...' but I didn't have the
159 confidence to talk to her like this because it was, 'Yes, well as I told you before..de de de de de
160 (brusquely) she's not answering my question..

161 3. You should have made her answer you..

162 2. Yes, but there are some people you can talk to, and there are some people you can't, see.

163 (agreement from 4 & 1) and another problem was... that it's the people she took in before me had a
164 language problem and she would come out tensed up. So I came to the conclusion that they were
165 either short staffed out there or overworked. And if you come out all tensed up and take your next
166 patient in this is not the time I'm going to ask her what I would have asked her, because she's still
167 tensed up with the language problem from the previous people. And to me it became an ordeal to come
168 here. Not for the treatment, for the overall () I mean I'm not special to anyone else, but I
169 needed to have this pain taken away, I didn't want tantrums from people who were before me who had
170 a language problem, yea, and I wanted to feel confident that I could say to her, but this is only as good
171 as when you're holding it, you're telling me it's good, but you don't live in my house, you, can't follow

172 me around all day, holding this for me, but I didn't have the confidence because of the vibes. she was
173 throwing out.

174 (general overlapping talk not distinguishable but sympathising with the speaker) .

175 2. Exactly. And every time I went home () not the help, I needed the help, it was all the surrounding
176 things that was putting me off from coming here.(Reiterates the language problem) But this is not what

177 (general murmuring in the group)

178 I wanted, and in the end I come here for 3 months, went over to see, I thought I'm banging my head
179 against a brick wall here, and on the day I come up here, she said we finish today, we can't go any
180 further with you..

181 (laughter from 3)

182 2. I felt I was to blame (2 seems to say this somewhat sarcastically) I said to myself well I don't
183 particularly like her (says this in an undertone) urn, I can only speak about the one I got, you know,
184 but the way you was talking (to 1) made me think that maybe it was the same therapist.

185 3. Yea, I thought that (laughter)

186 2. What you were saying I thought, (background laughter, difficult to hear) and um,...I've had, person-
187 ally anything that's got better with this, it's nature's made it, nature, you know what I mean? Because I
188 didn't have therapy, because I was only showing her what I could do not what I couldn't do, well if I
189 can go up like that (lifts her left arm above her head) well that's me doing it, I'm a therapist aren't I?

190 3. Why didn't you say to her, 'You're wasting your time and wasting my time' ?

191 4. Some people I guess you (drowned by overlapping speech)

192 2. Because there was certain things I said, you know, I said like, I put my coat on the wrong way, I
193 put this arm in wrong, I said I'm in agony, and she went and got a machine, that silver thing which you
194 can't feel but the thing is you have to rub it first to numb it, don't you, and I was already in agony, and
195 she rubbed the bone and I thought, 'Oh. God, I wish I hadn't told her that I put my arm in the wrong
196 sleeve,

197 (general laughter)

198 2. I would have felt better if I'd stayed indoors and worked on myself.

199 R. Right, what experiences did you have, what was important to you in the treatment as far as your
200 relationship with your therapist was concerned? (to 5)

201 5. Well, I had some perceptions as to what the treatment might be and I thought maybe I should
202 behaving this electronic interferential treatment, urn, which I found very soothing, it makes a nice
203 tingle,urn, and then, oh. actually maybe hurt depending on the level, afterwards it does feel much more
204 soothed and relaxed, urn, and I was expecting perhaps that would be part of the treatment as I had it
205 before, um.... somewhere else, so I was thinking perhaps on a different track, maybe this should be
206 this, this or this, but, urn.....I felt that the therapist obviously was very skilled and professional, but
207 that sort of treatment wasn't available, I mean the things I had before and expected weren't available,
208 so, I had, you know, it's very much, OK this is what is done, urn, this is what we do, this is what you

209 should have, which is fair enough, I mean I don't know, I'm not an expert, so having whatever is the
210 treatment that is offered, but at the same time I thought there may be slight variations or something
211 different. But as far as the scientific aspect of it was concerned, I felt that everything was explained,
212 and they were able to discuss things, most of the time, except, obviously at the end of the day the
213 therapist is going to say, well you know, this is what we give this is the treatment, urn, we know best,
214 which they do, I suppose. Urn, so at that point, you know I will shut up. Um, but that in a way in a half
215 hour or 20 minute's treatment there isn't time for someone to give a full explanation of this, this, or
216 this, where you consider alternatives, especially as (name) was saying there is so much throughput of
217 patients coming and going, it's obviously a question of doing as much as one can at that time.

218 R. So are you saying you would have liked more say in the choices that were available for your
219 treatment?

220 5. Well, beggars can't be choosers, I mean, I am happy to have physiotherapy urn, because there are a
221 lot of people who need it, and you know, glad to be able to have it, as and when, but, urn,.. I really
222 don't know, but I thought at some point there was the idea that, OK, maybe you're wrong we're right.
223 Urn, which perhaps there might have been room for abit more discussion.

224 R. So do you think you might have made more progress if you had what you thought you needed?

225 5. Um,well I don't know. There's no way of knowing, urn, it's just that, if every patient says, I
226 want this, this and this, then we'll be here all day, and it might be the wrong thing. I just don't know
227 really. I think perhaps there's different treatments given in different countries (patient is not English)
228 and I had some therapy overseas, so, if one thing is disastrous for one person it might be effective for
229 another person, just don't know really. You know if this is normal treatment, I assume there is one
230 treatment for a particular condition, and I don't know what that treatment is, so that's it really.

231 R. What did you feel about things that were important to you in relation to the therapist giving you
232 treatment? (To 4)

233 4. I think it was um.....quite good, but.....well the way the exercise I used to do before I actually
234 came here, (describes them) but after doing the exercises and after getting 2 injections

235 2. Excuse me, can I interrupt? Who gave you the injections?

236 4. Um, the hospital.

237 2. Now, again, I've had no help there, can I ask, was this official, can I ask?

238 R. No, could we just continue, I am more interested in the relation of your therapist as you attended for
239 treatment.

240 4. The exercise she told me to do were very important, because she did tell me that by doing the
241 exercises and when she was massaging it that releases the tension, you know, and it gave me an insight
242 into what was happening, you know, and because I am an engineer I can see () but I think one great
243 exercise especially when she was testing the arm, it was sort of taking it that way (etc)

244 R. Yes, but apart from the exercises, what about the way you were dealt with by the therapist, things
245 that were good, not so good ,like the others were saying?

246 4..... I agree with her (? who) to a certain extent there are certain times you can't really see
247 what...you want, because they're in charge, you know, and

248 2. You're frightened to upset them.

249 4. That's right.

250 R. Do you feel though that when you come for treatment like this you might expect the person treating
251 you to be in charge, or do you feel it should be more democratic.. ?

252 4. It would be better, isn't it.. because...

253 3. I think you get on better in physio if they're on your level, you know?

254 2. More at ease, yea.

255 R. So could you sum up by saying what you thing would make an ideal therapist for you?

256 3. The therapist I had! (All laugh)

257 R. So what sort of qualities did she have?

258 3. She was lovely, she listened to what you had to say, and if you asked a question she answered you,
259 and as I say she'd demonstrate anything. Mind you she used to have a go at me if I didn't do me
260 exercises right, you know, other than that she was very good.

261 R. What other qualities would make an ideal therapist?

262 2. Well, if you were in hospital, you'd call it 'bedside manner' from a doctor, he'd have a nice bedside
263 manner, as they say, yea?

264 1. Yea.

265 2. And I found this a bit sloppy, because there was times when she'd say do this, and I'll demonstrate
266 for yer, I was very annoyed, (stands up and raises hands above head) she'd be behind me, this is how
267 I'm standing.....

268 (chuckles from the others)

269 2. .. she'd left me..yea, and she's writing notes, and I don't know she's sat down and write notes, and
270 I'm suffering the pain because I thought she was looking at me,

271 1. Yea,

272 2. .. and this was burning like fire, and I thought, Oh!, and mentally I was saying I wish you'd hurry
273 up and finish whatever you're looking at, she was on the back of the bed writing notes! She should
274 have said to me, OK, put your arms down..

275 3. Yea, but perhaps she wanted to see how long you could stand there ...

276 2. But tell me that then, tell me that.

277 3. Yes.

278 2. Tell me that. Say to me, 'I just want to see how can stand there', tell me, and then I put me arms
279 down, and she never said to me, like....she just went on to the next thing, so it's just as well I looked
280 round. And on another occasion I was lying on the bed with the elbows like that, (out sideways) which
281 was hurting, chin in the hole, and this (head) was very painful up, no support, yea, and she was gone!.

282 And she should have said to me, 'no, just a minute, I've got to go and get...' whatever she had to get.

283 She never told me, and I was still sitting like it, when I looked, i put them down, I couldn't take no
 284 more, she's gone out to the locker and the cubicle.....

285 R. So, obviously telling you more specifically what you need to do would be something that is
 286 important.

287 2. Well, she should have said to me, 'Oh. just a minute, relax I haven't got the thing..' The bedside
 288 manner was lacking.

289 R. I know we probably all understand what you mean by that, but what do you mean by that?

290 2. Well, another person would have told you...Oh' just a minute, relax a minute, I've got to go and get
 291 the thing', or when I had my arms up like that, she should have said to me, 'OK, put them down, bring
 292 them down. 'but she started her jobs and never finished 'em, and I never found this out until I turned
 293 round and she wasn't there. (re-iterates the problem)

294 1. It was a lack of understanding, obviously. You see, they're not feeling it, but I do feel.....

295 2. (interrupts)and I thought, she's lacking inasmuch as she's not making the patient
 296 comfortable yea. or she lacks experience in the bedside manner...it's all unfinished symphonies. You
 297 know, like, that's her unfinished symphony, where's she gone? This is all causing you more stress. I
 298 come here for help, yea, (reiterates the problem again) I wasn't informed of what she was doing or
 299 where she was going..

300 R. But what about things, apart from what she didn't do, what would be your ideal therapist, what
 301 would she be like?

302 2. My ideal therapist, I would like to say to her, look I can't do this, (hand behind the back) can you
 303 help me, I know it won't be an overnight thing, but, this is what I thought, they lay you on a bed, and
 304 give it a good old rub, right, no one rubbed me the whole time I was here, rub all into where you can't
 305 get to it yourself, give it the old 'one two', right, then say to yer, (in a soft voice) 'Now slowly, try and
 306 see if that's a little bit easier, while I'm rubbing it' , and then I could have a bit of confidence and take it
 307 round a little bit myself. You see what I mean? I needed, you know what I mean?

308 1. Hands on.

309 2. I needed a one to one, but you know there's a time limit, they're in and out like a conveyer belt in
 310 there, you out, next one in, so it can't..! do understand this ...you know, you'd have to pay private to get
 311 that sort of treatment, wouldn't yer, to get that sort of treatment I'm talking about, but.....this
 312 hasn't got better through therapy, nature's slowly doing this (etc)

313 1. I think, not so much...she wasn't not friendly, it's just that I felt she was following the text book
 314 more than she was listening to the patient, if you know what I mean, and every patient is different,
 315 and no matter what, you do know your own body better than a text book is telling them. So I think it
 316 should have been more not what the text book is telling them more what you're telling them.
 317 Personally. I mean she did not exactly have a friendly way with her, but a bit standoffish and a bit...sort
 318 of urn, and as I was talking and trying to explain something, her mind seemed to be following,
 319 whatever, rather than you know, listening properly to what I was telling her, because I thought it was

320 important you know. Because it's what you're actually.... well it's difficult to describe what you're
321 feeling anyway, you know, the pain, you can't describe it can you really. But, um, that's basically what I
322 thought, just a feeling that you did matter really, and that it wasn't...although it is their job, you know
323 you're a person and you do what matters to them, or the whole thing is a matter to you, you're doing it,
324 and not just the physio is () it's something you should be feeling good about, and not that you're
325 wasting time really.

326 R. That's what you felt, was it?

327 1. Really, yea. I mean you do sort of hope for, as we said before, going over what we already said, but
328 I mean, you can hope for too much, I suppose, in a way, but it wasn't just that. it was the atmosphere
329 wasn't it, yea.

330 R. OK, lets just move onto something else that was mentioned right at the beginning, the question of
331 waiting lists, and how long you waited before you came up. Just want to talk a bit now about the
332 general way the therapy was organised, the frequency, length of sessions, and things like that.

333 2. When I went to the Dr. with this (shoulder) he said I'll write a letter to come for therapy..! waited
334 for an appointment, and waited and waited and it didn't come, and it was so painful and I needed help,
335 so I went back to the doctor and he wrote another letter, and I still didn't hear, so I phoned up, and said
336 could you tell me if you've got a letter there, and they made me an appointment on the phone. So a
337 good job I phoned: And that little time was short then so that was alright, so I was happy in the end.

338 R. What about other people's experiences?

339 3. Well I went to the Dr. and she sent me for an X-Ray, and then she said she was going to make an
340 appointment with the therapist, and um the next thing I heard, they'd got a very long waiting list.
341 So I said, fair enough, I mean, if you've got to take your turn, you take your turn. But it was a couple of
342 months before r heard, but perhaps if I'd been in agony I might have done something about it. I could
343 suffer it, so I just waited for my appointment and come up.

344 4. When I went to my Dr. and talked about it,.....he was telling me about these steroid injections,
345 you know, and so forth, I was a bit hesitant about what I should take, so I went back to him after a few
346 months because it was getting worse, and then he said he'd write to the hospital, and I got.... they told
347 me to come up about 3/4 months later, after I got the injections it didn't take me long to get the
348 appointment, about 3 weeks afterwards, that was pretty good.

349 (general mmmmm from group)

350 1. I waited 6 months. That was... well I was coming over here with my daughter actually, she had a
351 problem with her neck, and I called in to see if there was any hope of me getting an appointment, and
352 they said to me that there was a backlog, and urn.....I think it was a couple of weeks after that they
353 sent me a...an appointment. But I waited from the May to November before I got a first appointment.
354 A long time.

355 5 I was waiting from about July/August till about November, so it was about 3/4 months, and after
356 that....(tape ends)... I mean waiting 3 months seems the normal period for referral from GP's for

357 whatever it may be, for physiotherapy or for a specialist appointment. Other things that I've had in the
358 past, it seems...that's about average for me, par for the course.

359 R. And what about the frequency that you had to come up for your physio, was that what you were
360 expecting, or more/less frequent than you thought you needed?

361 3. I had no idea how long it would take. I just came up once a week.

362 R. And what did you feel about that? Did you feel that was alright?

363 3. Yes, just so as I was doing the exercises in between, like, she gave me the exercises, and I just done
364 'em and that was alright.

365 R. You didn't feel you needed to have come up more often?

366 3. No, no. R. What about you? (to 1.)

367 1. I don't know, I think, maybe, urn.....! suppose once a week was enough if you're doing them,
368 if you're doing the exercises. I don't know about everybody else, but you don't do them really, I mean,
369 did you do them? (to 3.)

370 3. Oh. I had to otherwise I couldn't move me neck! (laughs)

371 1. I do sort of.... I must do the exercises, I must do them, but to be honest, when you do get the time to
372 relax, you just relax, you don't.....! mean I do occasionally, but I didn't do them as I should have done,
373 you know, which also contributes to the fact that it's not helping you as much as it should, of course.
374 But, depending on what's wrong with you, I suppose, yea, I think a couple of times a week in a lot of
375 cases, I think is necessary, really, and to check that you're doing them right. Because at one time I was
376 doing the exercises and I wasn't even doing them right, and er, when she said to me, show me, and I
377 did it, she said no, and ,yea, I remember, Oh. yea, and I'd been doing it the wrong thing, so in no way
378 was that going to help. But, urn, I think really if you're going to benefit from it, I think you need a
379 couple of times a week really, depending on what's wrong with you, I suppose. But I really felt I would
380 have liked to have come twice a week to get the benefit.

381 R. Was that negotiated with you in any way?

382 1. The times were not the frequency

383 5. My appointments varied from 3 times a week to 1 a week. Urn, and I thought perhaps that was
384 according to availability of appointment time and or.....dependent on how the therapist thought
385 the treatment was going. And to begin with it was 3 times a week, yes, it was very frequent, to start the
386 thing off. Then towards the end of the period of the treatment, i don't know if this is the policy about
387 this, it became less frequent and went down to once a week, and, but...! think it's good to have 2 or 3
388 times a week, that seems to be normal for physiotherapy, that's... good to get the full benefit. But
389 when it stops, so.....

390 1. Any good that's being done in that one...um, you know,.....session, you know, you go home
391 and you've got a whole week before you come back, and even if you are doing the exercises, it's not
392 like being there with the physiotherapist, and I think that's too long in between, you know, to improve
393 it more intensely it needs to be more frequent than once a week.

394 2. I think when you first come to physio the person who you're seeing, the physiotherapist, is
395 énthusiastic, because you're starting with them from scratch and you're a new patient, but I think the
396 énthusiastic goes on the wane as you go along, actually, and to me, it's like, Oh. you're that person
397 that's never really better when you come back here every week and you can feel the énthusiastic going
398 out the window, and at the end she said, 'Can't do anymore with you', and I felt, like it was my fault. I
399 felt she wanted to say, look, you've been coming x amount a month, and you're not all that old are you,
400 so don't come any more. That's if it was put into it's proper English and said like that (reiterates again)
401 I was expecting too much actually, when I came here. I was in such pain, I thought, Oh. I run here and
402 they'll sort me out, and then, you know..... (undertone mumbling) Could be all according to what
403 your problem is actually, maybe someone else has () problem or just had an operation and
404 needs movement, they can do that more, they might () to do with arthritis or anything like that,
405 the damage is done anyway, you know yourself, you're just clutching at straws.

406 3. Didn't you go back to the Dr. and explain to him, perhaps he could have got you

407 (someone else' —overlapping speech)

408 2. Yea, I told him what they said here, that's a think that will have to go itself, but, if they had told me
409 that at the beginning I wouldn't have. wasted them 3 months coming up here, because it wasn't a
410 choice to come here.

411 R. The first time you come up here it's a longer session because the therapist has to examine you,
412 (general 'yes' from group)

413 R.and then it's shorter. Did you feel that the shorter sessions covered everything that you needed at
414 the time? Some of you said you were taught exercises to do at home and the sessions were mainly to
415 have them checked, were the sessions mainly for checking or was there further treatment input?

416 3. Oh. yes, she would show me different exercises to do when I came up, like every time I come up it
417 was a bit extra, so towards the end I was doing all of them.

418 5. Likewise, there was, urn, how are you this week, urn, how are you getting on with exercises, better,
419 worse, same, and then perhaps more treatment as well as time to discuss how things were going, um so
420 that would be the normal pattern.

421 1. To begin with there was one exercise I was given, then there was another one added, and then
422 another one added and that was it. I mean, very often she was busy anyway, you know, you'd be over
423 there doing whatever, while () somewhere else, you know" so, urn, you'd be left on your own, so you
424 think I could be doing that indoors anyway, because there's no one there with you anyway. Yes, it was
425 mostly doing what you had been doing or what you should have been doing. So... I didn't feel it
426 was getting any better, it was, that was the exercise and that was it really. It didn't seem to go any
427 where, you know, strange really. I can't explain what I mean, I suppose it's because you do expect too
428 much, as I said before, but you expect it to go somewhere and it doesn't go there. I know it sounds
429 weird but that's the way it feels.

430 R. Were you expecting to have to do some work on your own between sessions?

431 (general agreement 'Oh. yes.' from group)

432 R. You felt that that was a necessary part?

433 (Oh. yes. from group)

434 5. I'm still carrying on doing them, the exercises as i can, as i remember them, and so on, I try and do
435 them as often as possible, um.....obviously that's part of it. Because treatment here, one has to wait for
436 another term presumably, until, you know however long that might be, before one can come for
437 another course of treatment. It could be 6 months or a year or whatever, during which time it's up to
438 oneself to find other forms of work to do as best as one can, I suppose. To that extend one has
439 expectations, obviously the treatment happens then it's OK last session, bye, bye, end of story. What do
440 I do now?

441 1. The story's not complete is it, it's not an ending, well now your better, off you go, it's just that the
442 treatment's finished, off you go.

443 R. So, your ideal ending would have been you're better?

444 1. Yes.

445 R. And that was the bit that was missing?

446 1. It seems to have to end mid-way, you know.

447 R. You said earlier that you didn't expect that you would be getting better anyway, so how does that tie
448 in with your feeling that the treatment didn't help?

449 1. I still get disappointed, (laughs) Although I came knowing that it wouldn't...it's like buying a
450 lottery ticket, you know you're not going to win, but you still have that hope.

451 (general laughter from group)

452 R. So would you ever go back to the doctor and ask to be referred to physiotherapy in the future?

453 2. It's all according to what's wrong with yer.

454 R. Well, if you had the same problem coming back again?

455 2. No.

456 4. I don't think I would.

457 2. I'd do it myself, I'd rub myself indoors

458 (general overlapping talk)

459 5. I think perhaps they say, all right this course of treatment is finished, but, see you again in 3 months
460 or 6 months, whenever, how long everwhatever period it is..

461 1. Review it

462 5. then go back to your GP would refer you for treatment again, according to the time scale, according
463 to the system if there is one, then that would perhaps help, and give you some sort of framework for the
464 future.....

465 R. How does that help you by having that sort of framework?

466 5. Well, just that you know, that not it, end of treatment, then nothing more, you're on your own now,
467 bye, bye. That feeling at the end of the course of treatment perhaps is a bit of an () and if there was

468 a piece of paper saying OK call us back in 6 months, like the dentist, them, urn, you have something in
469 mind at least for the future.

470 R. And does that give you more confidence in managing your problem, is that what you're saying?
471 5. Indeed, yea.

472 1. I agree 2. I agree
473 4. Yea.

474 R. And none of you were given that option, told we'll stop for the moment and review you in a few
475 weeks time.

476 3. No.
477 4. No. Even though in a few months time the pain starts recurring, or it's getting worse.

478 R. Talking more about organisational thingshow much does the appearance and decor of the
479 department contribute to whether you think you treatment is successful or not?

480 2. No, doesn't make any difference.

481 1 It's just a nicer atmosphere to come into isn't it. It's quite a nice area to come into, it's bright and
482 clean looking. When I was a little girl I used to come here for physio, we used to be in a totally
483 different building, it used to be...it never had the feel that this one has got, you know, in that respect it,
484 it's not a feel of Oh. no! that building, but um.....it wouldn't affect your treatment, you're coming for
485 the treatment not the building.

486 2. It wasn't a problem for me, the decor or whatever

487 1. It's obviously more pleasant, but it's not part...
488 2. It's clean, and you know, that's good enough for me. I just want someone to help me out of this pain
489 (general chat that appearance doesn't matter too much)

490 1. Given the choice it's nicer to come into a pleasant building, of course,
491 2 Of course,
492 3. Of course,

493 R. We'll gradually draw this to a close now, try and think of one thing that stood out for you in
494 relation to your treatment as being the key factor

495 5 Pain.

496 R Perhaps you., can explain more about that..

497 1. One thing that stood out that was beneficial to us or one thing that stood out altogether?

498 R. Well. let's think of one thing that was beneficial to start with..

499 3. Mine was when I could turn me head round, and see the other side of the wall (laughs)

500 1. Mine was the massage. I came on a day when I was in really, really bad pain, she didn't do the
501 usual physio, she did this one off thing which she hadn't done before, and I did feel the benefit from it,
502 a big difference. Whereas I came in really stiff and in pain I left feeling much better, you know () that
503 was really nice. And that seemed to be a point to that, because, I came in feeling bad and I went out

504 feeling better, and you thought, that's what you think of, that's what you imagine you're going to get.
505 But it didn't happen every time though, so urn, that one time did stand out, yes.

506 4. For me it was the massage, especially the therapist who was massaging this (points to his right
507 shoulder? patient actually means frictions) Because as I said, my problem was not only the shoulder, I
508 didn't mention this before but I had pain on both sides of the neck, and By noticing how she actually
509 did it, I actually the pain you see was on both sides up here (points to posterior lat. neck) and it used
510 to move, all knotted up, so I actually applied more or less the same pressures and it was so sore, you
511 know afterwards, i thought I must have done some damage, but after about 3 days it went, the pain,
512 and also the knottiness, is much better now, just by, and also, you know, massage it (point of
513 shoulder) but once actually got carried away and applied too much pressure, and it got sore, and she
514 told me off (laughs)

515 1. We don't want physio, we want massage!

516 2. I haven't had a massage in 3 months. Haven't had one massage. No. This is what I want, (etc) so I
517 came in, in pain, and I finished off in pain, but all I've shown is what I can't do..

518 R. So what's your key feature then?

519 2. Nothing.

520 R . Nothing.

521 2. No, I'm not being rude (reiterates she only showed what she could do not what she couldn't do)

522 4. My one was really, really good, because after maybe say she used to massage after about 5 minutes,
523 but you can actually feel that during the process the pain is actually disappearing.

524 R. You mentioned pain as well (to 5.)

525 5. There was an expression introduced during the course which I can't remember exactly, something
526 about 'gate'..

527 R. Pain gate?

528 5. Yea, I mean in terms of an explanation of massaging where it hurts, it hurts a bit more and then it
529 feels better, which seems to apply, um...to physio on joints, vertebrae and between joints, that is
530 something which was new to me, and so I did learn a bit, I learned more about my condition, I mean I
531 could go away and read a book, perhaps I should, probably would be a very good idea to do so, urn, but
532 this was something that seemed relevant that I'd learned from coming here, about my condition and
533 about ways and means of treating it, and what was being done. So to that extent I thought, OK. this is
534 good, this is a positive thing, um...most of the time, yea....

535 R. That was an interesting point that was made there about learning something from the therapy,
536 something positive in connection with your condition. Did the rest of you feel you had learned more
537 about your problem to help you cope with it better in the future?

538 4. Yes, definitely. As I said, there is a problem and the pain is still there, but at least I know what I
539 can do to suppress the pain.

540 3. Yes, right, if you can still do your exercises it keeps it on a level.

541 R. So although you didn't get a particular benefit as a result of treatment, did you learn anything about
542 your problem as a result of coming up, do you feel? (to 2)
543 2. I'm still the same. No 1 don't know. (abbreviated version of repeated complaint)
544 1. I'm in a different situation really, aren't I?
545 R. In some ways, but there may be some things that you learn about a current problem when you come
546 up to therapy.
547 1. Not this time.
548 R. (General summing up)
549 2. If I have to be referred back to therapy by the GP I would ask if I could be seen by someone else
550 because 3 months, all I've done is come here and gone back.
551 End of session. General thanks to all participants.

APPENDIX 2.

2.8 Focus group matrix charts. i) Responses under the category heading Expectations of Treatment

CHRONIC <i>n</i> = 11	ACUTE <i>n</i> = 10
<p>20 Waste of time because of OA in every joint (7. +ve)*</p> <p>30,34 Expected miracles for pain to go away. (5. -ve)</p> <p>42,44 Hoping for a miracle, less pain, being able to walk (4. -ve)</p> <p>46 Pain relief (6. +ve)</p> <p>58 Pain relief (8. -ve)</p> <p>63 Dr. sent me for exs. but I didn't have much hope (2. +ve)</p> <p>70 Relief for my neck pain (1. -ve)</p> <p>80 Didn't have much hope (10. +ve/ -ve)</p> <p>96 Pain relief (3. +ve/ -ve)</p> <p>103 Didn't know (no increase in pain & increased mobility) (11. -ve)</p> <p>122 Pain relief (9. +ve/ -ve)</p> <p>268 PT said I was to have electrical treatment (11. -ve)</p> <p>279 Thought PT was to strengthen muscles (4 -ve)</p> <p>Total responses 11/11</p> <p style="text-align: center;">CHRONIC <i>n</i> = 5</p>	<p>5 Dreading it (because shoulder was so painful) (1. +ve)</p> <p>15,17 I was apprehensive I thought it was going to hurt (3. +ve)</p> <p>21 Treatment would be painful (2. +ve)</p> <p>28/29 Didn't know, wasn't scared, no idea (10. +ve)</p> <p>29 I didn't think it would hurt (10 +ve)</p> <p>41 Grateful for help to walk again (9. +ve)</p> <p>45 Looking forward to getting going (8. -ve)</p> <p>50 Looking forward to treatment after POP off (5. +ve)</p> <p>62 Knew what to expect (from previous treatment) (4. +ve)</p> <p>67 Looking forward to getting mobility back (6. +ve)</p> <p>75 (Nothing explicit mentioned) (7. +ve)</p> <p>Total responses 10/10</p> <p style="text-align: center;">ACUTE <i>n</i> = 4</p>
<p>3 Get rid of all this pain (2. -ve)</p> <p>6 Pain relief (1. -ve)</p> <p>7 Ease the pain (3. +ve)</p> <p>15 Hoping it will get better (4. +ve/ -ve)</p> <p>31 Didn't really expect any difference (1 -ve)</p> <p>44 Expecting traction (5. +ve/ -ve)</p> <p>197 Thought I would be having interferential treatment (5. +ve/-ve)</p> <p>Total responses 5/5</p>	<p>10 Didn't know (assumed it would get the arm working) (1. +ve)</p> <p>17 Wasn't really expecting anything (2. +ve)</p> <p>60 No idea (but exercises self explanatory) (3. +ve)</p> <p>(N 4 not asked as came in late) (+ve)</p> <p>Total responses 3/4</p>

Key: (Applies to all matrix charts) i) Details in the brackets identifies the participant in the transcript, and whether the treatment outcome was regarded as positive, negative or ambivalent
 ii) Numbers on the left in the boxes indicate the transcript line number

2.8 Focus group matrix charts (cont.) ii) Responses under the category heading Communication

CHRONIC n = 11	ACUTE n = 10
<p>71 Told I've got to do self help (1.-ve) 174 PT makes you aware only you can help yourself (2.+ve) 250 Showed me different things to do (exercises etc.) (4.-ve) 257 I still don't understand why they could do nothing for me (8.-ve) 271 Explained about exercises in relation to arthritis (11.-ve) 290 Showed me how to relieve cramp (4.-ve) 323 Told I had muscle cramp (10.+ve/-ve) 320 Had to tell PT my problem (10.+ve/-ve)</p> <p>Total responses 6/11</p>	<p>127 PT would show you how to exercise correctly (1.+ve) 142 Good communicator/ got over exactly what she wanted (10.+ve) 149 Communication goes both ways (3.+ve) 156 PT listened to what I had to say and we worked on that (3.+ve) 161 Gives you praise (10.+ve) 172 Gives you a guide to the right level of exercise (6.+ve) 180 Very little instruction and encouragement (8.-ve) 229 Told about the injury (4 & 9+ve) 266 Didn't have much talk with PT (8.-ve) 333 Good carry over between therapists (6.+ve) 409 Asked specifically for exercises before sport (6.+ve)</p> <p>Total responses 7/10</p>
CHRONIC n = 5	ACUTE n = 4
<p>53 Principle of treatment fully explained (5.+ve/-ve) 60 Given information from the X-Rays (3.+ve) 65 Showed a model of the spine and explained (3.+ve) 67 Explained cause of the problem (3.+ve) 78 Need to know the point of treatment (1.-ve) 99 Told cause of shoulder pain (2.-ve) 132 PT did tell me everything she was doing (3.+ve) 151 If I asked her anything, she'd write it down (3 +ve) 155 I didn't have the confidence to talk to her (2.-ve) 206 Everything was explained (5.+ve/-ve) 218 Might have been room for more discussion (5.+ve/-ve) 236 Explanation of exercises gave insight to problem (4.+ve/-ve) 271 PT didn't tell me what was happening (2.-ve)</p> <p>Total responses 5/5</p>	<p>120 Good explanation of exercises by PT (2.+ve) 135 Pt had X-Ray, explained exactly about arthritis (3.+ve) 150 Told why you were doing things (2. & 1.+ve) 194 Told not to overdo exercises (2.+ve) 267 Told to do home exercises (4.+ve) 327 Told to do home exercises (2.+ve) 381 Explanation of exercises in relation to everyday life (3.+ve) 399 Warned that treatment would probably hurt (3.+ve) 435 Told to do home exercises (3.+ve) 434 Showed X-Ray (3 +ve)</p> <p>Total responses 4/4</p>

2.8 Focus group matrix charts (cont.) if) Responses under the category heading Process/Content of treatment

CHRONIC n = 11	ACUTE n = 10
<p>26 PT gave me exercises to strengthen muscles. (7. +ve)</p> <p>130,132 Weekly/ 2 weekly PT visits gives encouragement (2. & 7 +ve)</p> <p>181 X-Rays should be with the PT for treatment (5. -ve)</p> <p>250 PT showed me different things to do/ exs. (4. -ve)</p> <p>303 (Assume) PT has Dr.'s case notes on the patient (8. -ve)</p> <p>353 PT should have a test for osteoporosis (2. +ve)</p> <p>564 Initial assessment (asking questions) wastes PT's time(9.+ve/-ve)</p> <p>Total responses 6/11</p>	<p>151 PT tailored the exercises (to me) (3. +ve)</p> <p>184,189 Facilities poor/cancellations/transport problems(8.-ve)</p> <p>199 Thrown out because you have had your lot. (8. -ve)</p> <p>283 Sessions used mainly for review of exercises (6. +ve)</p> <p>349 No appointments cancelled (9. +ve)</p> <p>386 Glad for discharge – not to come up to hospital again (7. +ve)</p> <p>412 If any problems could come back and enquire (6. +ve)</p> <p>436,440.If any problems could come back and enquire (3. & 7. +ve)</p> <p>447,451 If any problems come back (9. & 10. +ve)</p> <p>Total responses 6/10</p>
CHRONIC n = 5	ACUTE n = 4
<p>9 I thought I would have had to wait longer (3.+ve)</p> <p>11 There wasn't a long wait (for appointment) (2 -ve)</p> <p>328 Given appointment quickly (when chased up) (2.-ve)</p> <p>332 Long waiting list for treatment (3. +ve)</p> <p>340 Got appointment 3 weeks after injection (4. +ve/-ve)</p> <p>341 I waited 6 months. (1. -ve)</p> <p>358 3 months seems normal (wait) for GP referral (5. +ve/-ve)</p> <p>365 Once a week OK if you exercise in between (1. -ve)</p> <p>376 Twice a week (better frequency) to check on exercises (1. -ve)</p> <p>378 Treatment very frequent to begin with then less frequent (5. +ve/-ve)</p> <p>379 2 or 3 times a week seems normal for PT (5. +ve/-ve)</p> <p>408 Extra exercises added each time (3. +ve)</p> <p>441 PT very busy so left to exercise alone (1. -ve)</p> <p>448 Follow up appointment after discharge (desirable) (5. +ve/-ve)</p> <p>469 Building/décor not predominantly important (2. -ve)</p> <p>Total responses 5/5</p>	<p>44 Seen for treatment 2 weeks after accident (3. +ve)</p> <p>182 Given graded paper with exercises (3. +ve)</p> <p>223 Experts should tell you what exercises needed (1. +ve)</p> <p>231/232 PTs very busy so time for treatment limited / 20 minutes (2. +ve)</p> <p>245 Treatment never felt rushed (3 +ve)</p> <p>254,268 Never felt rushed (2. & 4. +ve)</p> <p>416, 418 Good continuity with new therapist (1 & 3 +ve)</p> <p>463 Surprised at quick appointment for treatment (1. +ve)</p> <p>466 Consultant referrals (get quicker appointments) (1. +ve)</p> <p>472 Treated until they could do no more for me(1. +ve)</p> <p>474 Treated until they could do no more for me (2. +ve)</p> <p>496 8.30 a.m. appointments good (1. +ve)</p> <p>521 Treatment near workplace more convenient (4. +ve)</p> <p>Total responses 4/4</p>

2. 8 Focus group matrix charts (cont.) iv) Responses under the category heading Perceptions of the Therapist

CHRONIC n = 11	ACUTE n = 10
<p>25 PT was excellent (7 +ve) 46 PT was marvellous (6 +ve) 169 The person treating you knows better (5. -ve) 193 PT too vicious (5. -ve) 203 PT didn't know what was needed (5.-ve) 218 PT goes straight to the point/knows what to do/gentle (9.+ve/-ve) 237 Knowledgeable (7. +ve) 248 Pt was very helpful (4. -ve) 253/255 Caring / dedicated (8. -ve) 325 They ought to have more information about the patient (9.+ve/-ve) 576 PT worked out (my) problem on her own (7. +ve) 618. PT good at explaining exercises (1.-ve)</p> <p>Total responses 7/11</p>	<p>6 PT put me at ease / assured me (1. +ve) 109 Put you at ease / attentive / very kind (5. & 7 +ve) 126 Joined in (with the class) (1. +ve) 141 PT was very caring and a good communicator (10. +ve) 156,159 Listened / explained clearly (3. +ve) 161 Gave praise (10. +ve) 274 I took it they knew what they were doing (7. +ve) 341 PT didn't make you feel silly (9. +ve) 345 PT put you at ease (9. +ve) 369 PT had a positive attitude to treatment (10. +ve) 423. PT busy, no time to keep telling me what I know (1.+ve)</p> <p>Total responses 6/10</p>
<p>CHRONIC n = 5</p> <p>132 PT was friendly /told me everything she was doing (3. +ve) 134 Felt she didn't want me to say too much (1. -ve) 144 PT didn't communicate well (1. -ve) 151 PT answered my questions (3. +ve) 153 She was 'matter of fact' / didn't answer my questions (2. -ve) 162 PT came out tensed up (2. -ve) 201 PT was skilled and professional (5. +ve/ -ve) 206 Able to discuss things/everything explained (5. +ve/-ve) 254 PT listened/ demonstrated anything (3. +ve) 289 PT didn't make patient comfortable (2. -ve) 290 Bedside manner lacking (2. -ve) 288 Lack of empathy (1. -ve) 292. PT didn't inform patient what she was doing (2. -ve) 312 PT didn't listen (1. -ve) 387 PTs enthusiasm wanes (if patient doesn't improve) (2. -ve) 413 Pt was busy (1. -ve)</p> <p>Total responses 4/5</p>	<p>ACUTE n = 4</p> <p>110 No knowledge of X-Rays or condition (1.+ve) 117 PT seemed 'on the ball' / good at explaining need for exs. (2.+ve) 129 PT Extremely pleasant and outwardgoing (3. +ve) 231 Therapists very busy (2.+ve) 316/317 PT was interested in you / getting you better / friendly (4.+ve) 337 Nice people / remembered little things (1.+ve) 320 Remembered things about you (4. ve) 344 Wanted you to get better (1.+ve) 349 Personal touch (4.+ve) 356 PT very friendly and efficient (3.+ve) 403 She understood the nature of the injury (2 +ve) 597 PTs were very patient and friendly (3.+ve)</p> <p>Total responses 4/4</p>

2. 8 Focus group matrix charts (cont.) v) Responses under the category heading Outcome

CHRONIC n= 11	ACUTE n = 10
<p>25 Got me walking properly, stopped a lot of pain (7. +ve)* 46 Good pain relief (6. +ve) 88 Maybe PT helped but still has pain (10. +ve/-ve) 97 Original ache gone now new pain higher up (3. +ve/-ve) 229 Temporary pain relief only (9. +ve/-ve) 244 I'm worse (4 -ve) 256 Don't understand why they could do nothing for me (8.-ve) 610 Pain worse (11. -ve) 620 Pain not improved (1. -ve) 622 Pain free due to insole (2. +ve) 627 No improvement (5. -ve)</p>	<p>25 It's still not better (2 +ve) 204 The improvement was very slight (8. -ve) 349 You could see a difference each time you came (9. +ve) 409 Return to sport (6. +ve) 424 Functionally improved but not 100% (1. +ve) 434,440 Discussed discharge, happy to continue at home (3.&7. +ve) 476 Return to work (musician) (10. +ve) 492 Functional improvement (5. +ve) 497 Return to work (window cleaner) (4. +ve)</p>
Total responses 11/11	Total responses 10/10
CHRONIC n = 5	ACUTE n = 4
<p>73 Some symptom relief and increased movement (3. +ve) 379 Some temporary benefit during treatment (5. +ve/-ve) 416 No better (1. -ve) 527 I know how to suppress the pain (4. +ve/-ve) 531 No change (2. -ve)</p>	<p>289 Most movement returned but not 100% (4. +ve) 436 100% movement returned (3. +ve) 537 100% better, back to work (2. +ve) 558 Good functional recovery (1. +ve)</p>
Total responses 5/5	Total responses 4/4

2.8 Focus group matrix charts (cont.) vi) Responses under the category heading Salient aspects of Care

TREATMENT MODALITIES	OUTCOME
489 Massage (C) n= 5 (1. -ve.) 495 Massage (frictions) (C) n= 5 (4. +ve/-ve) * 612 Heat , IF & U/S (C) n=11 (10 +ve/-ve) 622 Built up insole (C) n=11 (2.+ve) 623 Exercises & heat pad (C) n=11 (3.+ve/-ve) 630 U/S (C) n=11 (6.+ve) + 471 Exercise bike (A) n=10 (8. -ve) 474 Machine ? U/S (A) n=10 (7.+ve) 486 Exercises (A) n=10 (2 +ve)	488 Could turn my head (C) n= 5 (3. +ve) 521 Learned / how to manage (C) n= 5 (5.+ve/-ve) 527 ,Know how to ease pain (C) n= 5 (4.+ve/-ve) * 531 I'm still the same (C) n= 5 (2 -ve) 468 Could move after 1 st . appt. (A) n=10 (4 +ve) 476 Could play again (A) n=10 (10 +ve) 493 Able to use hand again (A) n=10 (5 +ve) 610 PT makes pain worse (C) n=11 (11 -ve) 625 Haven't gained (C) n=11 (4 -ve) 627 PT no help (C) n=11 (5 -ve)
Total responses (A) 3/14 [21%] (C) 6/16 [38%]	Total responses (A) 3/14 [21%] (C) 7/16 [44%]
THERAPIST	TREATMENT CONTENT
618 PT explained /kind /understood (C) n=11 (1 -ve) 630 Understanding (+ U/S above) (C) n=11 (6.+ve) + 636 Caring / helpful / dedicated (C) n=11 (8.-ve) 638 PT essential (C) n=11 (9.+ve/-ve) 620,622 Gave encouragement/ mind at rest (A) n= 4 (2.+ve) 646 Gave encouragement (A) n= 4 (4 +ve)	629 Explanation of X-Rays (A) n=4 (3. +ve) 638 Knowing why exs. were important, the way it was all co-ordinated together (A) n=4 (1. +ve) 463 Finding right level of exercise (A) n=10 (6. +ve) 503 Treatment so gentle it didn't hurt (A) n=10 (1. +ve) 632 Thoroughness of initial examination (C) n=11. (7. +ve)
Total responses (A) 2/14 [14%] (C) 4/16 [25%]	Total responses (A) 4/14 [28%] (C) 1/16 [6%]

Note: i) (A) = acute group (C) = chronic group

ii) 2 responses (C) marked * + appear in 2 categories, so total (C) answers = 18 not 16 (n= 5 + n= 11)

iii) No response from no. 3 & 9 (A)

APPENDIX 2.

2.9 Peer review of statements by subjects relating to the topic categories represented in the matrix charts following content analysis of the focus group interview transcripts.

Key to judgements of Matrix charts

- Added* = new statement added to matrix chart under the category heading
- Supplementary* = added to existing short statement giving a fuller description of subject's comment
- Similar sentiment* = statement not added because it was judged to say the same thing as the originally selected statement using different words
- Replacement* = statement suggested by judge described the sentiment more comprehensively than the original one chosen
- Salient aspects of care* = judges were not given this chart because subjects were specifically asked to state the most salient feature of their treatment at the end of the interview, the statements identified were therefore unambiguous in relation to the categories
- 100%* = total agreement with the content of the cell of the matrix chart. No additions/amendments needed
- (100%)* = supplementary statements were added to existing ones on matrix chart therefore constitutes total agreement with originals

Table 2.9.1 Agreement between researcher and judges to representative statements selected for the 5 principal categories of matrix chart for the Acute group $n=4$

Judge	Expectations	Communication	Process/content	Therapist	Outcome
KD	100%	1 suggested statement already under 'Process'	100%	1 added	100%
JW	1 supplementary not added (100%)	2 statements to 'Salient aspects of care' 1 added	3 added 2 expand existing statements 2 statements to 'Salient aspects of care'	2 added 1 supplemented	100%

Additional/supplementary statements in relation to each of the principal categories in Acute group $n=4$. Subject identification in parenthesis by number identified on the transcript, and whether outcome of care was positive, negative or ambivalent.

Communication

- Showed X-Ray (3+ve)

2 statements added to Salient aspects of Care matrix chart under the heading 'Therapist',

- Encouragement all the time (2 & 4 +ve)
- Not in an ordering way (3 +ve)

2.9 Peer review of statements by subjects relating to the topic categories represented in the matrix charts following content analysis of the focus group interview transcripts (cont.)

Process/content

- Seen soon after accident, 2 weeks (3+ve)
- 20 minutes enough (2+ve) (add to existing statement)
- Never rushed through anything (2 & 4 +ve) (confirmed existing statement and added)
- Good continuity with new PT (1 & 3 +ve)
- Treated till couldn't do any more for me (1 & 2 +ve)

Two statements were added to Salient aspects of Care

- Encouragement all the time (2&4 +ve) (under 'Therapist')
- The way it was all co-ordinated together (supplementary under 'Content')

Therapist

- Good at explaining why need exercises (2+ve) (supplemented)
- They were very patient and friendly (3+ve)
- PT understood the nature of the injury (2+ve)
- No knowledge, no X-Rays or anything about the condition (1+ve)

Table 2.9.2 Agreement between researcher and judges to representative statements selected for the 5 principal categories of matrix chart for the Chronic group n=5

Judge	Expectations	Communication	Process/content	Therapist	Outcome
KD	1 added	1 added	3 added 1 statement already under 'Therapist'	100%	1 added
JW	2 added (1 the same as KD)	3 added (1 the same as KD)	5 added (1 the same as KD)	3 added 2 not added as similar statements	1 added (same as KD)

Additional/supplementary statements in relation to each of the principal categories in Chronic group n= 5. Subject identification in parenthesis by number identified in the transcript and whether outcome of care was positive, negative or ambivalent.

Expectations

- No change (1+ve)
- Thought I would have IF treatment (5+ve/-ve)

Communication/Information

- PT did tell me everything she was doing (3=ve)
- If I asked her she'd write it down (3+ve)
- Didn't have the confidence to talk to her (2-ve)

2.9 Peer review of statements by subjects relating to the topic categories represented in the matrix charts following content analysis of the focus group interview transcripts (cont.)

Process/Content

- Given appointment quickly when chased up (2-ve)
- There wasn't a long wait (2-ve)
- Didn't take long to get appointment, 3 weeks after injection (4+ve/-ve)
- Long time waiting 6 months (1-ve)
- Treatment frequent to begin, later less frequent (5 +ve/-ve)
- Extra exercises added each time (3+ve)
- I thought I would have to wait longer (3+ve)

Therapist

- PT came out tensed up (2-ve)
- Able to discuss things/ everything explained (5 +ve/-ve)
- She was busy (1-ve)

Outcome

- I know how to suppress the pain (4+ve/-ve)

Table 2.9.3 Agreement between researcher and judges to representative statements selected for the 5 principal categories of matrix chart for the Acute group $n=10$

Judge	Expectations	Communication	Process/content	Therapist	Outcome
JW	3 supplementary (100%)	1 supplementary 1 added 1 replacement	1 added	1 added 1 not added as similar	1 replacement
DM	1 supplementary Delete 'didn't know' from existing statement	1 supplementary (100%)	1 not added as similar (100%)	100%	1 replacement (same as JW)

Additional/supplementary statements in relation to each of the principal categories in Acute group $n= 10$. Subject identification in parenthesis by number identified in the transcript and whether outcome of care was positive, negative or ambivalent.

Expectations

- Thought it would be painful (3+ve) (supplementary)
- Wasn't scared, no idea (10+ve) (supplementary)
- Didn't think it would hurt (10+ve) (supplementary)
- Help me walk (9+ve) (supplementary)

Communication

- Listened and worked on that (6+ve) (supplementary)
- Very little (instruction & encouragement) (8-ve)
- She told me in no uncertain terms (I had not been exercising) (6+ve)
- Good communicator (10+ve) (supplementary)

2.9 Peer review of statements by subjects relating to the topic categories represented in the matrix charts following content analysis of the focus group interview transcripts (cont.)

Process/Content

- Thrown out because you've had your lot (8-ve)

Therapist

- I took it they knew what they were doing (7+ve)

Outcome

- The improvement was very slight (8-ve)
- You could see a difference each time you came (9+ve)

Table 2.9.4 Agreement between researcher and judges to representative statements selected for the 5 principal categories of matrix chart for the Chronic group $n=11$

Judge	Expectations	Communication	Process/content	Therapist	Outcome
JW	2 added 1 supplementary	1 added	1 added	2 added	1 replacement
DM	1 added (same as JW)	1 added under 'Therapist'	1 not added as similar (100%)	2 added (1 already under 'Salient aspects of care')	1 replacement

Additional/supplementary statements in relation to each of the principal categories in Chronic group $n= 11$. Subject identification in parenthesis by number identified in the transcript and whether outcome of care was positive, negative or ambivalent.

Expectations

- PT was to strengthen muscles (4-ve)
- PT said I was to have electrical treatment (11-ve)
- Sent for exercises (2+ve) (supplementary)

Communication

- Good at explaining exercises (1-ve) (added under 'Therapist')
- I still don't understand why they could do nothing for me (8-ve)

Process/Content

- Showing me different things to do, exercises etc. (4-ve)

Therapist

- The person treating you knows better (5-ve)
- They ought to have more information about the patient (9+ve/-ve)
- PT was marvellous (6+ve)
- PT was excellent (7+ve)

Outcome

- I'm worse (4-ve)
- Got me walking properly (7+ve)

APPENDIX 3

3.1 Sample transcript of multiphase interview (chronic subject, female, inner city)

3.2 Sample transcript of multiphase interview (acute subject, male, suburban)

3.3 Sample of coding sheets following content analysis of multiphase interview transcripts of acute subjects ($n=19$, inner city). Preamble and unstructured phase of the interview

3.4 Sample of coding sheets following content analysis of multiphase interview transcripts of acute subjects ($n=19$, inner city). Card ranking phase of the interview

3.5 Sample peer review of statements attributed to the principal topic categories following content analysis of multiphase interview transcripts (acute $n=19$, inner city)

Table 3.1 Results of card ranking by individual subjects in multiphase interviews: acute group $n=19$ (inner city)

Table 3.2 Summary of card ranking by all subjects in multiphase interviews: acute group $n=19$ (inner city)

Table 3.3 Results of card ranking by individual subjects in multiphase interviews: acute group $n=15$ (suburban)

Table 3.4 Summary of card ranking by all subjects in multiphase interviews: acute group $n=15$ (suburban)

Table 3.5 Results of card ranking by individual subjects in multiphase interviews: chronic group $n=17$ (inner city)

Table 3.6 Summary of card ranking by all subjects in multiphase interviews: chronic group $n=17$ (inner city)

Table 3.7 Results of card ranking by individual subjects in multiphase interviews: chronic group $n=15$ (suburban)

Table 3.8 Summary of card ranking by all subjects in multiphase interviews: chronic group $n=15$ (suburban)

APPENDIX 3.

3.1 Sample transcript of multiphase interview (chronic subject, female, inner city)

- 1 I. Before this recent course of treatment you had on your neck, had you ever had physiotherapy
2 before?
- 3 S. No.
- 4 I. So, did you have any idea about physiotherapists did?
- 5 S. Yes.
- 6 I. Yes? How was that?
- 7 S. Well I had a sister in law who had MS and the physios used to come to her, and show us what
8 to do to help move her legs, so I knew more or less what it involved [tape stopped because of
9 baby crying]
- 10 I. [tape re-started] Alright, we were just talking about the fact that you have had some experience
11 of seeing physiotherapy. OK, now I'd like you to think back on your recent course of physio
12 treatment, and try to bring to mind any aspects of that treatment that you remember for whatever
13 reason, things that you would associate with that treatment....[tape stopped while patient thought
14 about this]
- 15 [tape re-started] OK, so you have written a few things down, 'Exercises', 'Pulling my head' and
16 'Certain ways she twisted my arm'. Now if you are to think about those in order of importance
17 for you which would you put first?
- 18 S. The exercises.
- 19 I. Alright, tell me why those were particularly important for you?
- 20 S. Because I had to do it when I wasn't there, I'd have to do it...because I go to the gym anyway,
21 and I had to do it at the gym, or I could do it in my own home, because it was all the time, it was
22 more or less every day I done the exercises, so that is the main thing that sticks.
- 23 I. And what were the exercises for?
- 24 S. All to do with my neck.....um I'd have to pull my head down and twist my arm, and the
25 last exercise she gave me was with a giant elastic band, that exercise I had to do...that was
26 funny, it was funny doing that one, but um, it was the exercises.
- 27 I. Yes. Did you think you'd have to do work on your own like that at home?
- 28 S. Yes. I had an idea I'd have to do that because of when.... my sister in law....when the
29 physios.....they only used to come very occasionally to her because they were so busy, so they
30 used to give us a rough idea of what to do, and we used to do it for her every day, to try and
31 loosen her feet. -
- 32 I. OK, now what's the next most important one?
- 33 S.I think when she used to pull my head, it used to make me laugh when she did it.
- 34 I. Yes? Was it uncomfortable?

35 S. No, no, when it did get uncomfortable.....she'd, you know...tell me if it's uncomfortable, and
36 I'd say, but um, it's funny, because she used to stand behind me and pull my head.
37 I. What position were you in when she did that?
38 S. Lying flat.
39 I. Do you know why she was doing that?
40 S. Not really, no.
41 I. What effect did it have on you?
42 S. Well, I'd get a certain feeling down part of my arm, and um, she used to....it was to do with
43 loosening something in this part of my neck, and um.....yea, it was just to loosen up certain
44 parts, because I was very stiff on one side so.....and the same with the..... twisting
45 movement.
46 I. That's you third point.
47 S. Yes.....pushing it back.
48 I. What was she twisting it for?
49 S. Well it was.....I don't know...it was all to do with the nerves, the nerves in the arm, certain
50 ways you twist, she done it with both, see how far I could go with my right and how far I could
51 go with my left.
52 I. And was there a difference between the two?
53 S. Yes, there was a difference in what I could do with my right and what I could do with my left.
54 I. OK. So those are things that immediately come to mind about your treatment. Now I'm going
55 to show you some cards.....[tape stopped while patient rank ordered the cards]
56 [tape re-started] Alright, the cards have been placed in the following order, 1. Result of treatment,
57 2. My therapist, 3. Explanation and Information given, 4. Content of treatment, 5, Expectations
58 of physiotherapy, 6. Organisation of sessions.
59 I. OK, you've got Result of treatment as your number one card, tell me why.
60 S. Because of the....how uncomfortable I was with my arm, it was my neck going down my
61 arm. First of all what I wanted to get done was to get cured, so the result of treatment was
62 probably my top....top one.
63 I. So were you hoping to be completely better after the treatment?
64 S. Yea, yea.
65 I. And in fact how were you when the treatment finished?
66 S. No better.
67 I. No better at all?
68 S. No.
69 I. Didn't it change anything?
70 S. No, because I think there's something else there apart from the damaged nerve. I have got
71 arthritis in the neck, so I do believe that has a lot to do with it, it's nothing to do with the

72 physiotherapy, it's...there's something else there, so I'm waiting for an appointment with my GP
73 to start from scratch to see (what happens).

74 I. Who referred you up to physio this time?

75 S. The GP.

76 I. Right, and what did he say was wrong with your neck?

77 S. He....I kept saying it was my arm, because my arm kept feeling very heavy, and um, I
78 explained to him that I go to the gym, but I know I never ...I knew I never damaged it at the gym,
79 but um, just something there, it kept going dead, I kept getting pins and needles...to be quite
80 honest I thought it was something wrong with my heart, because I kept getting pins and needles
81 to my thumb, So I thought because the family is known for heart trouble, so I kept thinking and I
82 kept putting it off because I was a bit frightened, and then I went for an X-Ray, and that's when
83 they discovered that....there's something...a nerve there, plus that's when they discovered I had
84 the arthritis in my neck as well, but um....and then I got referred to the physio.

85 I. Right. Did the GP say what he thought the physio might be able to do for you?

86 S. Loosen...loosen my arm, so.....I did wait quite a long time, I never realised I
87 was on the list. So I was on the list from November, and I got my first appointment at the end of
88 May, so...I never knew I was on the list, so, she just phoned and said, um.....to make an.....I've
89 got to make the appointment because the amount of appointments people miss. I said, that's
90 quick because I only went to the doctor's last week, and she said you've been on the list since
91 November, so I never knew that, so.....

92 I. So, if you were to say, in percentage terms, how much your symptoms have changed as a result
93 of treatment, what would you say?

94 S. Well, when she done them, when she was doing them sometimes she said you might be achy
95 tomorrow after what's gone on, which I understand that. I never was, I never was. I could go
96 back and I could say to her, yea I've been great this week, my arm's been great, and then the
97 following week I'd go downhill again, so I felt like....she wasn't wasting....I was wasting her
98 time, if you understand what I mean, I felt a bit like a fraud, because I was coming away and I
99 was no better....that's why I keep thinking there's something else there, you know, because she
100 really tried hard, she really did well.....

101 I. Oh, dear. So you've still got the symptoms in your arm as well....

102 S. Yea, yea. All the time I support this arm, I'm supporting here, you know, but it's hard trying to
103 feed the baby that way [Note: patient's grandchild] and that makes it a bit difficult. It's a year
104 now...and even down to sleeping.....I have to sleep with um...a V-shaped pillow, I can't have a
105 pillow just at the back, I have to have my arm and my neck and everything supported, more or
106 less level, my top half, and I can only ever sleep on my back, I can't turn over, so.....

107 I. So that was disappointing.

108 S. Yea, it is it's really disappointing.

109 I. Alright, explain to me why you have put the Therapist card as number two.

110 S. Because she was good, she was really good, she knew what she was doing, and I'd come away
111 from there feeling better, you know, but then as I say, I'd go downhill again, but I couldn't fault
112 her, you know, she was really good, she'd explain things as well, what she was doing, so...half
113 of the things I've forgotten (laughs), but, um, no she was good, and you know, she...made you
114 feel comfortable and that was nice, she made you feel really comfortable. So she would come
115 second I think.

116 I. Did you just have the one therapist all the way through?

117 S. No, I had one when I first went, who took all my particulars down, and um...my next
118 appointment with her would have been the day I was going on holiday, so I had to cancel it, but
119 she left, so that's when I had (the second one)...I went back and had (PT name), so but I
120 had.....the one who done my treatment was the same one, the only difference was the one that
121 took all the particulars.

122 I. What difference did it make to you to have two therapists?

123 S. No, no, it didn't.

124 I. Did you find you could talk quite easily to your therapist?

125 S. Yea, yea she was good. I was worried about the gym, whether I should go to the gym, and she
126 said yes, carry on going to the gym, she....you know I couldn't not go because I liked it so much,
127 and plus my state of mind sometimes I needed to go to the gym, um, she just asked me all the
128 machines I used, what exercises I did, but she never ever said don't do certain ones, but she said
129 if you feel uncomfortable doing something, don't do it, but nothing in the gym made me
130 uncomfortable, so.....you know she did say....I knew if there was anything there that I
131 couldn't do she would have said, but there wasn't so.....

132 I. OK, anything else about the therapist that comes to mind?

133 S.not really.

134 I. Alright, do you want to go on to your next card then? Explanation and Information

135 S. Yes, she....she...well she used to explain everything.....um.....

136 I. What did she tell you about what she thought was wrong with your neck and your arm?

137 S. She said that....I don't know if I remember it now, she said it's like.....is it 3 nerves, like a
138 W, and one of the nerves is damaged, and that's where the pins and needles are coming from, and
139 she explained all that,...um.....and I had to do this exercises, where I had to twist my...hand
140 against a wall to loosen it, and however far I got, then that was making...like it...that much
141 better. She would....you know she used to explain all the exercises and everything else to me,
142 but um.....

143 I. Were you shown a model of the spine at all, the bones to show what was going on in your
144 neck?

145 S. I think the other lady, the first one showed me that.

146 I. Did she?

147 S. Yea, that was when I first went, she showed me that.

148 I. What did you think about that?
149 S.I don't know, I don't think I was really taking it in,.....um.....the thing is, so many
150 times it's been explained to me, different things, that my mind goes a complete blank.
151 I. What by different people, or different therapists?
152 S. Not therapists. When you talk to other people who's hurt their arm or whatever, and they tell
153 you this and they tell you that, but, um.....that skeleton was shown to me the first time I went,
154 I'm sure it was.....I'm sure it was.....I don't think I ever see it again, I don't think it was
155 explained to me afterwards, no, only the once.....
156 I. How much do you like to know about the details of things like that?
157 S. I don't really. Only to an extent, I want to know if it can get better and how long it's going to
158 take. I don't like to know the gory bits (laughs)
159 I. Had you had some X-Rays taken of your neck?
160 S. Yea, I had the X-Rays taken before I had physio, and that's when they noticed the nerve and
161 plus the arthritis.
162 I. Do you know if the therapist saw your X-Rays?
163 S. Don't know, no idea?
164 I. They weren't there in the department?
165 S. No, no.
166 I. Had you seen them yourself?
167 S. No. (laughs)
168 I. Right. Now, you've said as well that she gave you these exercises to do when you came home,
169 did you have anything written down to keep as a reminder?
170 S. No, no. Nothing like that.
171 I. Would you have found it helpful to have had something in writing?
172 S. No, because I knew, you know. Once she showed me how to do them, I knew what I had to
173 do, it was quite simple really. If it would have been...maybe if it would have been I...didn't
174 know about exercise, than maybe it would have been better for someone to have had it written
175 down, but, you know, it wasn't really needed. If I'd have asked her she probably would have, but
176 um, no, I knew. It was one exercise each time she gave to do, she didn't bung them all on me at
177 once, so, it was one, carry on doing that, but try this one as we. So I more or less knew what I
178 was doing.
179 I. So when you say you knew about exercise, that was from going to the gym was it?
180 S. Yea, because I've been going to the gym for a long time, so, yea.....[short discussion of
181 how her gym exercises are organised]
182 I. And when you had to do these exercises, it had to be all the time the therapist told you?
183 S. Well every day. Like um, the one with the arm 3 times a day you'd do, um.....shrugging your
184 shoulders you can just stand in the shop and keep it up, say, I was in the shop and I was standing
185 there shrugging my shoulders, exercises like that, you know, that you can do any time, you can

186 stand in the kitchen you can shrug your shoulders, but um.....the arm one, which you twist on
187 the wall, that was 3 times a day.....or however many times I suppose, if you want to do it more
188 you could, so.....I did, I used to do it in the gym, I used to do it at home.....I tried.
189 I. Did you find it time consuming, did it get in the way of other things?
190 S. Well.....no, not really. I go to the gym 3 or 4 times a week, so.....no, not really. I could
191 you know, go to the gym and come home. Sometimes I'd just go to the gym, and I'd do it at the
192 gym and I wouldn't do it for the rest of the day, I'd have other things to do, but if I wasn't at the
193 gym I'd do it 3 times a day, so, just (get better, really).
194 I. Are you still keeping them up now?
195 S. I still do the exercises, yea, but it's as I say.....it's.....
196 I. Does it benefit you?
197 S. No.
198 I. So, why do you keep them up?
199 S. I don't know! Waiting for a miracle I suppose, but um, once I go back to my GP and find out
200 just what's going on, I might end up with more physio, I don't know.
201 I. And would you go back?
202 S. Yes, I'd go back.....I'd go back and have another go, because it's so uncomfortable, really
203 uncomfortable...and, don't lift things...like don't lift things, um, level it off, it's hard to level
204 them off.....
205 I. What do you mean?
206 S. With your shopping, level them off.
207 I. Oh, I see, equal in both hands.
208 S. It's not the physio that said that, that was my GP, level everything off. I said I'm going to
209 stand in Tescos and put 6 tins there, 6 tins there, you know, it's so....you know you can't do it,
210 you just can't do it, so.....we'll have another try.
211 I. So, if the treatment turned out to be similar to what you had before, would you still persevere
212 with it?
213 S. I'd try with it....I'd rather try something else, rather than have the same... see if something
214 else would work. If that didn't work I can't see it working a second time, you know,
215 so.....sometimes I...feel like....hanging, you know, like when you want to stretch
216 yourself, but I daren't do , it's a really horrible feeling....
217 I. But you said she did pull your neck...
218 S. Yes, yea, she did....she did pull sort of.....
219 I. And it did help a bit.
220 S. Yea, yea, so, maybe if I can hang from my neck (laughs)....just leave the arms
221 dangling.....
222 I. OK, anything else about the explanations?
223 S.

224 I. So you felt you were fully informed about what was going on in the session?

225 S. Yea, yea, yea.

226 I. So this brings us on the Content of the sessions.

227 I. Now apart from the pulling, and the exercises, was there anything else you had done when you

228 were up in the department?

229 S.Yes, um, the last time I was there.....she bandaged my shoulder.....um.....I had

230 to hold it straight, one ladywhile she held me.... I had to be level.. they put this, like, sticky

231 bandage, yea, put that on it, and er, I said to her, that will probably make me come up, and she

232 said no it won't, it probably won't, she said, because it's all..... non-allergy.....

233 I. Come out in a rash, you thought?

234 S. Yea, because I know what I'm like with plasters and that, she said try it and keep it on as long

235 as possible, so we was laughing about it, and I said, there goes my shower, don't it, there goes

236 my sauna down the gym, and um, she said just try and keep it on, I couldn't keep it on for 5

237 hours, and I had to rip it off, because I was all marked all down me back.

238 I. What, a rash came up?

239 S. Yea, it was the plaster, I sort of kept it on, but I couldn't.....I couldn't do it. But it seems

240 strange, and I thought, how can I keep my shoulder straight even with that on, but it did, it sort of

241 held it, but, um, unfortunately I had to take it off.

242 I. So, it was only the once you had that done?

243 S. Yea, yea, well that was the last time, yea, because she said that if it doesn't work then you

244 have to go back to your GP, but I haven't had time to go back to the GP, the Neurofen has been

245 too close in the cupboard (laughs), and that was the only other thing she did.

246 I. She didn't do anything with her hands, you know, pressing....

247 S. Yea, all down my.....yea she done.... all the way down my spine.

248 I. How did that feel?

249 S. Yea, alright, it was strange...it was a strange feeling, because she was in.... points that, you

250 know, you don't usually feel, yes, she did do that all down the spine.

251 I. Do you know what that was for?

252 S. No, she probably told me but I don't remember.

253 I. Did it have an effect on your arm at all when she was doing that?

254 S.She touched a point here at one time, up here somewhere, and it tingled down my thumb,

255 there was something there, then she released the pressure and she'd say, are the pins and needles

256 still there or have they gone, and at times when she did certain things, I'd say Oh, keep your

257 fingers there because I've got nothing, it's great, and um, certain pressure points that she done, I

258 could feel it run down my arm.....

259 I. And was that the actual treatment she was doing, or was she just assessing you doing that?

260 S. I'm not sure.

261 I. No.....Did you have any equipment used on you at all, electrical machines?

262 S. No, no.

263 I. Had you thought you might?

264 S. Not really, no.....

265 I. How long were your sessions?

266 S. About half an hour, 20 minutes to half an hour.

267 I. And what did you feel about that as a length of time?

268 S.I don't take much notice of it, to me half an hour is quite a long time, really, because of the

269 way things are, but, um.... I thought it was long enough....I thought it was long enough to see

270 what....what they could do, you know, so.....it was always so busy, you know, you go in the

271 waiting room, and the waiting room is so packed, so really to get half an hour you were lucky,

272 so.....then come up half an hour late, Oh, half an hour late! They can't see you.

273 I. Were you late?

274 S. No, no, not me, other people, I used to listen to, and I used to think, they can't do that, you

275 know, there's other people....you know if they left me waiting an hour I'd be angry if someone

276 else was late, but I know they're so busy, because I know from.....my sister-in-law, they're ever

277 so busy.

278 I. Right, OK, so anything else about what happened in the session that come to mind?

279 S. No.

280 I. Would you say any of the sessions were uncomfortable or particularly comfortable?

281 S.No, not really.....only when she...at the pressure point when the pins and

282 needles and the ache went away, I could leave her there all day (laughs) but um, nothing was

283 really uncomfortable, it was just.....something being done and, you know, so.....

284 I. OK, lets go on to the next one then, Expectations of physiotherapy.

285 So, this is your 5th card, so fairly low down on.....

286 S. I knew more or less what to expect.

287 I. In terms of what?

288 S. What they'll do, and how you get pulled about in physiotherapy, because a lot of people go to

289 physiotherapy with the idea they're going to get a massage, and be done and not get no pain, but

290 I already knew what went on in physio so.....they kill you before they cure you, sort of thing

291 (laughs) you know.....

292 I. Who told you about the massage?

293 S. No, I'm saying, people do go around with the idea you go in there and have a massage and you

294 come out cured.

295 I. What, they've had that have they?

296 S. No, no, like a friend of mind said, Oh, you're having physiotherapy, she said, how lovely,

297 lovely massage, I said it's not only massage! (laughs) that's how some people's ideas of physio

298 are.

299 I. Yes, yes. Do you think a massage would have helped you?

300 S.I don't know.....don't give me no ideas, I'll go and book one (laughs), I don't really know,
301 it might have at the time, just.....just while it was being done, but I don't suppose afterwards it
302 would have done any good.....

303 I. So, it was mainly exercises you were thinking of?

304 S. Yea.

305 I. So when you started the treatment were there any surprises at what did happen?

306 S. No, not really, no.....because I've watched it, and I've watched my sister-in-law's feet
307 being twisted and turned, and her legs being pulled down, and I know more or less what goes on,
308 and when I thought about her, I thought what they done with her feet they're going to do with my
309 arm (laughs) so.....

310 I. Then linking in with the Result, so when you first started the treatment, I think you mentioned
311 earlier, you were hoping you would get completely better.....

312 S. I did, but unfortunately.....it didn't happen.....

313 I. Alright, anything else about that?

314 S.

315 I. No? Let's go on to your last card then the Organisation of the treatment.

316 Now, again earlier, when you said the GP had referred you up to the department, you said you
317 didn't know you had been referred in the November, well, did he say he would be writing up to
318 the department?

319 S. No.

320 I. He must have sent a letter?

321 S. He must have done, because, um..... he said to me, to take.....I was taking Paracetamol, I said
322 I'm taking Paracetamol, but.... my arm's getting immune to it, and it's getting to the point now
323 when it doesn't help, 'Take Neurofen', I said OK then, I'll take the Neurofen, and then, it was
324 then....that was a long time...it was after Christmas that was, that I went back to him about my
325 arm, and I came away from there, and it was.....April.....beginning or end of April I got
326 a phone call *from* physiotherapy, and it weren't long.....I said, but I only went to the doctor's
327 last week, but she said, yea, but you've been on the list since November, so he did that without
328 me knowing, soI never knew at all that he'd been in touch with physio, but when I went
329 back the second time he mentioned physio....

330 I. What, in the April?

331 S. Yea, he mentioned it then, so I thought, well, he might do it then but he'd done it before.

332 I. What did you think about that?

333 S. I thought it was strange.....I thought it was really, really strange that he hadn't said he was
334 going to put me in for physio.....

335 I. So, as far as you were aware the, you actually didn't have to wait that long.....

336 S. No, because I was....that's....Oh, that's what....Oh, hang on, that's what he said, because his
337 words to me were, I'll put you in for physio but it won't be straight away, because there's quite a

338 long waiting list, so when I goes...and I gets the phone call, I went, Wow, that was quick,
339 (laughs), so she went, quick? I went, yes, I went doctor's last week, she said, no, you've been on
340 the list since November, and I felt a fool (laughs)...but I didn't know....never mind.

341 I. How often did you come up for your therapy?

342 S. Once a week, just once a week.

343 I. And what did you feel about that?

344 S. I thought perhaps twice a week might have helped....maybe it wouldn't, but then maybe it
345 would have helped a little bit more, but as I say, they're so pushed you can't.....that might
346 have helped, but then.....as I say, with my sister-in-law, they could only come out once every 2
347 weeks maybe once every 3 weeks she'd see a physio, she was completely disabled, she couldn't
348 move any part of her body except her eyes, so if he couldn't get it I don't suppose....anyone else
349 is going to.....

350 I. Right, right. And how many sessions did you have in all?

351 S. Ten.....about 8 I think I'm not sure, I think it's about 8, I think so.....I think
352 I missed one.....yea, I'd come home from holiday, but our flight was delayed, so I missed
353 one, and I found a message, you can't miss...miss another one.....you end up not having the
354 physio, but I wouldn't have done it, you know, I didn't do it deliberately, and the next one I
355 missed was when my baby [granddaughter] came into the world, so don't expect me up there, I
356 was at the hospital, so, ...um.....they forgive me, I still got another treatment.

357 I. And when it came to your last session did you know that was going to be the end?

358 S. Yea, yea, she said that....if this doesn't work, then I'd have to go back to my GP.

359 I. Right. Did she tell you that on the day?

360 S. Yea, yea, it's not that, I was explaining to her about what was wrong with my neck, and I kept
361 saying I'm sure this isn't only to do with this nerve, I still say it now, because I get the pain down
362 my neck, so I do think it's all connected with this and nothing to do with maybe the physio,
363 maybe a slight bit because of the pins and needles, but I don't think all of it, I really
364 don't....um.....

365 I. Did you feel the 8 treatments you had was long enough then, or were you expecting to go on a
366 bit longer and try other things?

367 S.I don'tI really don't know...I wouldn't.....I couldn't say, it's um.....

368 I. Well when she said, we'll finish today, how did you feel about that at the time?

369 S. In a way I was glad, because then I know I can go further now, because I'm sure.....where I
370 wasn't satisfied, where....not so much satisfied with the therapist, it was....what was going on
371 with my arm and my neck, and I thought if I go back to my GP now, he's going...but you're
372 having physio, wait till the physio'sI know what he's going to say, but once the physio's
373 stopped he can't say that, he's got to send me for another X-Ray, he's got to do something,
374 so.....in a way I suppose I was glad that it finished, because I know she'd tried, and I'd done
375 everything that asked me to do, the exercises, so.....

376 I. Now, what about organising the sessions, how were they arranged in terms of when you came
377 up and what time you came up?

378 S. I could pick my time, they were pretty good like that, um, because mine was every week, she
379 said, what do you want morning or afternoon, you know, it was pretty good like that, you know,
380 so.....they didn't tell you what time you'd got to come..which was nice, you know, it was
381 what time would you like, would you like morning or afternoon.

382 I. Yea, yea. You weren't working at the time were you?

383 S. No, no.

384 I. So could you have come at....

385 S. I could have come at any time, yea, yea, so it didn't matter, you know, so.....

386 I. When you finished your course of treatment did the therapist say you could contact the
387 department again if necessary?

388 S. No, no.....but then like.....she did tell me to go back to my GP, she did advise me of
389 that.....(but to get to my GP) you wait longer for a GP than you do for physioa 3 week
390 wait we have if it's not an emergency.....

391 I. Now you were talking about the department seemed very busy and some people coming in late,
392 did you find that were you seen reasonably promptly?

393 S. Oh, yea, as soon as you went in, if I was 1 o'clock, they'd do over the loudspeaker, (PT name)
394 your 1 o'clock's here, and she's always on time, you had no hanging about, none at all, if you'd
395 waited maybe 5 minutes after your time, she'd say sorry to keep you waiting, but I never waited
396 no longer, they were pretty good so.....

397 I. And what did you feel about that, was that a surprise?

398 S. Yea, yea, because...I had a.....the day my granddaughter was born, I had an appointment at
399 the hospital to have a tooth out, and I always wait there, and I'd waited an hour and a half, and
400 then she was in the delivery room and I () the appointment and ran up to the delivery
401 room and that.....naturally when you go National Health..... you've got that long drag that
402 long wait, and with the physio you didn't have it, it was in, you know, see to you....and..... out,
403 you know, it was great (laughs).....no it was good.

404 I. OK, now that we've talked through al these, I'm just going to turn the cards over....[tape
405 stopped as cards turned over for patient to read the statements on the reverse]

406 [tape re-started] We're looking at the backs of the cards now. You don't have to necessarily
407 agree/disagree with a statement, but it might be applicable to you.....so Result of treatment.

408 As you said initially before the tape was on, the third statement applies, 'The treatment has not
409 helped me at all'.

410 S. Yea, yea, well it's not....in a sense, it's not really.

411 [reads Therapist card]she put me at my ease, she was a nice...nice lady.....I really
412 couldn't fault her, she was really good.....yea, it would be number one, she
413 was.....

414 I. Any other statements on there that you want to comment on?

415 S.it's just, I did get on quite well with her, yea,

416 yea.....

417 I. What about this one, '.....bedside manner'?

418 S.she had a good manner, yea.....she didn't bash me about unnecessarily (laughs), heard

419 some bashing about going on in the other cubicle (laughs)

420 I. What about this last point ?['PT gave encouragement and praise']

421 S. She did encourage me...she did encourage me to do the exercises as I said before she was

422 good like that.

423 [reads Explanation card] Yea, um, the treatment was fully explained to me but I could not

424 explain it to you now (laughs).....[reads] 'I was able to ask my therapist anything connected

425 with the treatment', I could ask her anything, so.....

426 I. Did you find you were asking quite a lot of questions?

427 S. I did ask her quite a few, yea, about my arm, and what's going on and how long will it

428 take.....no, she used to answer my questions..... was told what was causing

429 my problem.....at the beginning.....

430 I. And were you told the treatment might be painful?

431 S. Yea, yea, she warned it could hurt, yea.....

432 I. But in fact it didn't.

433 S. No, she didn't hurt me at all, no.

434 [reads Content card]It was...it was tailored to my needs, because she was pulling my arm

435 she wasn't pulling my leg (laughs)

436 I. So she was dealing with the right bit of you, you think? (both laugh)

437 S. I hope! [reads card].....I had the personal attention of the therapist, she wasn't.....her

438 attention wasn't anywhere else it was completely on me.....that's

439 it.

440 I. Were you left to work on your own at all?

441 S. No, no, only if I was exercising at home, I wasn't left at all.

442 I. And these two statements here about the treatment being rushed or uncomfortable?

443 S.It wasn't uncomfortable, no.....half an hour I thought was sufficient time really.....I

444 think it was sufficient time.....

445 [reads Expectations card] I thought the treatment would get me back to normal

446 again.....no, I never had no equipment.....I thought the

447 treatment might be painful, but it wasn't.....but, no I did

448 think it would help me.....unfortunately not.

449 I. [looking at the first Organisation statement] So the wait seemed comparatively short for you.

450 S. [reads card] Yea, as I said it's the GP.....I was able to choose my

451 appointment times morning and afternoon.....um,.....'The treatments were too

452 infrequent', um.....I thought maybe if it had been twice a week it might have been better, as I
453 said, but you can never...I could (never say) really.....half an hour was long
454 enough.....I had one of my treatment sessions cancelled.

455 I. You cancelled it?

456 S. No, they cancelled, um..... don't know whether the therapist was.....not there,
457 or.....I don't know if they double booked, or what it was, but it was only once, but it was tit for
458 tat because I done it so (laughs)

459 I. Yea. But there was no difficulty re-organising that?

460 S. No, as I say, I could pick my times, so [reads card].....that's
461 it with that one I think.....they said there's a 6 month waiting list for an
462 appointment for physio.

463 I. Who said that?

464 S. The GP, yea..... so it was November [counts the months] that's right, so it was 6 months, it
465 was 6 months.....the times I could choose.....and I think the treatment
466 sessions fine, half an hour.....

467 I. OK, now that we've talked about all the cards, I would like to think and see if there are any
468 comments or suggestions, from a patient's point of view, that you would like to make about the
469 whole physiotherapy process as you've experienced it, that would it any better. Things that you
470 think could be improved or changed?

471 S. (I wouldn't know a thing)

472 I. OK, I'll just turn the tape off for a moment while you have a think [tape turned off]
473 [tape re-started] Alright, so you've thought of some thing.

474 S. Yea, they need more space. They've got no space to move.

475 I. Where was that? In the treatment room?

476 S. Yea, it's um.....just curtained off little cubicles, and you can't move, and there's just like a bed
477 and a chair, and if they've got to get round the back of you they've got to twist, it'sit's really
478 difficult, it must be difficult for them to work.... in such a small place. If they had a bigger place
479 to work from I think they'd do a lot better, but, unfortunately.....and maybe if they can get
480 twice a week instead of once a week, people might get.....you know, it's hard to say, but.....it
481 might help people a bit more.....

482 I. Do you know why it was only once a week?

483 S. No, no. I don't know.

484 I. She just said I'll see you next week, did she?

485 S. Yea, she said make an appointment for next week.

486 I. Right, You didn't ask whether you could come a bit more often?

487 S. No, I didn't, you know, well it must be only once a week they can fit you all in because of
488 how busy it is.

489 I. Did you think about it at all?

490 S. I did think about it for a little while, then I thought I am doing my exercises, I can't expect
491 miracles so.....but I do think, I put myself in the position of someone who
492 can't exercise and they need like, the physio.....

493 I. So you felt you could get on and there wouldn't be much change by going again.

494 S. Because a friend said to me why don't you let me come with you and I'll watch what she does
495 and I'll do it, you know, you see....you know, maybe yea, but you can hurt someone as well at
496 the same time, I said you can't do that really. She said but you did it for your sister-in law, but I
497 only twisting her ankles, I wasn't doing nothing.....you know, I can imagine you, and all of a
498 sudden I move a certain way and you clump me one (laughs) you know it's.....I don't
499 know.....I suppose they try hard, they try hard at their job, but
500 they.....

501 I. OK, any other comments at all?

502 S.No, it's only the space really. That is.....Oh, it's really dingy, it's tiny, tiny, I
503 can't believe it.

504 I. Alright, thanks very much.

APPENDIX 3.

3.2 Sample transcript of multiphase interview (acute subject, male, suburban)

- 1 I. Was the physiotherapy you just had for your elbow the first time you had ever had
2 physiotherapy?
- 3 S. It is yea.
- 4 I. So, did you have any idea before you started what might be involved in the treatment?
- 5 S. I had an inkling because my brother broke his er.....bone behind his knee, er, his 21
6 birthday 2 years ago, so I brought him here a few times so I knew exactly, well not exactly, but I
7 knew roughly what they were doing to him. Although it did come as a bit of a surprise really.
- 8 I. Did it?
- 9 S. Yea, you hear all these stories about er., you know, about being rough and jumping, not
10 jumping all over you, but, you know, really pulling your leg, but because of my elbow it was, er,
11 one of the bones they couldn't pull too hard, so it was just a case of gentle massage, for maybe
12 45 minutes, half an hour to 45 minutes, depending on if she was busy, popping me in there in the
13 cubicle.
- 14 I. Right. Where did you hear about this more vigorous approach to physiotherapy?
- 15 S. I think er, the wife's family, my father- in -law is er, and my mother-in-law really, is prone to
16 er.....funny joints, maybe a bit of rheumatism or thing, and she had a problem with her back
17 about 5/6 years ago, and she was saying they put their knee right into your back and this, that and
18 the other, but, you know, it was just a case of..... everyone exaggerates the problems they go
19 through with any form of medication anyway, but, er, when I came here and it was just a case of
20 rubbing my arm, I thought this wasn't so bad, you know, because it had only just come out of
21 plaster, and it was very difficult to, sort of, cope with it as it was, without someone taking it and
22 start pressing and putting on weight or whatever else. But, er, I was quite surprised to know the
23 difference.....first hand, as it were. (laughs)
- 24 I. And, overall, was it successful?
- 25 S. Er.....it was and it wasn't. When I first came here I hardly had any movement at all in the
26 elbow. Er., I think we got about 5/6° extra movement in it, and I used to come once a week for
27 half an hour or 45 minutes, and it got to the stage where after the 6th or maybe 7th, if it was that
28 much, that the physio said that they couldn't do any more for me. She wrote a letter to the
29 consultant er, and we made an appointment to go back and see him. Took some more X-Rays.
30 There seemed to be a bit of bone floating about , no one really said anything, but I've got to go
31 and see a specialist in December.
- 32 I. And it's you right arm, and you're right handed?
- 33 S. I am, yea. I'm a transport manager for a HGV firm, and I can't drive the lorries any more. I'm
34 a decorator by trade, I can do a bit, but er, but it takes about 10 times as long to do anything. But
35 I've got the strength, I can lift up heavy weights, er, but what's helped me recently, I've joined a

36 gym, and after about 20 minutes of running on the treadmill, when I slow it down to a fast walk,
37 it's actually swinging. So I'm not putting any pressure on it, but it has given me an extra 10/15°,
38 well it feels like that.

39 I. Straightening or bending?

40 S. Straightening. I can bend it straight up to my (elbow), but I have trouble twisting.....twisting
41 my wrist, er, but the jogging in the (? warmth) helped, helped more than the physio, whether the
42 physio started it off, got me more supple, because I've still got bruises there, from the operation,
43 and er, they said they couldn't force the arm so it was just a case of the gentle....maybe the
44 vigorous running and walking I was doing might have helped it a bit more.

45 I. Mmm. Mmm. OK. Now I'd like you to think back over the course of treatment, and try and
46 identify the key aspects of it for you, the main associations of the physiotherapy

47 S. The actual work or the person or both?

48 I. Anything, whichever aspects seem most pertinent to you.

49 (tape turned off while patient jotted down his ideas)

50 Patient wrote the following, Friendliness, Informative, Relaxing, Professional, Confidence,
51 Hope, Clinical, Exercise, Time, Naive.

52 (tape re-started) Alright, now you've written quite a few things down here, so just take me
53 through what you've written

54 S. Right, er, the first one I've put then is 'Friendliness'. Basically, er, I met 2 physios. Both of
55 them were very informative, er.....maybe sympathetic with the actual elbow, er, explaining to
56 me, showing me on the actual bones, they brought a skeleton in for me each time, showing me
57 what I was doing and what I had broken, everything else. Um, just reassuring me that, you know,
58 it isn't the end of the world. Because when I came here I was really down, I was out of work for
59 a month because of it, because I couldn't do anything, um.....and just generally politely, just
60 with....we didn't make any.....er, medical conversation, just general politeness, and, you know,
61 talking to me about my day and what I was doing yesterday and what they were doing, and she
62 told be about her holiday, and everything else, and generally at the same time the half an hour's
63 gone, and you know, and I've gained 2°, and she's measured me this way and that way, and er,
64 come after the first or second one, I think maybe the second physio I just came out more
65 confident. Er,.. and I put that down as well, 'Confidence' and 'Hope', as well, because I.....at
66 the time when I came out of plaster, there was no way I thought that I was going to move
67 that arm, um, it was only in for a month anyway, but when it came out of plaster it didn't feel
68 like it belonged to me. You know, it was just 'attached', and I was, I was, I think as white as a
69 ghost and sweating when he was cutting it off and pulling the staples out of my elbow, and I
70 thought there is no way.....er, but then they just relaxed you, you know, they were doing their
71 job but relaxing you at the same time, so it probably helped do their job properly in the first
72 place. If you start fighting against any medication or any help, it's not going to help you at all, so
73 that was the first word. And the second word (written down by the patient) 'Informative' was the

74 same sort of thing. She was very informative showing me the diagram and the model, of where I
75 broke it, how she was going to use the physio to try and get my bone moving again. Um, and the
76 informative side again was, knowing what people always tell you about what medication they've
77 had regarding physio, so you know, they're going to this to you, and they're going to do that to
78 you, they're going to pull you apart, they're going to jump all over you, and when I actually
79 went there, it was a relief to know that they actually...they might have had to in some cases, but
80 in my case it was...was a case of a gentle ease just trying and get it going again without too
81 much problem. Er, again with the 'Relaxing', they made you feel at home, er, you didn't think
82 that you were in hospital half the time, just lying there on the couch, and she was just talking and
83 talking and talking. At the same time she was manipulating you, putting you on the machine,
84 just general chit chat, so it didn't feel like you were in hospital having medication, and it made it
85 easier going back there every week, you know I wasn't looking forward to it at all in the first
86 place, er, and again, that came with 'Professionalism', er, very professional, the two physios I
87 had, er, they informed of everything they were going to do, the type of machine they would put
88 me on, er.....roughly how long it would take, if everything was going OK, so give me an
89 idea of when I might get, you know, maybe half of my arm back in use, er.....yea, I've never
90 had.....I didn't have any complaints at all regarding what they were doing to me, but they did
91 make you feel at home, and were very easy going, er, which again is the other word,
92 'Confidence'. They gave me the confidence to keep coming back, er,..... and just generally
93 exercises at home as well. They gave me a routine of exercises to do, which when I did go back
94 to work I was able to do while I was sitting down doing my job, so I was able to do it during the
95 week and then come back here, and then at the end of the day, see the results that I had made
96 myself, as well as, er.....the two physios helping me, I was helping myself as well, so it wasn't
97 a case of sitting there and just moping about all week hoping the next time I go I will see a
98 result, I was pushing myself all week, and when I did come back, she would measure me first,
99 and then give me, you know, strength to carry on really, to try and do a bit more. Er, but again, it
100 all comes down to, you know, I never had, I had a lot of doubts regarding what could be done
101 because of the injury, um, but (he) gave me the confidence and the hope to carry on and er., just
102 keep attending, really. There was a bit of a blow when they said they couldn't do any more for
103 me, so at the time I felt I was just wasting half an hour when they could actually get someone
104 else in they could help, because I think of the last 2 weeks I never got any extra movement at
105 all, um, and it is a continual ache now, but I wasn't getting anywhere with it, so rather than
106 wasting the physio's time I thought better off just to leave it, and go back to my GP and see if I
107 can get an earlier appointment with the specialist. Er, and the 'Exercise'.....I tried, I bought
108 some.....weights for you wrists and your legs when you're walking upstairs, so you've got a
109 weight, I actually bought a couple of weights and put them on my wrists so I lie, the physio said
110 if I lie down and just bounce my arm, it was one of the exercises I did when I get home from
111 work, er., I didn't think it was doing anything so I put an extra weight, she said, if you can't

112 really lift anything more than a bag of sugar, maybe not even that much, because I had the
113 strength, and I was able to pick up, I was doing actually quite manual work at home to try and
114 move it a bit further. I was digging in the garden, I was lifting heavy weights at work, so I
115 thought, well, I'll give it a rest now, I'll just. I got 2lb. weights for my wrists, I'll just gently
116 bounce it up and down, and again, I did get a result for a little while, er, which comes to the
117 next word, 'Time'. Just.....time went.... quite quickly when you think back on it, it was a very
118 slow process which you have to acknowledge, because when I first came here they gave you the
119 information to say, it's not going to be a month or two months, when I came here at the
120 beginning of June, I was told it was going to take a long time because of the X-Rays, and
121 everything else, so when they made me feel at ease and they were helping me and I was helping
122 myself during the week, it just made it a lot easier, it was easier to cope with, um.. it probably
123 helped the healing process as well, you know, if you're sitting at home, moping about it. (As she
124 said) I used to keep it in the sling at home, first 2 or 3 weeks, until she actually explained to me
125 that helping myself as well at home and at work, I just had to do my exercises sitting down, it's
126 not as though I needed to do anything strenuous, even just moving the chair with my arm, or
127 swinging it up in the air, or swinging it down, or swaying it from side to side, and swinging it,
128 was better than sitting there in a sling and just trying to er.....I wouldn't say play acting, but
129 trying to gain some.....what's the word for it.....trying to feel sorry for me,
130 you know I was back at work, and I was thinking, well I don't really want to be here, my arm's
131 aching I can't move it, I can't drive the lorry, I can't do any work at home, because I like DIY
132 and I was in the building trade for 12 years, um,...so I felt useless. So, I helped myself during the
133 week, and when she said it would take months and months and months, so....it's only half an
134 hour here, and I can really do the exercises she's giving me at home you know, 7 days a week,
135 and spend longer at it. I now do it in the morning when I get into work, I do it at lunch after I've
136 had something to eat, I do it just before I go home, when I get home have my dinner, and
137 just....as good as just lying down and watching the telly, because that's the exercise I was doing,
138 er, and then the 'Naivete' really was....until I came here, it was impossible to actually understand
139 what the physiotherapy was doing, er, the machinery they were using, er, they genuinely felt and
140 knew they could help you, but at the same time, 'Informative' word comes back, because they
141 were telling you that they can't help you 100%. It was a case of *I will help them* by exercising
142 the arm and *they* will manipulate it or whatever they can do to stretch it and get a bit more out of
143 it, so when I leave here, I might have gained a couple more degrees but that's a couple of degrees
144 that I can exercise during the course of the week. Um, so it was, I did enjoy it, er, there wasn't
145 really any downside, apart from my own thoughts of, you know, I'm never going to be normal
146 again, er, I'm going to be disabled, I can't do this, I can't do that, I couldn't drive for 6 weeks,
147 had to get lifts in to work and cabs home, that sort of thing. But, er, I just jumped in the car one
148 day and drove and it actually helped, it was good exercise as well, holding the steering wheel and
149 turning it, so it actually worked in my favour, actually getting back in the driving seat, um.....so

150 yea, positive thoughts, they gave me positive thoughts and it just carried on during the week. It
151 did falter when they said they couldn't do any more for me, which is why I felt, well, there's no
152 point in wasting anyone's time, I must just do what I can myself, and see what the specialist says
153 in December. The trouble is December seems so far away. {chat about getting to see consultant)
154 L. Mmm. You mention earlier there about feeling disabled. Do you feel disabled now?
155 S. Not so much. I know there are still a lot of things I still can't do, er,... as I said I am decorator
156 and builder by trade, er, I have difficulty in hanging wallpaper, I can get up and down a ladder,
157 er, painting, because I'm right handed, but, I'm ambidextrous when it comes to painting, but, I
158 mean, the small bits, when you paint a window, you paint the left hand side with your right
159 hand, and the right hand side with your left hand, so, you're all over the place. Before the
160 accident I decorated my front room (gives details) in 3 days. It's taken me 6 weeks so far to
161 get to the rubbing down stage, because it aches. Rubbing down takes longer, trying to...a lot of
162 things I can do with my right hand, but I can't do the manual side of it, or the heavy side of it, the
163 rubbing down, the lining, moving the ladders, and even carrying the paint tin. I have the strength
164 there, but after a while it just.....the elbow does tend to ache, so.... I probablyif I carried on
165 with it I might pass that pain barrier, er.....pain's never bothered me before, but, because, it
166 just feels that's' it.....it's my body, my elbow, it does feel as if I'm one handed.....er, so
167 it's a mental thing I think really, once I get past that barrier, once I get some more information
168 from the specialist, I'll probably feel a lot better. If he *can* do something for me, then I'll go for
169 it, if he can't, then I'll just have to see what I can do. Maybe get my GP to refer me back here for
170 more physio to see if...I know there is a difference, er, if L.....find out what I was doing to
171 make that difference, I can carry on with that.
172 L. You mean there was an improvement after this last lot of treatment?
173 S. After I left the physio, yes. So, I know the exercises.....the walking helped. It's just the swing
174 of the arm. When I first came here they said swing your arm above your head, down your side,
175 try and scratch you back, even just try and touch your toes, but every time I did that, just... just
176 looking at the deformity, if you like, it's not a deformity, just stretching your arms out, there's a
177 big difference, just, I *know* it doesn't look right, and it doesn't feel right, so I just feel..... I
178 wouldn't say I've lost my self confidence, I'm still outgoing, it hasn't bothered me that way, I've
179 probably gone for the sympathy vote, when I've gone out, 'How are you?' 'Oh, I'm not too bad.
180 I can't have a drink tonight because I'm on these pills', or whatever, but er, that's worn out now!
181 I'll have to think of something else! Yea.
182 (some chat about how the patient fractured his elbow)
183 L. Alright, in that opening discussion we've actually covered quite a lot of things, but, what I'm
184 going to do now is show you some cards which cover different aspects of the whole
185 physiotherapy process.....(tape turned off while patient reads and rank orders the cards)

186 (tape re-started) Al right, the cards have been placed in the following order, 1. Content of
187 treatment, 2. My therapist, 3. Explanation and information given, 4. Organisation of the treatment
188 sessions, 5. Expectations of treatment, 6. Result of treatment.

189 I OK, so you've put Content as you number one, so.....

190 S. Mmm. Well, basically, er, as I mentioned earlier, the content of the treatment I was given was,
191 er, very good. There's a couple of these here (indicating the cards) they should really go in line
192 with each other rather than putting them in order, because the Content of treatment comes in
193 with the physiotherapist who was actually giving it, and then the Expectations she was explaining
194 to me what I could do and what I couldn't do, but the Content of the treatment was very good.
195 Er.....er, there was, every week was different. We would start off with the same things, to
196 get me warmed up, to get the arm warmed up and get me try and loosened up a bit, and then we
197 would try, she would be lifting my arm, pulling it, um, I got some more movement that way,
198 then I tried 2 different machines. One was a heat machine, and the other was aion
199 machine?.....throwing electronic pulses into my elbow to try and, I think to loosen up the
200 muscles that hadn't been moving for a while, so there was a, not too much of a variety, but er, I
201 thought, well maybe she thought it would be better to try and keep me under one treatment that
202 was better for me. So the first couple of weeks it was a case of, I'll try this one, and do it that
203 way, and if works better then we get more movement in one way then we'll carry on with that.
204 So the content was er, it was good, well, it wasn't a case of it's boring old thing, when I sat
205 there and she did exactly the same thing every week, she explained to me or asked me whether it
206 had helped me during the week with the exercising, um, if it hurt when I was there, so as not do it
207 so hard, or do something different, so, the content of the sessions was very good.

208 I. Were the machines only used for one week?

209 S. No, I had the machines every week. It was the last 10/15 minutes. Maybe it was half massage,
210 or half movements, and the other 10 minutes, yes, 10 minutes it was, er, one was on the first
211 week it was theI'm not sure what they called it now, it was a machine, like a lamp and
212 they placed it right on your elbow, and there was a hundred..... beats per minute she called it...

213 I. Megapulse?

214 S. Could be megapulse, yea, and then she tried a heat lamp the following week, er.....

215 I. Which did you feel had the best effect?

216 S. Er, the megapulse gave me a funny feeling a tingling sensation, er, the first week, it hurt the
217 first week, the elbow got quite sore, I think we stopped it after about 6/7 minutes. Er, then we
218 went back to that the third week, because I don't think the heat lamp, it didn't do anything for me
219 that week at all. Whether it's in the mind again I'm not too sure, but we stayed with the.....the
220 megapulse again, yea.

221 I put Therapist as number 2, I really, I could have put her first, because the treatment all
222 evolved around the therapist. As I said before, made me feel at ease, er.....trying not to make
223 you worry too much, er, trying to build you up, to say that it's not just a case of you coming here

224 for half an hour, and the world's going to.....stop fighting, or whatever, you know, it's a case
225 of, she'll help me start off the week and I will carry on. So it's a case of helping each other
226 really. Because her job wouldn't do any good if I wasn't doing anything during the week. So the
227 degrees I...I gained here, I just, I...the first 2 weeks I did loose the degrees I actually got,
228 because I wasn't in the mood to sit here for half an hour, and think well, she's told me it's going
229 to take a long time, er, and I was really,..... I wasn't too happy really with the situation
230 anyway in the first place. But talking together, it was more of an informal chat, she explained
231 everything to me regarding my muscle, my bone, what I could do for myself to help her, er, I
232 think that probably swung it, helping her to help me, that was the main thing. Then moving on to
233 3, Explanation and information...

234 I. Just before you move on, you mentioned that you had two therapists?

235 S. Yea, er, I had one for the first week, then she went away on holiday. The lady I had for the
236 second week, she did it in a totally different way. It was, it wasn't so much on,..... we did..... the
237 usual thing, she warmed my elbow up got me moving, er, in the restricted zone I was in at the
238 time, er, she introduced me to the swinging of the arms and everything else, er, I think I was with
239 the second one for 2 weeks. It didn't seem right. When I first came here and spoke to (PT) she
240 was just.....I'm not sure.....it wasn't the fact that she was better looking, it was er, she made
241 me feel more comfortable, er.....and it was easier going through the half an hour, and I felt
242 better coming out of it. So after the third week, I asked if I could go back to the first therapist. I
243 think I was going to go back to her anyway, because she did say that someone was going to take
244 over for the next two weeks, but, er..., the week she came back, I thought well, I don't
245 feel.....it might have been the first instance I felt.....elated a bit that she was explaining
246 things to me, and it wasn't as bad as I thought it was going to be. So, after the next 3 weeks I
247 didn't feel the same with the other one. So, I just felt, I could probably.....I felt the first one
248 could do for me than the other one. Just a silly thing, really, I know, but, er it felt more
249 comfortable... I just felt I could do more.....for her as well as for myself if she was there, I
250 don't know why. But er, a mental thing somehow, but the first, because she was the first physio,
251 you know, and obviously the second lady isn't going to be the same, because she..... is starting
252 off with a different routine, and she done this and done that, and a lot of the time she was, she
253 showed me how to do the exercises, she put me up against the wall, she measured me, took my
254 top off, the problem I had was that I thought I was moving my arm more, but it was my shoulder,
255 yea, I thought, this is great, you know, I'm going to stay with you, and then she measured me up
256 against the wall, and it hadn't moved further than it was 3 weeks ago, don't build your hopes up,
257 try and keep your shoulder back and do your exercises. She did help in one way, but it didn't feel
258 the same, I don't know why, no.....It was just, it was more enjoyablewith the
259 first one. So,..... it's weird, I suppose, yes, everyone had their infatuations, a girl in a white
260 uniform, I suppose at some stage, so it may have been that.

261 I. But they were both in a white uniform weren't they?

262 S. Oh, true, yea, yea, but she was younger, more my age! So, yea, I had visions, before I came in
263 of having this bloke, 17 stone, jumping on my elbow, pulling me left right and centre, so it was a
264 nice relief to see someone..... Mmm..... Mmm..... Explanation and information given,
265 Which was every session. It wasn't a case of, you know, the first session I came here, er, we sat
266 down for ten minutes and carried on, every session she explained what she was doing, both of
267 them, before they started, as she was doing it, measuring when I got there, half way through,
268 before I got on to the machine, and before I left. Everything was marked down on my
269 records..... it was informative, you know.....it was.....bits of it were boring, er....

270 I. Which bits were boring?

271 S. Well, I suppose it's above your head really, you know, naming the bones and everything else,
272 and I'm not really interested in that, you know, are you going to get any more movement out of it
273 today, er, what can I do during the week. No, she talked all the way through, I wasn't sat there
274 for half an hour or 20 minutes, er, you know in total silence, everything was explained, even
275 trying new techniques at home, giving me ideas. That was a good thing, giving me ideas, she
276 explained things, maybe trying this trying that way, er.....at the start, in the first couple of
277 weeks I was using my left hand all the time, I know I couldn't use my right hand that much, as
278 the weeks progressed, I was still using my left hand, er, I was even writing with my left hand at
279 work, taking bookings, and it was a case of you know, when I told the therapist this, it was a case
280 of, you are right handed, use your right hand, just keep using it. If it gets sore, change over. But I
281 was going the other way round, I was using my left hand all the time, I couldn't read my own
282 writing half the time, er.....washing was the same sort of thing, washing my hair, I couldn't get
283 my right hand in my face. Doing the things you normally take for granted, it was now a case of
284 trying them, because it was, it was stretching my arm. So, things you couldn't think of, they
285 informed you about, so you did things you normally do, but though you mightn't be able to do it ,
286 at least you were trying and stretching the arm the way it should be, rather than I was going down
287 all the time (extending elbow), whereas up to me (flexion) was just as important. So, that was
288 good.

289 I. Do you think you learned more about the fracture and the problem from the therapist rather
290 than from the doctor?

291 S. Yea, definitely, yea. The doctor.....obviously they were good, when I was in the other
292 hospital, (described how he was taken to A&E and the elbow reduced, then transferred to the
293 current hospital, seen by a ? locum in the clinic) so when I came here, he was informative, sat me
294 down, he just looked at me, we need to do this, needs an operation, which I was dreading at the
295 time, um.....and that was it. Operation went well, this that and the other, er.....have this on for 2
296 weeks the come back in 2 weeks, have another X-Ray, have another plaster, a lightweight plaster,
297 um.....and that was it really. No more, until the physio said she couldn't do any more for me and
298 she sent me back to the consultant....had more X-Rays. All they were saying was, it was as well
299 as can be expected, you've got this much movement, and we have the letter from the

300 physiotherapist and we'll refer you to the specialist, that was it. But with the physio while she
301 was manipulating my arm she was showing me on the actual model what it actually does, and she
302 was probably, not putting ideas into my head, but she was explaining what the problem *might* be,
303 because they took a bone graft, because I can't move it down, because it does tend to thud if I let
304 my hand drop, and I can't twist, might be just the bone is too big there, and she was giving me,
305 not ideas, but explaining to me what might happen if I had another operation to take the top of
306 the bone out, or, shave it if it is overgrowing (talks about the appearance of his arm) she was
307 explaining to me everything really regards that, any questions I had, I just couldn't think of any
308 questions to ask her. Maybe 'cos I was.....I wasn't happy knowing what the outcome might
309 be, er, if there was to be another operation I wasn't looking forward to it. If it was a case of
310 taking the bone out, or whatever, I couldn't understand how would I be able to work my arm if
311 there was a bone missing from my elbow.

312 I. Did she have your X-Rays in the department for you to see?

313 S. Yes. Well, she didn't have them for the first couple of weeks, it was when, about half way
314 through, they got my X-Rays down she showed me the last X-Rays I had after she referred me
315 back to the consultant. She showed me the bone before, out of it's socket, the bone back in it's
316 socket and the ..(describes all subsequent X-Rays), so anything I needed to see she showed
317 me.....Just seeing you records there and to go through themwas
318 certainly.....enlightening. It wasn't the case of, you're the doctor, it's like before when you
319 couldn't see your own records, the doctor would write all his things, and you'd wonder what
320 they're talking about, or what writing about you, but everything was there for me if I wanted to
321 go through it.....I just didn't have the inclination to bother going through it because..... most
322 of it would be jargon anyway...

323 I. These were the physio ones?

324 S. Yea, yea. Er, the physio ones, and she brought my medical ones and X-Rays up from the
325 consultant as well, so everything was there. Because we weren't getting anywhere fast, she
326 actually asked for the X-Rays to come up so she could see what the actual break was and how
327 bad it was at the beginning, and see the notes the doctor made up before and after the operation,
328 to give *her* more information, because I couldn't tell her anything what happened, because I was
329 out most of the time, so, it gave her the information to try something different, or to explain to
330 *me* what I could be doing, and what actually happened to me in lay man's terms really. So it
331 was quite good.

332 I. So now you know all the ins and outs and all there is to know.

333 S. Unfortunately, yes. I'd rather I didn't sometimes (laughs). So, Organisation, would that be just
334 be what we do?.

335 I. Well, that could also include coming up here, organising your treatment times.....

336 S. Well, everything was organised by the physio. Um, it was always booked a week in advance,
337 um, probably because I could only get Friday afternoons off from work, because it's the quietist

338 time of the week, so I was just booked in every week. It was the case of same time next Tuesday
339 or next Friday.

340 I. So it was just once a week you were coming up?

341 S. Once a week, yes.

342 I. Did you think that was often enough?

343 S. Er.....not at first, but as we were talking, it was a case of....every time I came up here it
344 was very busy, there was always about 5 or 6 people waiting, and people going in the gym,
345 coming out of the gym, there's physiotherapists, it must have been about 7 or 8 people that I've
346 seen, I thought there would be a lot more than that, but that's all they asked me to have. So, I
347 didn't think to ask for any more. Then when I started the physio, the second week I was back at
348 work, because I'm in an office job now, same place but I'm not doing as much as I was , er, so I
349 was in the office all the time now, so I was doing the exercises at home that the physio was
350 telling me to do, so I just thought, well once a week.....it's very difficult to get, I think...I'm
351 not sure if we asked for 2 in the first week or not, I don't think I did,..... no, I think I just
352 booked me the one, because that was all I was told to do. Just to come for the one...to come once
353 a week. I was surprised it was only half an hour, but that goes very quickly.

354 I. What, again, were you expecting more than that?

355 S. I was, for a session, yea.

356 I. What did you think then?

357 S. I thought it would be.....I thought it would be an hour, because she put the machine,
358 sometimes it did, I got an hour and a half one day, because again, her next patient didn't show up
359 I think, and it was the end of the day, I took the last one of the day, and she wasn't in a hurry
360 because she was waiting for someone, so we were doing quite well that day, I think we got 4°
361 more movement in the space of about half an hour, so we just carried on, and she left me there
362 for half an hour while I was doing my swinging, so she came back, did I want to go, I said well,
363 rather stay here because there's no one at home, so she came back for the last 20 minutes and put
364 me on the machine. But for the half an hour you get, it's normally about 20 minutes physio, it
365 was for me, and then the last 10 minutes was on the machine. In that 10 minutes she'd go away
366 and do her notes, er, and then come back and see me off at the end of the (). So, it's only
367 20 minutes, so it doesn't feel....it does go very quickly, we're always talking about how time
368 flies.

369 I. Mmm. And you said you had about 8 or 9 sessions altogether?

370 S. I think so, yea. Pretty sure. I don't think it was much.....much more..(talked about missing 3
371 sessions because of various problems with lifts and then on a course) so I think that's when it
372 petered out really, because I missed a few weeks. I did inform them, but at that stage er.....
373it ..it was nice getting out of work for half a day coming, but the novelty wore off and I
374 wasn't getting anywhere fast, so, er I thought, well, you know, my governor was good he paid
375 me the month I was off work, he let me have the Friday afternoons off with no problems, so I

376 thought, well, you know I'll just wait till December now, I thought to myself, I'll just carry on
377 doing five and a half days at work. I did ring up about 3 weeks ago and asked for some more, but
378 I had to be referred by my GP first. It's too much hassle, and there's people who need it more
379 than me so I haven't bothered since.

380 I. So when it came to the last day, did you know it would be the last day?

381 S. No, no, I had booked an appointment for the following week but that's when the car I'd
382 booked didn't show up to bring me here, and the following week the car broke down with the
383 friend I was coming with. The following week I thought, I've let them down for 2 weeks
384 I know it's short notice, probably couldn't fill the booking, and at the time I justI just
385 felt I wasn't getting anywhere, and I was just wasting, because at that time she had sent the letter
386 to the consultant saying there was nothing more she could do, so as the weeks went by, and I'd
387 missed 2 weeks, if I went then two weeks I would probably still be there now, but because I
388 missed those 2 weeks I thought well I'm wasting her time, she can't do any more for me, why
389 take up a booking.

390 I. So there wasn't a formal discharge then?

391 S. No, no. (discussed phoning up physio again after 2 months and was told to go through GP)

392 I. Originally when you had the plaster off and due to start physio, how long was the gap?

393 S. Er, quite quick. Er, they had the physio, the () took the plaster off came in here and
394 spoke to a lady and I think she booked me in for the following week, um, I think the doctor did
395 put 'Urgent' down on the list.

396 I. Yes. Was that a surprise that it was so soon?

397 S. Er.....surprised it was so long.

398 I. So long?

399 S. I thought, yea, he was telling me this that and the other, and said it was urgent and you've got
400 to get physio as soon as possible, he put that fear of urgency into you, and I thought, Oh,.....I
401 wouldn't say I was in agony, but I was so shocked that the bloke who cut the plaster off just
402 pulled the pins out without saying he was going to do it, I was lying there, you know, I was white
403 as a ghost, I was sweating I was fainting, my wife was trying to hold my hand to wake me up,
404 you know, what's the matter with you, see, it wasn't really sore it was the shock of him doing it,
405 then seeing the doctor, right, urgent, go to physiotherapy *now*, you must have physio as soon as
406 possible, I think it was a Friday, Thursday or Friday, and it was the following week which I
407 suppose, a week isn't too long, but, looking at my arm and thinking all these scars, and the arm
408 was black and blue, and the funny smell from not being able to wash it for a month, and then
409 having been told to go home and come back the following Friday, er, and the initial shock of it
410 only being half an hour, I think half an hour was long enough for the first session anyway.

411 I. So you were almost expecting to immediately go to physio?

412 S. Probably not the same day, but the following day, yes. You expect the NHS, come back
413 tomorrow, and we'll sort you out, but it's like...it's not until I started coming here that I realised

414 how busy the physio is, you know, it's not just for broken bones it's everything, you know, any
415 pain at all, it's all to do with muscle, so you're a bit naïve about what the physio department
416 does. So I let them off! Expectations of physiotherapy.

417 Um, I'm not sure what to expect. I expected them..... to have me up and running
418 back to normal, I suppose 6 weeks. That's 4 weeks in the plaster, the bone's healed, they're
419 happy with that, the operation went well, er, no problems, the scars nice...nice and neat, wasn't
420 too bad, and then week on week on week, there was an improvement there, but it wasn't an
421 improvement that I could use my arm, um.....partly because I didn't want to use it, I was
422 doing the exercises, but I didn't want to use my arm, I was mentally blocked, I didn't want to use
423 my arm because it was sore, the elbow aches, this aches if I try and lift something up, the worse
424 thing was, when I was sitting down, and I was sitting down at home one day, um, and I dropped
425 something and I went to pick it up, and it's my right arm that I went to pick it up with, so I'm
426 very conscious of the fact that I didn't want to do anything, because I know I'm going to go with
427 my right arm, and that killed me, that.....dropping me thumb just going to grab it, because I
428 dropped it I went to catch it with my right, not thinking about me elbow, so that made me wary
429 of the... you know, the actual, the problem was worse than I probably thought myself. Um,
430 because I couldn't straighten it, even doing that I couldn't straighten it, normally if you have a
431 crick in your elbow or in any part of your body, you can actually straighten it without knowing
432 that you've actually done it, just like I did there by trying to catch my thumb, because I couldn't
433 do it, because I couldn't move it any more than I already had, woke me up, I thought well this is
434 going to take a hell of a long time I'm no happy with this, and then I got to thinking, I never
435 thought about the half an hour, I never thought half an hour was not long enough, because I was
436 happy to come here, and have the physio, it's only afterwards, just talking now really that the
437 half an hour doesn't seem.....doesn't seem quite right. I think every session is half an
438 hour, it's standard procedure here, unless it is everywhere, I think for different er.....(end of
439 tape) I wasn't sure if half an hour was normal or whether it was different for different parts of
440 the body, but definitely half an hour didn't feel enough. It was at the time, it's only hindsight that
441 er.....I didn't come away from any session feeling down or that was only half an hour,
442 because the odd day I did get the 40 minutes or whatever else, it was just the sake that knowing
443 that someone was helping me, and helping me to help myself, () you just don't think about
444 it.

445 I. Yes, so thinking about the outcome which is going on to the next one, had you said to yourself
446 well I'm hoping I'm going to get 100% better, or I think I'm only going to get, you know,
447 whatever?

448 S. Well I thought I would get 100%. I think, well, it's only a break. You know, everyone else has
449 broken a bone in their body and they're not walking with a limp, or unless a bone is taken out,
450 er....people are breaking bones all the time. Everyone's broken a bone at some time or another,
451 and no one's walking round with their arm at 45°, hobbling along.... a 19 year old boy walking

452 around with a cane because he broke his leg 2 years ago, so I'm thinking, well, there's no
453 problem, the operation went well, the scar's nice not too bad, er, physio's going well, not
454 thinking of the time, er..., then the bombshell that she can't do anymore for me, which was
455 her honest opinion, which.....I wasn't pleased to hear at the time, because I knew she always
456 explained everything to me, it was better I know than to having to go every week and not get
457 anything out of it. I might have got something out of it I don't know. But er,...I think for those 2
458 weeks we weren't getting anywhere at all, and she asked for the X-Rays, and she just gave me an
459 honest opinion, in which case I did manage to get back to see one of the doctors. That was a bit
460 of a shock.

461 I. Mmm. What would you estimate now your percentage recovery?

462 S. Er.....I'm a bit further on than when I left, partly because of the exercise, because I think I've
463 gained about 4" in my waist since having the accident, I'm not as.....running around as I used
464 to be, but er.....

465 I. Can you put a percentage on it, percentage improvement?

466 S.maybe 10° - 15° , it's not that much ,but it is a bit, whether it's
467 me, because I'm not sitting at a desk or sitting at a bench, where my elbow, my shoulder's
468 straight, if I were to measure it now, (patient stretches out his arm to show the degree of elbow
469 extension) it has, so I think it's just a different method of exercise. As I say I used to do 20' on
470 the treadmill, running, and then when you slow down to walk quite fast, the elbow was
471 swinging back on it's own, I was exercising the elbow without thinking about it and it was
472 actually working. But, if I was just sitting there bouncing up and down with a 2lb. weight
473 watching the telly I didn't think anything was happening at all, but subconsciously it was helping
474 me without even thinking about it. Maybe that helped. But everything stemmed from er....what
475 the therapist told me.

476 I. OK. Now having talked through all of those cards, and I think we've covered quite a lot, I'm
477 going to turn them over. On the other side are various comments...(tape turned off while patient
478 read the cards)

479 (tape re-started) Content card

480 S. Well, near enough every point here is correct really, (reads) the treatment was very
481 comfortable and soothing, there was no er...no major pain with it. Er.....because of the elbow
482 they couldn't force it, so it was just a case of, where my elbow stopped that's where they started
483 trying to stretch it a bit, er,... again the treatment was tailored to my needs, because it was,
484 er....because of my elbow, it was...it wasn't as forceful as another part of the body might have
485 been on the physio side. Er.....it was uncomfortable sometimes, er.....the first time I was on
486 one of the machines it was uncomfortable, other than that, the minute..... the word 'Ouch' was
487 mentioned or I jumped a bit, it was stopped and started again, so.....you know, er, the treatment
488 wasn't *rushed*, but the amount of time you had wasn't long enough, er...but then when you think
489 we did about 4 or 5 exercises, you only get that in the space of 20 to 25 minutes, you only get a

490 couple of minutes on each one, so it was a case of she explaining to me what maybe I should do
491 when I'm not there,(reading) yea, no problem with the personal attention of the therapist,
492 both of them, er.....always on time, never late, probably a couple of minutes early to get me
493 ready and then, dead on the half past or whatever I was on my way, er, with some more
494 information, um,.....I wasn't left to work on my own during the session, er.....when it was
495 the turn of the machine at the end of each session. She would go and make her notes but come
496 back before the machine finished, and explain to me the difference in the angle, so if there was
497 any movement er,.....I suppose they're all correct really. (referring to the card statements)

498 S. (Therapist) Yes, er.....definitely put me at ease, er.....not sure 'kind' is the right word,
499 but er... they definitely felt for you because of the injury. Er, it wasn't like a conveyor belt it was
500 personal attention, it was whatever problem you had, they just seemed interested in that.
501 Er,.....she was interested, she obviously, apart from speaking er, medically, it was a case of
502 private life, holiday, kids, where we lived, what I did in my spare time, er, so it was a one on one,
503 and it was a better feeling than actually going to see your doctor because he's just, he's got
504 obviously certain patients to see, it's no a case of you've got half an hour, so er, yea, it was, it
505 was.....definitely interested. Got on very well, no problem with either one of them, er.....like I
506 said we spent most of the time chatting, it was just a case of, if we came to a problem she would
507 explain it to me, um,.....bedside manner?.....depends what you had.....bedside
508 manner?...I suppose it's the same as er.....the interest as in point Number 2, er.....well she
509 had a good bedside manner if you want to..... put that particular..... banner to it, er.....they
510 welcomed me every time I came in, er, sat me down or laid me down.....it's a difficult one
511 that.....

512 I. It's just that some people talk of 'bedside manner' as a phrase....whatever that means to you.

513 S. Mmmm, well she had a good bedside manner then, because she put me at ease, it was a case
514 of, you know, again it was the one on one and she made me feel relaxed, it was easier for her to
515 work on me as being relaxed probably. Er, I got on well with the therapist, er.....even all the
516 therapists I've seen here, I don't think I've seen anyone in a bad mood,it's just one of those
517 jobs, isn't it meeting people and everything else, they wouldn't be in the profession otherwise so
518 I don't see how you could not get on with the therapist, er.....definitely gave me
519 encouragement and praise. Probably a word I could maybe have put down on the first list,
520 er.....it's good to know by the end of the session, big smile on the face, yea, 2 more degrees,
521 do this and do that, you know we'll see you next week, measure up how far you've gone,
522 um,....which was another way of helping me come back and just to see what have I done myself
523 during the week, she gave me her results after the half hour session by measuring the degree I
524 could move in.....yea, that's all for that one. (Reads, Explanation and information)

525 Of the points here, er.....any problem I had er..... with my elbow, er,....she.....there was an
526 aura about them, er., I suppose every nurse or doctor, there is an aura if you're in for treatment
527 with anybody, er, they don't put up any barriers so it was.....easy to talk to them on a personal

528 level, general chit chat to pass the time away. It's also very easy to discuss the problems, there
529 was no problems with discussing any problems at all, again I was told what was causing my
530 problem, or what might be causing the problem stopping me moving any further,
531 er,.....which is probably, I wouldn't say it c hanged every week, but we got to a stage where
532 it didn't feel that it was going anywhere, that's when the records came out and my X-Rays, and
533 we were looking at other things that might cause it, (reading).....'I wasn't told that the treatment
534 might be painful', I was *expecting* it to be painful.

535 I. You were?

536 S. I was, yea, because everyone else said, Oh, yes they do this and knee you in the back and
537 everything else, er, so the minute I got there, I think at the end of session one I asked the
538 therapist, with all this talk of people pulling you this way and that way, and she explained me
539 because of the elbow, it is a sensitive area that you can't force it too much, so I was quite happy
540 about coming back next week, er,.....yes, I was able to speak to the therapist about
541 anything connected with my treatment, er,.....there wasn't much I wanted to ask really, it
542 was the case of the end result I was more interested in rather than the treatment itself, but
543 everything was explained as we went along. As the treatment went on the explanations came
544 flowing as well.....She answered all my questions. There wasn't much to ask really, apart from
545 the fact of, what degree of movement have I got now, um.....the time when she said she
546 couldn't do any more for me, she explained that er.....she would do everything she can, er.....
547 to help me to try to get back to the consultant, she wrote the letter. So, she has helped me in
548 every way regards that. At the same time, during that half an hour, it's such a nice half an hour to
549 relax and be pampered, really, that er, there weren't many medical questions or delving questions
550 regarding the elbow, er, apart from the extra movement I got at the end of the session. Where it's
551 just the last point, 'the treatment was fully explained to me', everything was explained to me. She
552 never did anything that she hadn't explained first, and that both the machines, I know she had
553 explained them to me, but I just.....for the life of me know.....I can't remember what they're
554 called or what they were doing. (re-iterated the treatment content 'bouncing the elbow' etc).

555 (Organisation) We've talked about most of these points earlier, er,.....I did get my first
556 appointment after a week which I thought was long. It may not have been a week, but it
557 definitely wasn't in the same week I came, er,.....and the doctor putting 'urgent' on everything I
558 just felt that, you know, 'urgent' meant 'urgent', and it's a case of, the plaster's come off today
559 let's go and someone know and see what we can do to alleviate the problem, er, but again in
560 hindsight, probably, I suppose it was quite quick, because on being here you see the amount of
561 people who come in and out, er,.....I was, again I was able to choose the appointment dates, all
562 the dates all the times, er, both of them had their diaries with them all the time anyway, and they
563 gave me a choice of days and times. I just liked having Friday afternoons off!
564 Er,.....'Treatments were too infrequent', er, , they probably do seem too infrequent in
565 hindsight, again, er, but at the time.....I think it's er,.....the physiotherapist, looking back

566 on it, is only there to help , er,.....no one's a miracle worker, I think, but.... I think helping
567 myself helped me more than the physio, the physio was there to explain everything, what was
568 going on what was not going on, and what I should and shouldn't be doing, so she was more of a,
569 in a way of a teacher. Er, explained to me how to do this and that and I felt better, I felt better
570 because I could do it at home for longer, you know, er.....they were too infrequent and they
571 were too short, but then again they weren't, if that makes any sense.I didn't have any of
572 my .treatments cancelled, .er.....I had to cancel them myself through not being able to get
573 here, but I had no problems, every time I came here I was always seen on time.....I didn't
574 get to the stage of this last one, 'Could contact the department after discharge if any problems',
575 because I wasn't really discharged (re-iterates the situation). Expectations (reads card).....
576 'Treatment would get me going again', I thought I would be er.....back to normal
577 within.....months, er.....because of the explanations they gave you it was obvious it wasn't
578 going to be, so,.....again I expected the treatment to be painful but it wasn't, um,....'Treatment
579 would involve the use of special equipment', I wasn't too sure about that, I didn't think there
580 would be specialist equipment, er.....I just thought moving my arm would soften up the muscle
581 enough without having any specialist equipment, but it certainly helped.....'I didn't
582 know what the treatment would be able to do for me',at the time I didn't
583 um,.....it's a case of expectations, I thought the treatment would do everything for me and
584 get me back to normal, um.....before I came here, I didn't know, there'sno way of
585 knowing what anyone would have done. I just thought I would be lying on the couch and they
586 would be pulling me left, right, and centre, you know, but er.....'Treatment wouldn't be able
587 to help',..... I *assumed*, I was certain when I came here, that it would help. It did, but, again,
588 not as much as I thought it would, although it probably helped me on the way to where I am now,
589 um,.....whether it's just me, I don't think of... the future that far ahead, when it comes to the
590 treatment I was getting, I just came here every week, just lie down or sit downthe
591 treatment helped, but it was a case again, of she was helping me to help myself, it wasn't so
592 much the case of special equipment, but again, everything, it's mental isn't it, if you're on a
593 machine you think Oh, it must be doing good. Er.....
594 (Result) it has helped, it's changed my views I wouldn't say it's changed my view on the
595 (?NHS) because I never really had any. You know, becauseyou know, the nurses do a good
596 job, and the doctors do a good job, but you don't really think of physiotherapists when you don't
597 have to come and see one, you think of just doctors and nurses, er.....you all know they all work
598 long hours, but er,.... it's definitely, if I hadn't come here I don't know, I don't think I'd be at the
599 stage I am now, because of the teachings, the er, explanations and information, er, so it has
600 helped in some ways, but....I'm only half way there yet,.... er.....not made a full recovery
601 with treatment, so have to wait and see what happens in December, er.....not the last one,
602 because treatment has helped me. It's definitely opened my eyes to a different part of the medical
603 profession. Until you go to someone as a physio, you don't even know what they do, you just

604 think they're, I wouldn't say they're not qualified or anything, just think they're like a PE teacher
605 isn't it, tell you what to do, do this do that, then they go away and come back later, but er, when
606 you see them in the flesh, certainly the amount of problems anyone can have in their body, and to
607 fix it by physio or fix it by physio.....

608 I. Ok, now any suggestions for improvements to the service from a patient's point of view?

609 S. Er.....no, I was greeted, made very welcome when I came, no, this is weird, it ran quite
610 fine, it did for me, I never assumed, you know, experienced any problems at all. I was always
611 early, so that's my only problem, I'm never late, so any waiting around that I had here was my
612 own doing, so, for me, I don't think there is any way of improving it. I got the treatment, I got
613 the, er, friendliness, so no problem at all.

614 I. Well, thank you very much I think we've covered everything.

APPENDIX 3.

3.3 Sample of coding sheets following content analysis of multiphase interview transcripts of acute subjects ($n=19$, inner city). Preamble and unstructured phase of the interview

- Key: i) Prev. = Whether subject has had physiotherapy treatment on a previous occasion
ii) PT = Subject's prior knowledge of what physiotherapy is and what it does.
iii) The numbered letter at the top left of each section identifies the transcript
iv) The subsequent numbers indicate the transcript line number
v) The statements reflect sentiments relating to emergent categories/themes
-

M60 Prev. No.

PT. From friends, they try to help you to get back on your feet whatever the case may be.
Hoping to get back to work but with his job told not possible.
Just being able to get about

Content

39/40 A fortnight before I went on holiday I was on crutches and the physio said before you go away we will have you walking on one.

42. That's what helped me a lot

48/49 I own a caravan. I have some steps, it would have been quite a problem getting up and down with two crutches.

49 I must say the young lady helped me quite a lot.

Organisation

60 6 weeks (in POP)

64 then started physio) about 1 week after POP off.

F72 Prev. No.

PT. I thought it would probably exercises of some sort.

Content

12/13 The first time I came I had my fingers bent over, very, very painful the first time I came

13/14 After that I had it dipped in wax to make it more supple

14/15 Then I had the wrist mobilised, pushed back and forth, twisted round and round and it was all very painful.

15-17 Then after a few weeks put in traction because they thought the top of my arm or shoulder was affected.

20/21 I weren't very happy because I suffered from pain in my jawbone where I had been stretched.

23-25 I had 2 sessions, then I refused a third because I already have OA in the jaw bone and I found (traction) was aggravating this.

27/28 She said I should have mentioned it but I thought me neck was going in traction, I didn't connect it with my jaw.

28/29 Other that it was just manipulating all the time.

Organisation

32/33 Plaster came off on Tuesday. I came for physio on Friday and it hadn't had time to get movement back

33/34 It was very stiff and painful being pushed. Real agony.

Result

30. After all this time I still cannot close my hand

M33 Prev. no.

PT. Have some friend who are physios in Sheffield so I have some idea.

No specific thought. I knew they probably took you into a room with some other people and they'd look at you and ask you what was wrong and then they'd try and work out a course of exercises.....which they did.

Content

19/20 Over the period of 5 or 6 sessions I had I generally had to put my hand into wax so that it would soften up, well I suppose loosen up, warm up the joint.

21 On that particular occasion it was almost too hot to put my hand in

26/27 The wax then wouldn't stick properly....I don't think I'd put my.....managed to hold my hand in for long enough

31. (that was just once) yeah

Comment (belief)

23/24 Apparently some of the older people like it hotter and I guess their circulation might not be as good as younger people

31/32 (That's the only single incident I can think of which stood out as unusual)

F69 Prev. No

PT. No idea

Organisation

20 I was a bit upset for the first couple of times

23/24 because the PT hadn't my notes up from the clinic

27/28 A couple of weeks later I asked her again and she said she had received the notes from the doctor

"Personal worry"

24/25 I said well what you're trying to do, do you really know whether you're making it better or worse (without the notes)

25/26 The words she said to me was 'The doctors do sometimes think we can do miracles'

Result

28/29 Whatever she was doing she was doing right.

29/30 I was very satisfied with what the girl done

30/31 I was very pleased how it turned out.....but I'm still getting very, very painful

Information

33-35 The doctor said, 'We can't do anything for you anymore'.....they said I've got a bit of arthritis in the knee and if I couldn't copeshe would see me and probably open the knee up which I don't want

48/49 There was a little bit of a mix up (arranging for physio)

67/68 The actual doctor who was supposed to see to the leg... he never said nothing about physio

F30 Prev. no.

PT. I didn't really.....I knew that they got bones better but didn't know how

Content

24/25 Yea...the hot waxing...putting it in a container ...a grey container that had the hot wax

28/29 Had to put your hand in for a couple of seconds...have 6/7 layers, then wrap it in a towel and plastic bag...then it sweated whatever.
32-34 Then they used the wax to exercise into a ball
36-38 Hot and cold baths they told me to have....to bring down the swelling
40-42 In a bowl crushed ice and I had to wear plastic gloves so the finger never got infected with any water
42/43 I had to do a lot of exercising with my finger
43/44 Massage my hand because the whole hand was swelling as well

Organisation

56-58 After the operation.....maybe a couple of days I went to physio....I still had the stitches in you see
65/66 After I saw it was getting betterI took them out myself....I just got on with my treatment

M71 Prev. No

PT. Exercise.....you broken bits and things. I just knew....seemed to know
? Suppose from talking to other people

Expecting

15 Well get me walking properly

Content

22-24 Knee bending...the PT used to get me to....see how far I could get me leg to see if I could get a right angle, I had to be at a certain angleI forget what they're for now.....
35/36 Funnily enough it wasn't all that stiff, I got to near the angle she wanted straight away.
38 (put as No.1) because it was the first thing I done
24 Then sometimes I had to walk up and down
25/26 The bike I had to do for a quarter of an hour, just peddling away, I reckon I did about 5 miles in that quarter of an hour

F53. Prev. Yes. Chronic back pain through heavy lifting in garden. Had physio at () and exercise by prescription. ? physio helped, PT, that was my first experience, yes.

Atmosphere (perception)

37/38 Everyone was very nice, very helpful, made you feel relaxed
38 It was a really nice atmosphere
40/41 Made you feel.....you're in the right hands

"Frustration" (info)

42/43 I sometimes wondered whether I could get more info. than I was being given
43-45 I think the main policy is not to bother with too much detail with certain people like me who tend to get a bit wound up
46 Answers would often be on the reassuring encouraging side
47/48 Actually would have liked someone to have been quite clinical about what happened to my hand because it was quite bad and immobile
55 I got a bit depressed
74/75 The last interview.....he was a bit brief....I mean I knew my exercises....but just a bit brief...

Organisation.

- 79-81 1 month after POP off then I was in a splint and my hand was very swollen, I'd been given an appointment (?PT) 3 weeks ahead
82/83 I was worried, don't want to wait 3 weeksso went up to casualty
90-92 Seen in # clinic again and told you must start physio very soon, you need to get this hand mobile.....not so much of the sling and everything
92 (Then I started physio)

'Motivation'

- 100 I'm worried about my hand....
102/103 I've not been able to do my exercises, but things aren't terribly easy at home
103/104 I've done lots of things with my hand hoping that's making up for not actually sitting down and doing the exercises.

Outcome

- 105/106 In the cold weather it's started to hurt
106 But it's generally much better
106/107 It does have days when it just seems to get better on its own

Therapist

- 115/116 My physio was really good....she was very firm with me
117/118 Took a personal approach (because of personal problems at the time)
118 Kept trying to chivvy me along

-
- F33 Prev. Yes for an ankle injury 20 years ago....good result
PT. I know it would probably be U/S but that's all, because I do remember I had that

(Explanation) and Information

- 51-53 I didn't know exactly where I had damaged the shoulder and she took out the diagram and the model and showed me exactly where the damage was and how it affects the rest of the muscles
53/54 (told me)what exact course she was going to be doing
54/55 How the massage was going to help
55/56 How the strapping would hold it in place
56-58 So the diagram and models were important, with them I could understand where the pain was
61/62 To understand (is important) because I did it on holiday I wasn't sure exactly what happened
63/64 I knew the pain I was in so I realised there was something wrong
71-74 They gave me an X-ray in OP they said basically the joint was damaged and its more than 1".....you should have physio

-
- F51 Prev. Yes. For a knee as a child...still an ongoing problem because -ve
For back problem, +ve with home exercises and booklet. For tennis elbow +ve, one to one and home exercises Obs. & gynae. with children
PT. (from previous PT had good idea what was likely to happen)

Organisation (treatment frequency)

- 107 I felt once a week for physio wasn't enough
108/109 I felt if I'd gone 3 times a week and not attended for so long...
109 I know they're very busy
10/111 I would have got better quicker and discharged quicker
111/112 My wrist would have been stronger sooner

Content

- 112/113 There was things they gave me to do at home and exercises
114/115 Initially I was having hot wax treatmentwhich was very soothing
115-117 The physio mobilised my wrist which was good because she was pushing it more than I was able to do myself

Organisation (waiting time)

- 97-99 After I came out of POP..... I handed in my letter from the doctor
99 The first appointment I felt was too longI think it was 10 days
102-104 I felt if I'd got some earlier physio I could have got mobilised quicker.....a little bit more strength back into it

Organisation (seating)

- 120-122 Sometimes when I came there wasn't a space for me to sit and have the treatment
122/123 Sometimes I was pushed from pillar to post until there was a space
126/127 ...or kept waiting or....at one point I had one appointment cancelled
-

- F67HH Prev. No
PT. Expecting to feel terrible, really rough because knowing something hurts, I was dreading to go.

(Preamble)

- 13-15 They were nice, very nice and she gave me acupuncture in my hand as well to try and ease it
15 They were ever so good, and then I went for hydro....
20 I think I had once a week for 6 weeks

Therapist

- 38/39 I just used to go there and the therapist used to do what she had to do for me
39/40 I didn't think much about it, I just took it she was doing her job
45 I knew what young lady I was having
46 How nice she was
47 Having the same one every session that helps, quite a lot of visits and I got used to that young lady
47/48 I knew I could tell her how I felt....confide more in them
48/49 She puts you at ease
49 If you had a different one every time I don't think I would have liked it so much
57 She was very, very nice and very helpful

Information

- 57/58 She said I must try and get you better as much as I possibly could
58/59 She said you're never going to have it 100%
59 She said she would try acupuncture the next time I went

Content

- 64 She had a big ball I used to put my arm on and roll it
64/65 ...and pulley and all different exercises
65 Lift your arm up and put your hand up the wall and climb
65/66 I think I did every new exercise she gave me
66/67 I had a plastic thing to fetch home to practice with
71 It really was so painful....it was painful for weeks

Outcome

- 29/30 (preamble) I can't lift it up properly but she said it would never be....
30/31 (preamble) but I understand as you get older your bones do..... but I can't complain at all

- 71 I'm one of these impatient people, I thought I'd be over it
72 I kept thinking it would get better next week, but it took a lot longer

Organisation

- 45 I was glad to go there every week
73 I think I had a few more (sessions) than I should really
73/74.....because I don't think you have 13, I don't really know
75/76 Then she said to me we'll try you with hydrotherapy....I had 6 of those

-
- M25 Prev. Yes. Op. for recurrent dislocation of shoulder....2 sessions of physio only which was a bit poor Ankle injury on same ankle (as now)
PT. Sister is a PT as well, so I get my personal physio

Content (process)

- 28-30 Basically when I first camewent over history, they checked the damage that had been done

Information

- 35-37 When I had any questions I got the explanation pretty much in layman's terms so I could understand what was going on
37/38 They didn't baffle me with names
50 Told me I shouldn't try and rush it too much

Content

- 38/39 I was able have gym sessions and things like that
41 Trampoline, where I was doing balance work and wobble board
43 I was able to take things, like theraband home and actually work on that, which you can use anywhere

Outcome

- 49 Basically I took a little bit longer than I thought to recover
50-52 I had a couple of relapses when I thought I was getting better.....did a bit too much at homeand went back down
73 It's still not 100% right

Therapist

- 52 Generally he gave me encouragement

-
- . M24RT Prev. not asked (very indistinct tape)
PT not asked

Information/explanation

- 56/57 Understanding what the task was, what the physio tells you the damage is

Therapist

- 61 Also the bond between the therapist because there was a rapport....an understanding between you
63 Instead of the therapist telling you do this and just walk off, that's not terribly helpful
67-70 Just being able to talk to him about certain things , like playing basketball and knowing how long it would take for me to play basketball
69/ 70 For him to tell me what exercises I need to do, what would be the best exercises to do

- 73 I mentioned a gym and what exercises I could do in the gym
80 I think its best to stick with the same therapist....
81/82 they know what the problem is and what position you were in after that

'Healing and repair' (Belief?)

- 90/91 You need to rest the ankle for it to repair so the healing process could come up
92 I had a machine, I can't remember what it was.....
98/99 but it would help the ankle heallike a heat on the ankle which would help the muscles and so on
103 It felt that it helped by loosening the joints and helping the healing process
106/107 They had a balancing board there which I had to stand on then balance and try and strengthen the ankle again....and stand on one foot

(clarified order of statements)

- 115 Rapport first, you have understanding
115/116 The therapist has understanding of you which is very helpful
116/117 After that understanding (? Re. healing-indistinct on tape)
117/118 Then...like the exercise after
-

- F27 Prev. No
PT (not asked) (I wanted it to be betterbetter than before the accident if it could so it would never happen again)

Outcome (improvement)

- 25 Improvement was very important....
26/27 because... I'd had this problem on my knee before and I didn't wasn't it cramping the lifestyle I had
32/33 I wanted to be able to do the things I did before....and you can't do this with a knee that isn't working properly
36/37 I wanted it to be better....better than it was before the accident if I could , so it would never happen again

(Unknown/unaware of problem) information given

- 43/44 It was interesting finding out just how much (variation) I had in the way I stand
54-56 She said if you've got a problem....its either something I've had since I was very young or developed after my first accident
57/58 It made me more aware of what I was doingas well as getting the strength in my muscles back
88/89 They said you will never be free of this, there are always going to be problems

Environment (content)

- 70/71 I just liked the fact that every time I turned up there everybody was very cheerful
71-73 The whole thing with physio is its up to you to make the effort to do the exercises....but I didn't want it to be where it was a competition, where you've got to keep doing it
74/75 They recognised the fact that some days it was going to be harder to do
79/80 They were always understanding of what you were going through....how painful...how irritated
81/82 They were also very encouraging, they just encouraged you the whole time, this is he benefit you will feel
83/84 They always showed you what would happen if you did this, what difference it would make
91 They were realistic
91/92 They were always very friendly, they just made the whole thing very enjoyable

Therapist

- 102-104 (Had the same therapist all through)...good because she knew exactly what was going on...she knew exactly where we were with the whole set up
108 She was a really lovely person
110 She was very friendly
113/114 She said I'd had this problem as well so that was really helpful
116/117 She was always cheerful
121 She was very good....a lot of ideas
121/122 Seemed very switched on to what was happening muscle wise
124/125 Receptive to things eg. homeopathy
129/130 Very understanding about the lifestyle I wanted to lead

'Pain'

- 134 It hurt a lot less than I thought it would
140-142 I just thought in physio...you've got to stretch everything that little bit further....
142/143 but the therapist said once it started to hurt then we stop....respect the way not pushing it too far
-

- F66 Prev. No
PT. I was quite frightened because somebody had told meit would be terribly painful and to my surprise it wasn't

Organisation

- 16/17 I was only give one appointment a week and in my opinion that was inadequate
26/27 Unfortunately my first session I waited an hour and the second session I was 20' late and they wouldn't see me

Therapist

- 19-21 (because I was frightened) she said I'm not going to do any work on you now, I'm just going toI suppose correct the wrong impression that you've been given
21 I came away much happier

Content

- 23/24 She did U/S to my wrist and I'm not sure she should have done with the plate in my hand....somebody told me afterwards
25/26 The wax treatment was very good
64/65 Because the treatment I felt wasn't enough and I had private physio, that cost me £400 involved reflex therapy

Self help

- 69-71 I was also very tough with myself long before I had any physio. I tried moving my hand, because when POP off I couldn't twist my hand and I was in a lot of pain after this

Organisation

- 51/52 I couldn't understand that the physio didn't realise what a shock it was to me to be turned down for physio because I was late
52/53 It was an accident it wasn't deliberate, I generally am a person who is on time
55 I don't know unless they were running late...
56/57 I would say there weren't enough physiotherapists, but that's just a lay person's observation
62/63 After that they made a real effort....that I wasn't kept waiting maybe quarter of an hour.....sometimes if I was early she took me early
73/74 I feel if there had been a physio there when the POP off....I could have been given advice then on what to do

Therapist

67/68 Private physio more aggressive

68/69 Hospital physio gentler and I think I needed the aggressive stuff

Outcome

77/78 I am profoundly grateful to the hospital because I have the full use of my hand.....(I think he was a very good surgeon)

M43 Prev. Yes. # calcaneum on the other leg. Physio was excellent, resolved. +ve.
PT. (assumed previous experience)

Organisation

29/30 It was quite busy there (in the gym) several people would be wanting to use the same equipment at the same time

3-35 The physios are called to the 'phone while they're busy with a patient

35/36 The actual surroundings of the gym were pretty austere....like an old school hall type

40-43 Obviously there were times when you didn't have a cubicle, you'd have to rush to get hanged and put your clothes elsewhere because there wasn't space for the amount of people that were there.

45 Perhaps the equipment was a little bit dated

66/67 The therapists were always busy

8/59 You'd think things had been there.....sort of some more equipment provided and things like that.

F43 Prev. No

PT. I did understand it was sort of manipulation of the body.....getting the body back to working order again (from my sister who is a nurse)

Therapist

28/29 I felt the therapist could actually feel the problem

29/30 She really understood where it was hurting.... what the problem was

43-45 She also had more time, to be fair, the consultant had 2 minutes, you know

66/67 She acted like a bit of a chairleader, you know, 'come on, you can do this'

Information

49 I liked the way she talked me through everything

50-52 She said I'm going to sort of push this shoulder down, Gd.1, Gd.1V whatever and I started to understand what she was trying to do

52-54 I didn't understand the anatomy at all, so I needed to have things explained to me

54/55 The physio actually got out a working model and said this is what it is....

56-58 That was really good for me because it sounds frightening to someone who doesn't understand a single thing about anatomy

60/61 I could understand what she was trying to get me to do, how the exercises were benefiting me

61/62 I was given my homework....I had to do various exercises

72 I was actually terrified it was going to slip out again

73-75 but....I felt I was in very capable hands, that she was giving very good guidance and telling me what was happening, what the result would be

Content

78/79 We only went to the point where you reached a sort of level of pain where it has to

stop....and this was very well controlled
80/81 Every week you just do a little bit further
81-83 Initially it seemed like quite slow progress....after a while I started to understand
that the movement was coming back
86/87 But this was 6 months treatmentit's a long process

Beliefs

106/107 I feel it would have been quite helpful to have seen the PT right at the very
beginning.....
109-111 that it would have been better to take the arm out of the sling even for just a
little while in the 2 weeks and just moved it around a bit
91-94 I was completely ignorant...I thought when I had my arm put back in place it
would be fine....I would be back at work next week
94 I didn't have.....no idea what the problems were
96-98 I went for the first check up (after re-location)I was told that I should keep
my arm in a sling for 2 weeks
98-102 I actually felt this caused quite a lot of damage..... because I was rigid with fear
so the whole thing locked up and I felt that my arm was being pushed up too
high, I think this was proved right.....
112-114 I literally seized up so my arm would not moveafter 2 weeks in the sling I
could not move....and it looked terrifying

F66BB Prev. (Yes, 7 years ago, frozen shoulder, very painful treatment) in main text p.7
'Expectations'
PT. Expecting treatment to be painful again like last time.

Preamble

29-31 On the last session I had, she was leaving to go upstairs, then I was to have someone
else, but if it got better she gave me the phone number of the other girl....
32 if I wanted any assistance to ring.....so I didn't feel I needed at that time

Outcome (preamble)

4-6 The PT did everything she could....and at the end of the time there's a (?knot) there
which wasn't releasing
7 My Dr. said it will take 12 months for it to be released
10/11 Its still very, very stiff....and in those 3 fingers its like pins and needles running
through it
11/12 Sometimes it irritates me terrible, and I have to keep putting water on it to try and
cool it down
13 I didn't realise it would be that much of a lump
15 Each day its getting a bit easier
15/16 When I turn it round like that I get a terrible pain down there
18/19 There's also arthritis has set in there...how my hands are swollen

Content

51/52 I got lots of pain while I was having treatment, while she was doing the treatment
with me
52 Then as the treatment finished it eased off
54 I felt in myself a lot better as my hand was getting better

Therapist

58 She was such a nice girl
58/59 I mean if I'd got somebody grotty I wouldn't be looking much forward to it (belief)
60/61 If she was paining me too much she'd say, 'Is that hurting?' and I'd tell her and
she'd leave off for a while and come back (communicating)

63/64 She was quite young and I was a lot older, like a mum I suppose.
64/65 The minute she seen me or seen her, we got on until I finished there
72/73 She was like my own daughter....I thought to myself I've got somebody I can speak to
74/75 I used to look forward to going down every time I had an appointment
86/87 She used to talk to me about the family
91/92 It used to make me feel good, I knew I had an afternoon out to talk to somebody
It's a big difference when you're here on your own

M24AD Prev. No.
PT. I knew it was rehabilitating to that part of the body....trying to get it working (learned) from sports injuries....I used to do a lot of climbing. Some friends at university were doing sports science and knew a little bit

Content

29-31 I thought the physio was very good, I found it sometimes quite difficult to conceptualise the type of movement they wanted me to do
32-34 It would be more helpful if you could take something away with you that would describe the action in more detail (Information required)
36-39 While you're with the therapist they're guiding the movement, then you go away.....a few days later you might not be doing it quite the way they had in mind
42/43 I didn't use much of their resources in the gym I guess because it was the type of injury I had

Therapist

44-47 I had 2 different therapists....I think the one I had second was a bit more senior....due to rotation policies

Outcome

59-62 I didn't too much like the conclusion because they suggested it may not be in my best interest to go rock climbing again because I dislocated my shoulder playing football
63/64 They did say I could build it up and it would be a weakness....but it's up to my judgement

F26 Prev. Yes, on knee as a child....disappointing because wired up to a machine and it didn't work
PT not asked

Preamble

6-8 Because I wasn't really getting a lot of painit was more of pain when I did certain things....it was like , right, you're finished , all the pain has gone, bye
9 Then a few exercises to carry on with on your own
9-11 I was surprised there wasn't like a come back in 6 months and we'll see how you're developed because my ankle didn't feel any stronger
12/13 I was hoping I would be able to get it up to strength
13/14 I was referred to the orthotics department
18/19 It took a really long time to be referred to the orthotics department. In fact I only picked up my things last Friday
21-23 So that was a bit disappointing....I really wanted to get them quickly because I was doing a lot of sport before this and since I hurt my ankle I haven't been able to do any sport

Organisation (preamble)

- 29-31. I was coming in either last appointment in afternoon or first appointment in morning so I didn't lose too much time off work
33/33 I found the first thing in the morning all the time I'd be there about 15' before any of the staff were ready to deal with me
34 I expect they had other people to see... it was very busy there
35 I kind of felt that I was rushed through
40/41 I felt that the time allocated was probably not enough for her to do what she wanted

Information

- 37-39 (preamble) She explained everything what was going on inside my ankle so I knew what I was doing, what was going wrong, what I should be aiming for
67-69 I was often asked questions I didn't feel qualified to answer because she wasn't there to see what I was doing (eg. how does it feel?)
81-84 I thought it would be better if the exercise sheets were just condensed into one sheet which you can carry around and do your exercises, rather than having sheaves of paper which you had to go through to find the relevant ones

Organisation

- 65/66 For the first few sessions I got really good 'one to one' treatment, but after that my therapist was treating sometimes up to 2 other people
77/78 I thought the physio room was very clean and pleasant and you could get undressed in private, that was great
79/79 There was often thirsty work doing these exercises and there was no drinking water there
101/102 (Session booked) 8.30am sometimes it didn't start till 9.00am. I start work at 8.15am so I was already having time off....it was very frustrating

'Slow improvement'

76. I got very frustrated because I was improving so slowly
114/115 They did say it does take a long time, unfortunately I think it was just me personally, I wanted to get going again

Therapist (preamble)

- 37/38 I thought she was great, she was very nice and explained everything what was going on inside my ankle

Belief

- 117/118 I think I had a slight chip on the bone but that wasn't very serious at all....it was all the ligament damage....
119/120 Apart from the sprained ankle I probably have quite weak ankles anyway
120-122 So my physio was not just making it better after.....damage that had been there for a very, very long time....which is possibly why it took so long
122/123 I'm not sure that I feel cured yet
125/126 I mean I've only just got these lifts in my shoes and I do find they are making a difference,
130 .they lift the arches up,
132 yes, I've got very flat feet

APPENDIX 3.

3.4 Sample of coding sheets following content analysis of multiphase interview transcripts of acute subjects ($n=19$, inner city). Card ranking phase of the interview

- Key: i) The numbered letter in the left hand column identifies the transcript
ii) The following numbers indicate the transcript line number
iii) The statements reflect sentiments relating to the principal category headings
-

EXPECTATIONS

- M.60 250/251. I wasn't expecting to walk on 1 crutch before I went away on me holiday, I was still expecting to go away with 2 crutches
10/11 I didn't know what to expect not having been there before ... so it was all new.
15 I was hoping to make a good recovery
15/16 I knew in my own mind the recovery was not going to be 100% anyway.
- F.72 163. I just thought they were going to make it all better
165. I knew that it was going to be exercises - pushing and pulling and twisting and turning.
168. I didn't expect it to be quite so painful.
- M.33 58/59. I think to start with I thought I wouldn't even be able to straighten (my finger) properly again.
84/85. I didn't really know what they were going to suggest other than sort of keep it moving.
- F.69 108/109. Not really (any thoughts) obviously in your own mind ... when you go to these places it's got to be exercises whatever.
- F.30 157-159. I thought maybe ... someone waved a magic wand and it was all over. I didn't realise the work that had to go into it.
297. I didn't think it would be one-to-one ...
299. I thought maybe it was a group of people
304. I think I didn't know quite what to expect
338. I thought (my finger) would get better ... completely
343/344. If they'd explained it to me more, I would have known ... what to expect.
- M.71 293/294. I just thought it was ... could be ... sort of ... bending me leg and all that business.
299. I didn't know what to expect.
- F.53 129/130. Sort of, resume as normal ... movement of my hand as soon as feasible
131. Get full health ... back, to get my hand back in full working order
139-141. I must have thought there would be a lot of critical movement ... I'm going to be able to move my fingers a lot
142. I assumed there would be some sort of massage
143. I assumed also it would be painful to use, I've heard that it can be (ref "no pain no gain")
224-226. (After orthopaedic clinic) I knew more or less what to expect that it was going to take a long time, and it wouldn't be very definite (because RSD)

- F.33 157/158 I didn't realise I was going to have to have physio.
159-161. As soon as I saw her she explained it was going to take about six weeks or so, that was my expectation
185/186. I was more concerned that I would want the shoulder looking how it should do
187. I wasn't expecting it to be 100%
122-124. I knew that it would probably be some form of exercise and ultrasound obviously to repair the torn ligaments which I knew I'd had ages ago.
131. I thought (treatment) was going to be uncomfortable
135/136. I didn't expect it to be easy
- F.51 714/715 I was unaware of what physio I was going to get on my hand apart from ... the wax treatment...I thought I was going to get that
733. I didn't have any other expectations there.
- F.67HH 172. I had not idea. I had never had therapy before
174/175 I was a bit nervous at first because my arm was so painful I didn't fancy anyone pulling it around
175. I had heard a few people say that "they would give you what for, they pull you about".
- M.25 545-547. I haven't had that much (physio) before so it's not really important as far as I'm concerned as long as I get the end result.
250/251. My expectations were I would get better quicker (because previous injury)
558-562 As far as actual treatment ... how I expected the physio to get through, the physio to act, what exercises...I hadn't had much experience ... I didn't know, so just see how it comes.
- M.24RT 246/247. I wasn't expecting this sort of treatment, but where the therapist says "do that", every therapist you see is probably different.
- F.27 191. I expected to be able to do everything again from physiotherapy
198/199. I had to get better so I expected that physiotherapy would make me better
234. I just thought I would be doing exercise
- F.66 6/7 Somebody had told me that physio would be terribly painful and to my surprise it wasn't.
267/268 The surgeon (told me) as well that I was not to expect to get the full use of my hand, I found that very depressing.
- M.43 306-308 I spoke to the physio I had originally and said what's the chances of me going back to (work) and how long would it take ...
309/310 she said ... it's going to be hard work;
317-320 without that expectation ... she instilled in me ... and having a similar injury before I found that it motivates you if you expect that you're going to get better
296/297 I was really confident that I'd just get back to normal , completely normal
388 /389 I thought perhaps I'd be using slightly different equipment from before.
797-799 I didn't expect to get this many sessions I must admit in the beginning because I never had that many before, so I, you know, judge one against another.
- F.43 384/385 I just didn't know what to expect
385/386 I had no .. my initial thoughts ... no, there were no expectations.
386-388 This is why I had to be talked through it with them actually giving the

expectations and the emphasis on the positive is so helpful
393-395 I think probably had a vague idea that it would be a combination of
manipulation and exercise and that was obviously right.

F67BB 113 I didn't expect I'd be treated as well, you know, and quickly
136 I was expecting it to be much the same as the other physiotherapy (painful)
140 (but) it was less painful than the shoulder
145/146 I was hoping that everything would be nice and clear and this bump would
be gone from here, but it hasn't
164 Well I suppose I came out with the idea that eventually this pain would be
gone.

M.24AD 708/708 I didn't really go into it with too many expectations, I was just ... hoped
they would help get my shoulder better
726/727 I suppose I hadn't really thought that it might not get back to 100%.

F.26 274 I didn't have any expectations, really
275-277 I kind of had... an idealistic view of what I would like to happen but I didn't
hold out much hope because I've not had a very good experience of physio
in the past, so I didn't really expect much.

EXPLANATION AND INFORMATION

M60 75-77. They told me exactly what they were going to do, how they would do it, and
they also gave me leaflets I could read (to) help myself (Leaflets) of exercises
treatments...
81. what to do what not to do at home.
84/ 85 I got them at the beginning, during and as treatment progressed
106/107. Consultant showed me X-rays what I'd had and what he'd done and how it
was after the operation
116. I asked (doctor) about it (the X-rays) they said (pins & plate) are there
132/133 I asked (physiotherapist) how long the swelling would last ... they said you
can never tell
142/143 I used to ask how I was getting on ... she was quite helpful
285. Therapist kept saying ...it's alright, you'll be OK, (standing on bad foot)

F.72 60. The consultant said it would probably never be 100%
145/146 I came back once more after (traction) and she said I don't think we're going
to get any further with it.
147. I'll put you on an SOS for a month
194. There wasn't an awful lot (of explanation) really
195. (Manipulating it won't break it) it's only by falling on it ... that would break
196-198 She did explain to me what the muscles were and the bones and tendons and
things. I can't remember any names now
200. There was a chart on the wall but she didn't refer to it.
219/220. I don't think I could have done anything different if I had known it all
222. I had a page full of exercises
231/232. There were quite a lot of (exercises) on that sheet but I never did all of those
when I came (to Hospital)
238/239. only (asked) why wouldn't it do this .. or that, not sort of any complicated
questions .. she just said 'well because it won't do that'.
244. She said you mustn't let it stiffen up
290/291. The physiotherapist said 'I have never come across a wrist that is as stiff as
yours'.

- M.33 86. She gave me a chart with exercises on before my first session
101/102. That was a general sheet (exercises) and I think it became a bit more specific once I'd had the first session
114. He talked quite a lot about what was going on inside ... with the tendons, trying to straighten out and he didn't go into a huge amount of detail
- 115/116. I wasn't really that fussed other than working out the best way of getting moving again
139. I remember him explaining before each of the things he did what the reason was.
141. That he would measure my current movement, then warm it up, manipulate it and re-measure ...
143. He explained how it would progress and then he'd be hoping I would reach a certain level.
148. I understand (the wax) was supposed to warm everything up.
- 149/150. That it (wax) would speed up the process of him being able to reach (the angle) we were aiming for
153. (suggested) a hot bath and that sort of thing (at home) to (imitate the wax)
- 169/170. Before he did a bit of stretching (he'd) say we'll try and bend it to see how far this would go and it might be a bit painful, let me know if it gets too much
- F.69 91. If I asked her anything and that, if she could answer me she would
105. She used to emphasise that I had to do them (exercises)
117. She said I had fractured my leg very, very bad so that was it
129. I thought (the pain) gradually would go, but ... the doctor said I've got to live with it
135. The physio did say before I finished treatment- "if you feel you can do it (a little job) do it".
- 137/138. She said .. "if you feel when you get home your leg or your knee has swollen, keep ice packs and everything on it to help ease it".
151. A couple of times she did say she preferred me to have a stick because it was much better for myself
- 235/236 The receptionist said book your appointment for the simple reason it'll take at least a month. But it didn't
245. Physiotherapist said, the next time I went she said that would be my last
- 276/277. They explained to you, it was all written out exactly what they wanted you to do, then if there was anything extra she would write under it.
279. She'd write how many times a day she'd want you to do it
280. (Told) if you didn't feel like doing it one day, make sure you double it up the next
296. She was telling me (about the injury) but I forget now what I'd actually done to it
- 306/307. When the doctor discharged me, he showed me the X-rays and said that .. I had gone back alright ... (not bothered about details)
355. She did tell me (what the electric machine did) but I forget now
368. Another time she said "bend your knees but you've got to be careful not to bend them inwards, you've got to bend them outwards all the time".
- F.30 93/94. I wasn't told anything about ... what would happen ... what it would take ... what it was for ... how long you go...
- 129/130. I believe .. she did her best .. she gave me as much information as I ... as she could give
- 142/143. (The X-rays) it explained to me better ... what it was like, where it was positioned
- 201/202. They're just there to show you what to do .. and then you do the homework

- 214/215. She made me realise that .. you've got to do this for yourself
- 221/222. She made me see the importance of doing my exercises ... and getting the swelling down
124. I asked her question like.... how long is this ...
265. She explained to me it's not your knuckle ... it's your fore-something, I can't remember the term for it
- 267/268. She had all the terminology's and explained things to me
- 346-348. When they (doctor) explained it to me .. they was going to put the plate in .. I didn't understand what that was about at all .. that's why it was such a shock to me
385. She said to me (the stitches) they're strong, they're strong,
- 431/433. Do (the exercises) at home otherwise your finger will stiffen up
- 549 She said I'll just have to see you one more time ... then after a month off...
- 552/553.she said, we'll knock you off the books so to speak
- 628/629. My physiotherapist (said) there was nothing more we could do, a
- 629/631. and my consultant wrote and said could you please see this patient a bit more.
- M.71 157/158. She gave me a list of ... stuff I had to do ... different exercises which I had to be on the bed and do
- 188/189. She did say it would be the last time, but if I had any trouble I could come back again ... no bother
255. I think it was four exercises (on the list) she said do it twice a day
- 279-281. I had to use the crutches ... and I was told how to use the crutches because ... I started off doing it the wrong way round
319. I'd broken my kneecap ... yea, I was told that
323. I think there was diagrams round the room ... took no notice of it
364. I was quite happy with what I was told (didn't want details) -
- 366/367just that, given a sheet and told to do these exercises ... and asked to come back.
- F.53 160/161. On my last appointment I was told ... everything was fine and you're doing very well, just keep working at it.
- 199-201. The main point that people were stressing to me was to say, don't worry about it .. you've go to be confident in what you're doing
- 222/223. The OT helper started telling me ... about what the bone was doing inside because the break
- 223/224. He was explaining the anatomy a bit to me, he said your bone will be sort of a bit lumpy because . and explained,
225. I can't remember now what he said ..
213. I'm sure (physiotherapist) gave me what was necessary
- 240-242. (one thing they did make clear (in the Clinic) that it was rather a nasty break, sort of all backwards looking ... like a fork)
- 254/255. (from physio) it was generally centred on actually ... how to do the exercises ... I had to follow this (list of exercises)
- 258/259. I was finding it difficult to get into a routine. She said....write down for me and keep a diary
- 264/265. The doctor was actually saying to the students I had a particular effect, not just a broken arm that needed mending (ie RSD)
267. It was explained to me (RSD) by doctor but it would worry me
- 270/271. I wanted to know why (RSD) but doctor was saying they don't know why
- 409/410. She said you must get this (other problem) sorted because you've got to concentrate on getting your hand better
- F33. 51-56. She took out the diagram and the model and showed me exactly where the

- damage was and how it affects the rest of the muscles.
54. What exact course she was going to be doing
- 55/56. How the massage was going to help, how the strapping would hold it in place
- 123-126 She explained the reason why I need (the strapping) is to hold the muscle back so you can hold me upright again because I had lost control
- 144/145. I was just told basically I shouldn't push it quickly too fast
- 145/146. If I take it slowly then it will heal on its own
- 150-152. In fact straight away the model was there and the pictures was there, she explained it to me straight away
- 189-191. She explained (the shoulder) will go back and look near enough the same, but you're always probably have a slight lump there.
- 136-138. She explained every time you that you'll feel this, not to worry, because I was concerned that my shoulder dropped.
- 140/141. She said you're going to have an ache in it every now and then so I just expect that
- 227/228. She said there was not really much more she could do, it's a slow process and in time it will go
- 312/313. I wasn't involved in (planning the treatment) I was just told exactly what was going to happen,
- 314/315 how long it was going to be for , what I should do and what I shouldn't do
- F51. 233. She said this is going to hurt
- 389/390. She gave me a sheet....an exercise sheet to take home....and I proceeded to do that on my own.
- 398/399. She demonstrated the exercises out in the foyer at the appointments desk because she was so busy.
- 434/435. She just said to me (on discharge) we don't carry on treating Colles # until they're completely better
436. .got to the end of how much they're going to get better
- 499/500. I think she was very good at describing all thattelling me how to do the exercises....
- 502/503 She was ver informative about where the break was....how much movement I was going to get back with it.
511. There was a diagram on the wall
513. and I asked about it she pointed out where the break was
- 528-530. She was explaining to me if I keep the mobilisations going it would stop it seizing up and getting stiff and arthritic....and I thought that was good.
543. (I learned most off the physiotherapist)after I'd asked
548. it wasn't voluntary
557. I don't think she gave me any explanation on the wax treatment. She
558. actually informed me they don't think there was a benefit from it.
- 650/561 (but) if I felt I was getting benefit from it then she would give it to me on a more regular basis (that was) three or four times
- 583/584. She said (megapulse) would heal the tissue....and speed up the blood supply and then in turn get it better quicker.
- 634/635. Every step (in treatment) wasn't specifically detailed, but I think it was explained to me
- F67HH 95-97. (she) told me what she was going to do for me and if there was anything I wasn't satisfied with I'd have to tell her and she would stop and listen to me
- 109 .taught me the right way to do things.
- 110-112 The therapist would say 'sit properly, do this , put your arm back with your shoulder up properly' which I would never think of doing.

- 113-115. They did give me information about what was going on and how much better it would be, but that was about all really.
117. I did ask a few questions and they were answered well
- 120-122. She told me to do things and I came home and used elastic band and ball and climbed up wall
- M25
- 166/167 I was told ankles take a long time to clear up
- 186/187 I was given some sort of exercise sheets, like very basic pictures of what I should be doing
- 189-191 (exercises) was demonstrated to me before and I practised just so as I knew exactly what you've been asked to do, to remind and prompt you, so you know exactly what you've got to do while you're away
- 220/221 They were explaining (the problem) to me to make sure I understood
222. The therapist told me what I should be doing
- 460/-462. When they were talking about the bones in the foot etc. like that, or the muscles or the ligaments or something in Latin names, I didn't know what they were.
- 466/467 There was a chart on the wall showing which sort of ligament I had damaged...
468. so it was pretty well explained at that point really
- 499-501. I did ask at one point how the bruisingwhy ankle injuries take so long to clear up as far as bruising , swelling etc. goes...
- 501-503. is it the lymphatic system or something like that....I can't remember all the details
- M24RT
- 142/143. She gave me a lot of information, explaining what I'd done and how we'd go about repairing in the treatment
- 152-154. They gave me an information sheet, that was helpful, ankle, arm, elbow or whatever, what exercises needs to be done
155. If there is any problems give us a call
- F27.
- 54-56. (physiotherapist) said you've got a problem here (describes) it's either something I've had since I was young or something that developed after my first accident
- 57/58 It made me more aware of what I was doing as well as getting the strength in my muscles.
- 88/89 They opened up to me and said you will never be completely free of this, there are always going to be problems here.
- 89/90 If you keep doing these exercises you'll help strengthen them
- 142/143 The therapist used to say once it starts to hurt then we stop
- 144-146 So you just did a lot of repetition of the exercises until it started to hurt, OK push it as far...rest it, try it again, see if we can go a little bit further
- 223/224 Knowing that the exercises that I do, what muscles they would effect and how these muscles would interconnect up that was actually quite important
- 226 I got very good information and explanations
- 228 I got sheets .showing me different exercises
- F66.
- 285-287 I had about 6,7 or 8 exercises and I would have liked to have....I mean some were done with me, I didn't always relate to what was on the sheet
- 290-292 it was very good on the first sessions to be shownlike a skeleton

- of the hand. Once I began to understand that the little bone had to move over one another...
- 293 I found that superb.
- 299 The wax treatment I was told would soften the tissues
- 301/302 I'm sure she told me she was going to work on my hand....what she would be doing...
- 305/306 I would have liked to have been shown exactly how to do the exercises myself
- 319-322 Of course I was having private physio anyway so there wasn't any agency in me to have things explained
- M43. 178 I asked her quite a few things...
- 181/182 even sort of about physiotherapy....because I've got quite an enquiring mind
- 186/187 there were charts on the wall and I was asking things off that....
- 187/188. and she'd get the model and would explain to me and show me things
- 498-500 she explained to me how she would be starting off, how many of each I should do and as we got on the more () in the height you know
- 505 I didn't go into anything without knowing why
- 507/508 She told me...certain exercises or whatever, she said is for this, you know, ...
- 510/511 or that would help this...I found that quite interesting
- 1018/1019 If you're explained things it's nice,
- 1019-1022 but there is not always the time to sit there and tell a patient we're going to do this, and this is going to work that way
- 1033-1035 My first session she explained in detail what the injury was....how the joints affects....what the joint does
- 1038/12040 She explained it to me on the model, sort of told me about various parts that were affected and showed me what part had broken
- 1048-1050 She explained to me how it worked and why I'd broken a certain part in my foot, but it will affect a certain joint
- F43. 54/55 She actually got out a working model and said this is what it is (rotator cuff)
- 184 had (exercise sheet) which initially I found very helpful because it's not easy to remember.....
- 186/187 you've had a half hour session, you've been told quite a list of things to do.
- 190 If you have a little diagram with an arrow pointing the direction you think, it's a good reminder
- 207-209 She just kept saying it was a case of working on it and pushing it that bit further and sure enough this has all proved correct
- 261-263 I was told this....rotator muscle was the one of the main causes of my problem, so every night I had to do this (exercise) a hundred times
- 313/314 She actually explained (movements) as she was doing it, I'm stretching this muscle here and I'm doing this, that and the other
- 319/320 She asked me if I was getting to the point where there was some pain and if did get to that point then it stopped
- F67BB. 151-153 I went to my doctor a fortnight ago, it was really sore, he said to me it would be like that for about a year you know, 6-12 months
- 180 I wasn't given any explanations while I was having (physiotherapy)

- 182/183 I asked questions, you know, but she said she couldn't tell at the moment what was going to happen, and she'd do everything she could
- 185/186 Yes, she did (explain) it was whatever big words they use about tibia or whatever it was in here....it was broken in three places you see.
- 194/195 She said to me there was a very bad lump on there, that's the only thing she was worried about
- M24AD 136 They said they were going to try and do....
138/139 during the next couple of sessions get my arm moving a bit because it was stiff to begin with
- 147-149 I asked about going to the gym and playing football whether I should...join a gym...whether swimming would be good for my shoulder
- 151/152 They were very helpful with types of guidance like...you can start going swimming
153 before my treatment was completely finished because they said it was almost back to full range
- 155/156 They suggested joining a gym to strengthen it further if I did intend to go back to climbing
- 172/173 The first session I was given a sheet with general type of movements to do.....make my arm not so stiff
- 176/177 The exercises they wanted me to do later were harder ...to conceptualise
- 180 bit more (explanation) would have been more....a bit helpful
201 It's a bit inconsistent with the earlier exercises..
- 202/203 you're given pictures and written stuff for that, then not for the later ones
- 274/275 The told me about the type of dislocation and the angle I'd probably done it at when I fell playing football....
- 277-279, what I needed to do to get it back to how it was before....how it could be a recurring weak spot
- 280/281 So I did learn a lot from the physiotherapist much more than I learned from (clinic)
- 313/314 I'm sure if I wanted more information I would have asked for it, they would have been happy to provide it.
- 330/331 They said that with some cases...it might not be necessarily be crucial that you get back to 100% performance,
333/334 .but in my case if I want to carry on doing sport....that it was my age and things like that so
- 581/582 (on discharge) we talked about climbing and whether it would be advisable for me to go so soon after the injury
- 584-586 they suggested it might be better to wait another six months and try and strengthen the muscles round the shoulder area....build it up a bit
- F26. 155 I said will I be coming back and she said 'well I don't think it will be necessary'.
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- 113-115. They did give me information about what was going on and how much better it would be, but that was about all really.
117. I did ask a few questions and they were answered well
- 120-122. She told me to do things and I came home and used elastic band and ball and climbed up wall
- M25 166/167 I was told ankles take a long time to clear up
- 186/187 I was given some sort of exercise sheets, like very basic pictures of what I should be doing
- 189-191 (exercises) was demonstrated to me before and I practised just so as I knew exactly what you've been asked to do, to remind and prompt you, so you know exactly what you've got to do while you're away
- 220/221 They were explaining (the problem) to me to make sure I understood
222. The therapist told me what I should be doing
- 460-462. When they were talking about the bones in the foot etc. like that, or the muscles or the ligaments or something in Latin names, I didn't know what they were.
- 466/467 There was a chart on the wall showing which sort of ligament I had damaged...
468. so it was pretty well explained at that point really
- 499-501. I did ask at one point how the bruisingwhy ankle injuries take so long to clear up as far as bruising , swelling etc. goes...
- 501-503. is it the lymphatic system or something like that....I can't remember all the details
- M24RT 142/143. She gave me a lot of information, explaining what I'd done and how we'd go about repairing in the treatment
- 152-154. They gave me an information sheet, that was helpful, ankle, arm, elbow or whatever, what exercises needs to be done
155. If there is any problems give us a call
- F27. 54-56. (physiotherapist) said you've got a problem here (describes) it's either something I've had since I was young or something that developed after my first accident
- 57/58 It made me more aware of what I was doing as well as getting the strength in my muscles.
- 88/89 They opened up to me and said you will never be completely free of this, there are always going to be problems here.
- 89/90 If you keep doing these exercises you'll help strengthen them
- 142/143 The therapist used to say once it starts to hurt then we stop
- 144-146 So you just did a lot of repetition of the exercises until it started to hurt, OK push it as far...rest it, try it again, see if we can go a little bit further
- 223/224 Knowing that the exercises that I do, what muscles they would effect and how these muscles would interconnect up that was actually quite important
- 226 I got very good information and explanations
- 228 I got sheets .showing me different exercises
- F66. 285-287 I had about 6,7 or 8 exercises and I would have liked to have....I mean some were done with me, I didn't always relate to what was on the sheet
- 290-292 it was very good on the first sessions to be shownlike a skeleton

- of the hand. Once I begun to understand that the little bone had to move over one another...
- 293 I found that superb.
- 299 The wax treatment I was told would soften the tissues
- 301/302 I'm sure she told me she was going to work on my hand....what she would be doing...
- 305/306 I would have liked to have been shown exactly how to do the exercises myself
- 319-322 Of course I was having private physio anyway so there wasn't' any rgency in me to have things explained
- M43. 178 I asked her quite a few things...
- 181/182 even sort of about physiotherapy....because I've got quite an enquiring mind
- 186/187 there were charts on the wall and I was asking things off that....
- 187/188. and she'd get the model and would explain to me and show me things
- 498-500 she explained to me how she would be starting off, how many of each I should do and as we got on the more () in the height you know
- 505 I didn't go into anything without knowing why
- 507/508 She told me...certain exercises or whatever, she said is for this, you know, ...
- 510/511 or that would help this....I found that quite interesting
- 1018/1019 If you're explained things it's nice,
- 1019-1022 but there is not always the time to sit there and tell a patient we're going to do this, and this is going to work that way
- 1033-1035 My first session she explained in detail what the injury was....how the joints affects....what the joint does
- 1038/12040 She explained it to me on the model, sort of told me about various parts that were affected and showed me what part had broken
- 1048-1050 She explained to me how it worked and why I'd broken a certain part in my foot, but it will affect a certain joint
- F43. 54/55 She actually got out a working model and said this is what it is (rotator cuff)
- 184 had (exercise sheet) which initially I found very helpful because it's not easy to remember.....
- 186/187 you've had a half hour session, you've been told quite a list of things to do.
- 190 If you have a little diagram with an arrow pointing the direction you think, it's a good reminder
- 207-209 She just kept saying it was a case of working on it and pushing it that bit further and sure enough this has all proved correct
- 261-263 I was told this....rotor muscle was the one of the main causes of my problem, so every night I had to do this (exercise) a hundred times
- 313/314 She actually explained (movements) as she was doing it, I'm stretching this muscle here and I'm doing this , that and the other
- 319/320 She asked me if I was getting to the point where there was some pain and if did get to that point then it stopped
- F67BB. 151-153 I went to my doctor a fortnight ago, it was really sore, he said to me it would be like that for about a year you know, 6-12 months
- 180 I wasn't given any explanations while I was having (physiotherapy)

- 182/183 I asked questions, you know, but she said she couldn't tell at the moment what was going to happen, and she'd do everything she could
- 185/186 Yes, she did (explain) it was whatever big words they use about tibia or whatever it was in here....it was broken in three places you see.
- 194/195 She said to me there was a very bad lump on there, that's the only thing she was worried about
- M24AD 136 They said they were going to try and do....
- 138/139 during the next couple of sessions get my arm moving a bit because it was stiff to begin with
- 147-149 I asked about going to the gym and playing football whether I should....join a gym...whether swimming would be good for my shoulder
- 151/152 They were very helpful with types of guidance like...you can start going swimming
- 153 before my treatment was completely finished because they said it was almost back to full range
- 155/156 They suggested joining a gym to strengthen it further if I did intend to go back to climbing
- 172/173 The first session I was given a sheet with general type of movements to do.....make my arm not so stiff
- 176/177 The exercises they wanted me to do later were harder ...to conceptualise
- 180 bit more (explanation) would have been more.....a bit helpful
- 201 It's a bit inconsistent with the earlier exercises..
- 202/203 you're given pictures and written stuff for that, then not for the later ones
- 274/275 The told me about the type of dislocation and the angle I'd probably done it at when I fell playing football....
- 277-279.what I needed to do to get it back to how it was before....how it could be a recurring weak spot
- 280/281 So I did learn a lot from the physiotherapist much more than I learned from (clinic)
- 313/314 I'm sure if I wanted more information I would have asked for it, they would have been happy to provide it.
- 330/331 They said that with some cases...it might not be necessarily be crucial that you get back to 100% performance,
- 333/334 .but in my case if I want to carry on doing sport....that it was my age and things like that so
- 581/582 (on discharge) we talked about climbing and whether it would be advisable for me to go so soon after the injury
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 602-604. I had to plunge my wrist with a bucket of ice water and hold it in for so many seconds... in and out
- F.67HH 136. I had one go of (acupuncture) ..
 141. I have had it before ... So I wasn't a bit afraid
 148/149. (Exercises) were very good. The pulley and big rubber ball and my arm going up the wall, sitting properly with my shoulders back
 149. The elastic strap. I had all sorts of things.
 181. Some exercises did hurt me but I did stick it out.
 182. She used to say to me did I want a drink of water when it was so painful at first
- M.25 135-138 Early on the treatment sessions were very much hands on, obviously to get me over the early hurdles .. to a point where I could do a lot of it myself.
 141. I was doing harder exercises the stronger I got
 159/160 I think I had ... was it ultrasound treatment and things like that ...
 160 I hadn't had that done before (previous injury)
 165/166 ... and did a lot of friction work as well with the hands
 180-183 Later on it was very much circuit gym work which was something I got on with myself
 208/209. There wasn't much pain actually involved apart from if I put direct pressure on bruised or recent damaged tissue area.
- M24 RT 92/93 I had a machine, can't remember what it was but it would help the ankle heal
 106/107 They had a balancing board there which I had to stand on then balance to try and strengthen the ankle again ... and stand on one foot
 223/224 It hurt (balancing) but that's not why I didn't want to do it really, it's boring.
 240. (Physio not there) all the time, she was there in the gym so she knew what was going on.
- F.27 134. It hurt a lot less than I thought it would with physiotherapy
 244-245 We'd go through what I'd been doing and look at my knee and what sort of shape it was in.
 246/247 We'd to over some of the mobility tests that I'd been practising the week before and check the improvement.
 248. Then we'd try a new test to see if we could get a bit more
- F.66 131/132 The wax treatment was very good ...it softens the tissues ... and the actual therapy was good
 171-173 A lot of the hour was spent really with the wax treatment, the actual physio itself ... even though it was good ... wasn't I suppose aggressive is the word I'd use, or as strong as the physiotherapy I had privately.
 328/329 She did do some movement on my hand and got me to press it back and down and asked me to do these exercises at home.
- M.43 112-114. I found the exercises she gave me to do at home and in the gym were all ... within my capabilities at the time ... then she gradually increased them
 373 I was given a lot more different exercises and I felt ...
 374-376 I'm not trying to degrade the person that done it before but ... I got the feeling at some stage previously because it was taking some time, he was

- running out of ideas
- 337-339 It was more or less ... sort of the bike, stretching exercises and building up stamina and getting the muscles working
- 450-453 As I progressed some exercises were dropped and some added until I got to the point where I was doing a circuit
- 462/463 It's more like going for a workout
- 481-483 I asked her ... do you think I could try to climb the wall bars, she said try, yeah, if you feel ... she watched me, made sure I didn't go too high
- 627/628 I had a list in the gym when I had a circuit to do, ever time I went I (ticked it off)
- 632-634 I had exercises that I did at home which I was told to do and as I was told them I wrote them down at home so I didn't forget them all
- 742/743 We did clash at times (in the circuit) 'cos there was only one of everything
- 751/752 (Earlier on) there was a lot of manipulation , you know, trying to loosen up
- 761-763 The only thing I was left with was the heat pad just to warm up your muscle
- 955-957 I had a bit of a confidence crisis when I was taken off the walking stick... you get sort of like ... it's your safety belt ...
- F.43 223-225 I think the early sessions was a lot of confidence building and finding out where the real problem lay and then starting me off on a simple range of exercises
- 226-228 One exercise that was particularly good was walking my arm up the side of the door, so that I could actually see the progress
- 232-233 I have to say there are some exercises I really didn't like doing
- 234-236 I persevered and I felt that every week I went back to the physiotherapist actually knew how hard I'd been working
- 250-253 There was one point I was having to do this awful stretching thing with a green rubber band
- 257/258 I had to attach it to the bottom of the stairs and stretch it sideways –
- 260 this was agonising
- 284 The pulleys were absolutely marvellous ...
- 285-287 I loved the feel of it was just fabulous it gave me a stretch and I had something to get my arm up in the air
- 294 Every time I was told to go on the pulleys I thought great
- 296-297 I had a huge sort of beach ball thing to roll around and that was good because I could feel things happening
- 305-307 There was also a lot of ... sort of just manipulation which I just laid .. on the bench and my arm was just worked in various directions
- 405/406 I felt the physiotherapist understood me and the problem
- 405-408 (she) remembered absolutely everything from the week before and we commenced the next set of exercises without any problems
- 409/410 I felt very pleased that she had full grasp of the situation and it was definite progression
- 522/523 Towards the end of the treatment when I was actually able to be just put on the pulleys
- 523-525 I realised that the therapist was dealing with somebody else at the same time ...
- 528 then she'd come back to me, but it was no problem at all
- 529 There was an awful lot done in every half hour session
- F.67BB 151 I got the full treatment I should have ...
- 154 ... well I was looking at somebody else who had the same thing on the other table
- 157-159. We used to get our hand put down in this hot thing of .. it was all covered with white stuff when you took it out wax.

- 161/162 We had to put it down 10 times I said I like this I don't mind it at all, it makes my hand all nice and cool...
- M.24AD 89-91 Different types of movements ... seeing how the shoulder was sitting and how it was slightly too far forward.
- 91-95 Different types of exercises I had to do to get it fully back in place, so that I could have the full range of movement back in my shoulder which is quite important 'cos I did do quite a lot of sport
- 100-104 Some of the movements ... you wouldn't think that they'd be the key movement that you need to actually make it heal and bring back the full range of movement
- 120 They had to manipulate the movement sometimes ...
- 122to show exactly how it should be sitting
- 144 I had exercises to go away and do
- 162 (used) the rubber bands
- 209/210 I guess I didn't use more of the gym equipment because of the type of injury that I had
- 220/221 Once or twice the type of movement that they wanted my arm to go in .. it was very resistant to doing that
- 223/224 It wasn't very painful ... just a little bit uncomfortable
- 229-231 I don't know what the equipment was called .. it was just to show where you're .. exerting maximum kind of ... muscle use? It was like red and green lights
- 235-237 That (equipment) was kind of helpful .. quite useful to conceptualise what they wanted me to do with my shoulder
- 623/624saying this is what you need to kind of focus on
- 624-626 It felt to me sometimes we didn't do much at all ... I guess they could have a good look at the shoulder, feel it, and then suggest appropriate advice ...
- F.26 195/196 A lot of the time I had a full session but I wasn't working with my therapist, I was actually just working on my own
- 204 She did a bit of ... ultrasonics, sort of making it a bit warmer
- 212 I think she ... well she massaged my feet a bit
- 214/215 At the beginning it was quite painful, well not ... it was just painful in certain bits that she was doing
- 216-218 I did feel every time I came out of there absolutely exhausted, because you were doing ... it was tiring doing things ... using such weak ankles
- 225 wobble board.. which I've actually got one at home as well, so I can use it there
- 226 Those thick rubber elastic things that you move against tied round my foot
- 227 a little mini trampoline thing ...
- 229 and the exercise bike
- 231/232 She'd say, well do five minutes on that, five minutes on that and five minutes on that and we'll see
- 245/246 I felt perhaps if I'd had longer treatments I would have stuck with it longer.

THERAPIST

- M.60 74. She was quite good actually I couldn't fault her in any way. Just to say that to me
75. she done wonders
- 77/78 The way she wanted things done ... she'd tell you how she wanted it done and you had to do it that way which I think is great
- 295/296 I would have liked a bit more .. the therapist to be there with you ... but they haven't got the time

- 307 I think ... whatever the injury is, the physio knows what sort of treatment is
 308 best for you and they tell you
 309. It's their job, I mean they're trained ... so they're telling you for your own
 good
 330/331 Every time ... I came up for treatment and they see me walking and that they
 was pleased "You're getting on a lot better ...
 332. you're doing well" ... I felt great (encouragement)
- F.72 99 She was pleasant
 302/303. She was very nice and very pleasant She tried as hard as she could. She
 wanted a result as much as I did
 308. As I say, you're never going to like anyone who hurts you are you? But I
 can't say I disliked her.
- M.33 237. I had a chap for four weeks and I had a lady for the last two sessions
 279. After two or three weeks he said he was going, but to be honest I really wasn't
 that worried
 280. He was a nice chap, we got on O K
 281. I wasn't worried who was doing it ... I assumed that they'd all been trained to do
 the job
 282. The lady I had afterwards was his boss.
- F.69 85. Interested in what she was doing
 88. I think she was pretty good
 92. She was very helpful I thought
 96. Very dedicated to her job
 107. She would tell me the progress that she thought of me that's why I think she was
 very good
- F.30 228. She was very good
 229. She knew what she was doing
 231. She was a listening ear
 232. She wasn't there solely just to do her job
 233. She was really nice
 243. I found her very helpful
 284. She just seemed really concerned
- M.71 47. She .. seemed to be good
 48. She put me at ease
 56. She was friendly
- F.53 381. She was very confidence inspiring
 406. One physiotherapist was a very understanding person
 416. She is a sort of ... warm person
 373. (The student) was very, very nice and good
- F.33 275/276. She was very informative...very friendly, relaxed very well straight away
 with her (put at ease)
- F.51 738 She was a very pleasant lady
 738. Extremely nice to me ... and kind
 748. Very polite
 748. Very professional
 752/753. (I think of her as being a professional person and she's the one who's going
 to get me better ... I look and listen and I obey!)

- F.67HH 94. She was very nice
95. Put me at ease
- M.25 172. Obviously the individual who was treating you was very important(to get me back on my feet)
213. She was fairly open and honest with me
225/226 On the personal level it was probably pretty irrelevant to be honest,
226/227 but she was a very nice lady anyway.
- M.24RT 61/62 There was a rapport between you an understanding between you
67. Just being able to talk to her about certain things)
- F.27 107/108. The therapist was a really lovely person
110. She was very friendly
116/117 .She was always cheerful
- F.66 134/135 I don't feel they understood how traumatised I was after the break and the operation so forth
135/136 I don't think they understood I was really at a very low psychological level
142 She was very nice
- M.43 108/109 She was very, very confident in what she told me to do, and that gave me confidence in her
118 Friendly, but to the point
1223/123 She was always ready to have a chat and explain things to me
123/124 When I asked her a question she'd answer it
195/196 The other physiotherapists even though they weren't treating me were very friendly as well
- F.43 213 The therapist was very willing to listen to what I had to say
237-239 She could be quite sort of "school mistressy" and say I know you haven't done this week. When I had she said good you're working really hard, she actually knew
331 She was absolutely marvellous
334 She had full control of the situation... humour... persuasiveness
336 Absolutely brilliant
340/341 The other one I had (when she was on holiday) was quite gentle in comparison
- F.67BB 28 She was ever so nice
70 She was like my own daughter
- M.24AD 343-345 The therapist I had, she was great...she knew mostly everything
380 They were both friendly
381-383 I think they were both very good and competent at their jobs ... they seemed to really know what they were doing
- F.26 220/221 I did relate to her very well
265/266 I liked her and I listened to what she was saying
266-268 I trusted her which is, a lot of the time ... I've had sort of treatment from people I don't really ...they don't convince me they know what they're doing but she did
270 She just seemed very competent
271 She did make me feel comfortable "put at ease"

ORGANISATION

- M.60 219/220 (content) I was only coming ... at just once a week ... then I came twice a week
- 288 (therapist) It get very busy at times, they cannot spend too much time with you anyway
302. (therapist) Treatment not rushed
- 353-355 She organised what I was going to do just ... second ... third and I found that OK ... the organisation of it (session itself)
- 359 once a week is not enough.
361. (Expecting) 3 times a week. I mean I came once a week, then it went up to twice a week
380. Used to come up by mini cab for treatment Transport discussed ...
- 387-89 (didn't know) they've got ?? cars I could have been picked up and brought .. instead of paying £20 a week out of my own pocket.
- 403/404. Only if .. there was any vacant times .. they said we've got this time or this time, that was it ... all the others were booked
- 406/407 If it's like that .. to me it boils down to there's too many people for one person
- 411/412. I mean I was ... one (lot) I was getting 10.20, another one I was getting 3.30
418. Set times (better) either in morning or in afternoon
420. Regular (appointments) on a regular basis.
435. Always (seen) on time
437. Fairly punctual, that was the good thing about it.
443. (Sessions) I suppose half an hour to an hour
465. Around 12 sessions in all (treatment).
- 448/449 I was told a week beforehand when you come up next week it may be your last one.
491. They said that if I had any problems I could give them a ring and speak to them about it.
- F.72 248/249 That was all very well organised I think. The times were good and I never had to wait more than a few minutes
251. (Could choose times) within reason
254. Came up twice a week ... I thought that was about right
261. (Came) twice a week for six weeks I think
- 269/270. I just came up as normal and she said well I think that's as much as we can do. Just come back if you need to.
- 277/278. Plaster came off on the Tuesday and treatment started on the Friday, it was still very stiff and very painful
282. Ten days to 2 weeks (would have been more appropriate).
- M.33 185. Seen one to one
201. I'm sort of 10 - 15 minutes down the road so I could pretty much fit it with my day
203. There was normally a slot available at 9.00 a.m. so I could go there and go to work at sort of normal times
208. (Came up) once a week
210. They suggested 2 or 3, well 2 X week at one point but I was particularly busy and I found that ... a bit too much.
212. The weekly sessions were enough for me -
222. (Seen) in a matter of days... booked an appointment for the following week.
- 225-227. I'd had 2-3 hours off that morning anyway (in clinic) so I was quite happy to come back the following week.

232. Had six treatments in all
238. I missed a couple of sessions.
239. I was on holiday for a week and then I cancelled the next
240. She said just come back one more time next week and that'll be it.
253. (On discharge) they said make contact if you want to, if you feel things aren't quite right
262. Always, always (seen) promptly
264. Except one time when someone didn't know I was there, apart from that, it was always on time.
267. (Sessions) generally about 40 minutes, forty or forty-five minutes.
269. It was shorter towards the end... nearer to 20 minutes at the end
271. 10 minutes sitting in the wax anyway.
- 273/274. It was probably nearer half an hour by the end, the just couple of sessions were about 40 minutes then they were 30 or even less at the end.
- F.69 98/99. I used to go once a week and I done quite a lot of sessions, but not there long enough to have a thing over it
101. I was there half an hour, three quarters of an hour
156. I used to have to get a cab (to the hospital)
163. It was a bit awkward trying to get an ambulance ... you didn't even know what day you was going up for your physio.
172. Once a week used to suit me .. I wasn't asked to go any more times.
- 186/187 You'd go in and sit down, then she'd leave you and go off and do something else,
- 192 then she'd come back to you, then you had to wait, you know...
- 201 Sometimes I could get (a choice of appointment) sometimes I couldn't.
- 202/203. One week I was told that the type of hours I wanted I just couldn't get, so I had to have the week after
- 206/207. It was only because it was the hours I wanted so I couldn't blame them.
- 223/224. If your appointment was for 10.00 you went in at 10.00
237. I had to wait about a fortnight before I started, that wasn't too bad
264. Physiotherapist said any time if you felt you could come up and see her (after discharge).
- F.30 537/538. At first I was going ... twice a week ...then it went down to once a week.
- 546-548. I've definitely finished (in physio) ... actually I begged, I said I'm much better now, you can let me go!
- 566/567. I most probably wanted to be there every day (at first) 'cos you only spend about 15 - 20 minutes
561. It's not a lot (of time) and if you're late as well
- 588-590. I think when I was there sometimes maybe they'd be overbooked or something they'd be seeing me and maybe somebody else
607. (sessions) no longer than 20 minutes
- 658/659. I was able to choose the times....they'd always fit me in because I've got two children to pick up from school
- 667-669. I think it was my first appointment and I was late ...
672. she said we can't see you 'cos you are so late...
- 680/681. I found time keeping quite difficult.
684. I was seen straight away, she'd be there waiting for me
- 702/703. I remember coming out of hospital on the Friday and the following week I had the physiotherapy
709. I wouldn't have had a clue what to expect (re waiting time).
- M.71 110/111. It just seemed organised, you know, the different things I had to do .. as applied to my leg, sort of thing..

- 117/118 I think (I came) for our five times .. it was quite short session really
 131. (sessions) about half an hour each time ... maybe a little longer
 146. (seen) only once a week ... I accepted it
 151/152. I mean if she had wanted me up there every day I would have gone up every day.
 156. I was given a date to come (for treatment)
 159. I said I could go up on Tuesday and Thursday (only)
 168. I can't remember (initial wait) maybe a week or so
 181/182. I think the receptionist saw the physiotherapist and she came out and gave me the appointment.
- F.53 351. I had a student for a couple of weeks (before the physio)
 377/378. I wish I'd seen the senior person first and then they would have explained I would be seeing a student
 379/380. When the student left he said now you'll see the senior physio and then I felt very reassured.
 433/434. It all seemed to be well run, I had lots of sessions.
 441-443. I had two physio visits a week, then I think I had one occupational therapist then the physio sort of thinned out because they said you'll be seeing more occupational therapist
 461. (sessions) were generally forty minutes so they were pretty long ... I think it was about right.
 479. They just said when they could see me really.
 481/482. I was very fortunate I live within walking distance of the hospital .. so I didn't have to trek all the way
 484/485. I was seen very promptly. The senior physiotherapist was always very prompt, the student not quite
 494-496. They both said, come back, we're not abandoning you, if you have got problems you can always come back
- F.33 149-151. It's difficult with my job to come in the morning, it has to be between a particular time
 153/154. Every time I came she made sure that I had that exact time which ... suited me fine.
 164/165. (Came) every week, then missed a couple of weeks, I think the physio went away.
 171/172. The first time was probably on the Tuesday and then on the Monday, so that was five days, not seven.
 176. (Sessions) were half an hour ..I don't think I had that amount of physio anyway
 188-190. I first went to see the physio within a week, yes probably a week, so it was really quick
 192-194 When they said you're young to have a course of therapy, I thought OK I'm probably going to have to wait
 203. I think 7/8 (sessions altogether)
 210-212. She gave me the number to see if I had any problems (after discharge) I could ring up and she would make another appointment.
 213. Otherwise she would just wind me up.
 209/210. She gave me two weeks, maybe three, so that gave me time to see if I was OK.
 240-242. I was seen within five minutes or sometimes as I would be walking in she would be walking out, I went straight in.
- F.51 260/261. The organisation of the treatment sessions was 1 x week
 262/263 I felt that If I'd 3 x week it would have improved quicker.

272. That was it ... book yourself in once a week.
 283. (Sessions were) 20 minutes I think they were ...
 286. that was fine and I was happy with that.
 292. Maybe I would have benefited if I'd had a longer stretch but ...
 293/294. she was so busy with other people she couldn't do it.
 323/324. I think she more or less said ... when I could come .. which days to come
 and just fitted the times in myself
 350-352. I used to try and come .. during the afternoon or I'd come
 first thing .. do the physiotherapy then go on to work.
 358. Sometimes I had to wait quite a long time (for treatment) sometimes straight
 in.
 363/364. I think I sometimes people were turning up late for their appointments
 previously to me so there was a backlog ...
 371. that's fine, I accepted that.
 385. I was hoping to start physiotherapy immediately.
 406/407. I think she said to the people behind the desk to fit me in a certain day or
 when the next appointment after that
 414/415. I don't think (10 days) was the earliest, no that's when she told me to come.
 430. (I had) I'd say 8 - 10 (sessions of treatment)
 446/447. How it was left was if I felt that I needed some more advice then to get back
 to her.

F.67HH 129/130 We were punctual every week.
 130/131 Sometimes I'd wait 10 or 15 minutes which is probably the other patients in
 front of me was late
 131. No cancellations or anything
 233. I waited about 2-3 weeks for an appointment
 236/237 .I was always there for about a good half hour or so.

M.25 278/279. I was back at work, I came in from work (for treatment) at lunchtime to
 whatever
 281-283 At the end of the session I'd look in my diary and see when my physio was
 free and when I was free to do it (treatment)
 293-295 I could pick and choose really if it was two weeks down the line, the diary
 looks pretty empty, so there wasn't really any problems.
 297-299 When I was doing circuits on the equipment in the gym I was coming in
 twice a week
 300. I would come in just made sure my physio saw me come in....I could do the
 circuit myself ...
 303/304 Before that it was ... once a week or twice a week.
 325/326 (Seen) fairly promptly yes, I didn't have to wait very long, no.
 332-334 I knew it was coming towards the end of the sessions whenever exactly it
 was it wasn't completely unexpected
 339/340 I got given one of those SOS appointments, if I did need to come in which
was quite reassuring
 341-343 I did actually make an appointment (for a check) but I had to cancel because
 of work commitments.
 351/352 They said I could come up to a certain date, up to four weeks away, the I'm
 on my own.
 369-373 I came in on Monday to A & E had the X-ray and was asked to come to the
 # clinic on Wednesday. Also given an appointment for physio at the same
 time.
 381-383 I was in plaster for a little while, after I cam out of plaster then I was
 referred to physio
 386. (started physio) .. I can't remember, not that long.. a few days.

- 399/400. I think they asked me when I wanted to come in I think a few days, it was fine.
- 437/438 I think I had one appointment re-arranged because one of the physios was sick at the time of the first visit, so I had one changed ... it was just put back.
- M.24 189 (sessions) probably an hour, I can't remember how long 'cos it's been a while back now.
192. It did (start promptly) I mean I might have to wait 5 minutes.
- 192/193 I was seen three times a week
278. I was able to choose my appointment times for treatment.
288. I was told I could come back if I had any problems.
- F.27 250 (session) would vary. I can't ... maybe half an hour
- 252 We tried to get a time that was most suitable for me.
- 253/254 I used to schedule morning sessions so I could go before work.
- 267/268 I was seen about 2 days (after the brace was off), so it was pretty much straight away
- 270 I though I'd be stuck on a waiting list for months and months and months ..
- 272 it was a brilliant surprise.
- F.66 17/18 I was only given one appointment a week and in my opinion that was inadequate.
- 122-124 It would have been nice if it had just been the one therapist right through because I was still very traumatised and having to adapt again to another person wasn't easy.
- 142-144 I was shocked when I was late for an appointment very early on and she didn't see me even for a short period
- 150/151 When I went back again, whenever I was early she took my early .. and gave me extra time.
- 157/158 In fact after the first physio left, they left me without any physio for a week until they'd allocated me to someone else.
- 167/168 Oh yes, they asked me if I'd prefer morning or afternoon, yes, that was OK.
- 170/171 At first (sessions) were short, and when I went back to the consultant I said I felt I needed more physio and then I used to get about an hour.
179. (Initial sessions) were about half an hour I think.
- 212 It must have been about 2 weeks (before starting treatment)
218. They made an appointment there and then
- 227-229 I was having physio privately every week anyway, twice a week ... I suppose I could have told the hospital therapist I was having it, but I felt I needed the three sessions
- 252-254 It's a pity that the waiting room isn't nicer, it's a very drab old place ... you know visual stimulus is important and it's a pity is isn't nice, more comfortable
- 255-256... and of course there are big gyms and they would be nicer if they had rooms I think.
- M.43 676. There never seemed to be time to give somebody 100%
- 677-679 There was a stage where somebody couldn't turn up at the last minute, so somebody was having to cover their patients as they ere coming in
- 680 they were having to hop from one to another.
- 682-685 There wasn't enough staff to cover really without one patient being left on their own to do an exercise without somebody looking behind the curtain to see that somebody else was there.
- 690/691 Sometimes it seemed there were too many patients for too few

physiotherapists.
 702/703 I did notice that they seemed rushed off their feet.
 714 They had to spend a lot of time on the phone ...
 769/770 For quite a lot of the time I was coming up 2 x week
 783 I can't remember (how many sessions) it was loads
 826/827 I can't remember how long (sessions) when I was just going ... about half an hour aren't they or was it forty minutes?
 863-865 A great majority of the time ... as soon as I got there ... I was allowed to go straight in, no waiting, just get on with the circuit.
 873/874 She said see how you are ... like another couple of sessions maybe...
 875-876 I went to the last session. I thought I'd have one more because she said two,
 877/878 she said I think that's ...you know...I don't need to see you any more.
 909/910 It wasn't long at all (first appointment) just over a week.
 914 It surprised me ...
 916 cos the last time I waited quite a while ...
 920 I think it was 3-4 weeks
 931/932 She never actually said to me you've got to come on such and such a day ... it was quite open.
 941-944 There was a couple of times where I had to be told we've only got this available but most of the time it was quite flexible actually.
 965-967 Me boy drives ... when he was around he'd drop me off but most of the time it was minicab (to come up)
 979/980 I'd get there roughly ten minutes before
 990-992 I know there were people there that'd say I've been waiting ages and things like that but I never had that experience
 995 I cancelled a couple ...
 998 but I never had any cancelled on me, no.

F.43 399-401 I went every week for about four months then as I began to get more movement back that became every fortnight.
 403/404 I think the organisation was well controlled, obviously I can understand the huge amount of people going to these sessions
 418 I think (1 x week) was about right actually
 432-434 Possibly ... two sessions during the week .. just to sort of get the whole thing going, but after that it could have tailed off, yea.
 440-444 Obviously a break in the physio over Christmas but I was allowed to come back during the week between Christmas and New Year because of the problem it was best not to leave it for a fortnight ... so I think that was very wise
 453/455 I had to have the 9.20 session in the morning and I was allowed to have that every single time which was brilliant ..
 456 ..so it means minimum disruption to my day
 469/470 I was seen within ... I must have been seen within a week of the consultant's session
 482/483 It was overdue at that point (just appointment) I needed to be... I did need to be seen absolutely desperately.
 473-477 I think there could be better liaison between physio and the consultant possibly because I think it would have been interesting to have the physiotherapist's point of view at the point where my arm was going to be in a sling for two weeks.
 491/492 I knew ... I was going to be signed off fairly rapidly because there wasn't much I couldn't do any more so that was fine.
 498/501 I was told as the treatment tailed off if I wanted I could book an SOS session if I started to seize up or if I had a problem ...

503/504 .although I never actually made use of it, it was nice to have that facility.
505-508 When I finished I think it was fairly evident I wouldn't need anything else but I was told it was always possible to go back if there was a problem.
521 (Seen) very (promptly) absolutely.
533/534 I think (1/2 hour) was probably about the right time because you don't want to sort of go too far.
543-545 There were a few occasions when there wasn't somebody following my appointment and I did actually carry on for a bit longer.

F.67BB 113-115 I didn't have to wait for half an hour you know, when your time was there you were always called in at that time.
115. Sometimes you'd be sitting for 15, 20 minutes before.
236 I don't like sitting around, hanging on waiting.
238/239 I don't mind waiting on 5 or 10 minutes, but if you have to wait half an hour you're trying to get in there.

M.24AD 302 That's what I had, physio once a week
361-363 The reason why the (therapist) switched was probably because the first therapist had to go on rotation - she had to leave the department here.
435 I was happy with the treatment I received here ...
437 I didn't have to wait too long ... and I got seen once a week.
458-460 I thought there would be more (sessions) to start with ... because I waited a number of weeks to have my first session
462/463 I thought maybe there'd be a couple in the beginning.... close together (per week)
474/475 It was usually, well I'll see you next week sometime ... the early part of next week.
480-482 Then towards the end obviously they gave it a three week break .. to have some check-ups .. before they finally signed me off.
494-496 I thought to begin with it might have been more frequent but I didn't bring it up because I didn't know how it worked and stuff.
501/502 I generally took (appointments) when it was convenient depending when I had meetings and things at work so, it was OK.
510-512 They only cancelled one appointment, which I thought was quite good ... it was quite sudden really, it wasn't much notice
533-536 I thought I'd be seen sooner because my arm was quite stiff and you're obviously psychologically reluctant to do some movements until someone who knows what they're taking about has said, "No, don't worry, you can do that".
552/553 (Seen promptly) Yeah, I guess so - ten minutes sometimes and that's not too bad ... sometimes I was late because trains
561/562 After I'd had a break of three weeks I went back,
563-566 then they said go away, carry on with the exercises, then come back and then I knew that would probably be the last time I needed to go back.
612/613 (Sessions) were under an hour ... half an hour ... 45 minutes ... kind of around that.

F.26 180-182 I was hoping when I did get there early that I would have the appointment when I made the appointment and not half an hour later.
182/183 I didn't feel I could really complain about (late appointment) because they did seem so over-stretched
183/184 she was doing two people at the same time as me
289/290 Didn't have to wait long for first treatment, able to choose appointment times.

291-293 I had quite a lot (of sessions) 2 x week to start, then down to 1 x week
because boss creating a fuss
307 I was told I could contact the department if I had any problems.

RESULT

- M.60 527 I'm not completely better, I know I won't be completely better
527-529 I'm roughly between 80-85% there's no way that I'm going to be 100%
again.
534/535. Hoping that the calf strain get a lot easier, but the swelling it's one of those
things, if it goes , it goes, if it doesn't it doesn't
555 I'm quite happy ... with the outcome
556 mean they got as far as they could for me ... all I can do is keep it up, improve
557 it more myself
- F.72 50. I just wanted a good result at the end of the treatment
52. ...well, 99% (expected)
54. 75% (in fact)
56-58 I can't understand why, I broke my wrist, my wrist is OK but I still can't
close my hand, fingers
78/79. It's still swollen. It hasn't gone back to normal
86/87. I can't handle money or anything with that hand
89. I can't open jars or bottles
186. I didn't feel that I had got a positive result when she said that's it; but if you
need to come back you can.
189/190. If I'd come back she more or less told me there was nothing else she could
do ... there wasn't any point...
- M.33 44/45. The most important thing was that I did get full facility back (in the finger)
47. It's still stiff six months later. I don't think at this stage, it probably won't
every be properly the same
64. 90% improved
91. To be honest most of my improvement came from my own (doing)
- F.69 117/118. On the whole I thought the treatment was pretty good the way I got on
124. I am back to normal
125-127. The only thing is I still get a terrible lot of pain in the knee
I'm alright on the level, but it's coming up and going down stairs, it's still
very painful
- F.30 435/436. I can do a lot of things with it, but obviously there's certain little things I
can't
495. 80% better
511/512. I'd say ... if I can't have perfect, I'd definitely take this
519. I don't know why I expected it to be 100% better ...
520. ... maybe it was because I didn't understand the extent of the break
525/526. I can move it and do things with it, and it's not a hindrance
528. I'm quite pleased
- M71. 303. I thought I recovered quite well...you know....quickly
311. Well 100% (now) really.....except I'm walking slower.....
314/315. Sometimes I can't walk so far now....that may be old age
375/376. As soon as I was able to dispense with the stick, I did because I was able
to.....well I thoughtwas, you know, normal.

- F53. 162/163. I wasn't really sure in my heart that I was doing well but I was hoping what the physiotherapist was telling me would come true.
 180. I'd say it's like about..... 70% back I wouldn't ever expect it to be full percent back
 182. I'd say it still has some way to go
 189-191 I'd like to stop feeling aware of it....to the kind of improvement where you stop, you can almost forget that you have something wrong
- F33. 166/167. I'm concerned about a lump there.....
 174/175.it's the AC joint it's been damaged so it's always going to be slightly weakened.
 230-233. I knew it had improved greatly.....I had a shoulder that was uplifted, I couldn't move it. I got full movements, so that was fine.
 259/260. I haven't got strength there like I used to have, but that's because I'm not pushing it I can do anything now that I was always doing before....lifting heavy saucepans and things It's not 100% but I don't think it's going to improve any more.
- F51. 649. I was a little bit disappointed that I've still got a swelling...
 654. .but they said it'll be a year before it goes down
 661. Sometimes it aches
 671. I think 90% improved
 680-682. Sometimes when I'm playing around with the childrenthey pull my wrist and it's sore
 686. Apart from that I tend to try to do everything
 697/698. I didn't realise that it was going to improve a bit with me working on it on my own
- F67HHL 99. Well 75% better. She said I wouldn't get 100%.
- M25. 103. I would say probably 90% (recovered) at the moment but that's no criticism of the treatment I took.
 105-108 The rest is up to me....there's no point in my coming to outpatient physiotherapy treatment 'cos I know exactly what I've got to do
 120/121 That 20% I consider is sporting activity with the ankle injury...
 121/122. I can't sprint at the moment because my ankle can't take the pressure of it
 123/124 I won't be able to play football, it's just a matter of he turning, there's not the strength there
- M24RT 198/198....not quite 100%...I can do things still like I did before
- F27. 154. I could bend my knee, I could bend it right back
 156/157. I can run, I can do everything again, I've just got all my freedom back from doing the sessions.
- F66 113 I would say I've got 99% use of my hand back
 113-115 I would say I'll get 100% because all the time it's improving
 I have a little discomfort now and again but that's to be expected
- M43. 273 My result up to a certain point....was excellent
 274/275 but I had another problem...some of the metal work's displaced....so obviously I've taken a step back
 283 I'm waiting for an operation
 283/284 But the result was spot on...I mean I could balance....I could bend....everything
 291 80-85% (better)...

- .292-294 that was only due to the fact that I still had a bit of discomfort which is normal for this type of injury from what I remember
- 296-298 But I was OK, I was bearing weight, I was driving....I was really confident that I'd just get back to normal....completely normal
- 809-812 when I left I felt ready to carry on with my life and get back to normal now
- F43. 140-143 When I first went I would hardly move my arm at all and by the time I'd got to the end of the treatment I had practically full range of my arm movement back which everyone said was not actually going to be possible
- 148 I've got probably 96% full arm movement again
- 155/156 I just treat myself as completely a whole person again
- F67BB. 136 Well, I didn't think when I turned it round this way that I get a pain there
- 138/139 Even when I turn it straight round like that I get a terrible pain shoots there
- 206/207 There's quite a few things I can do now, I can put my hand out and clean the windows which I couldn't do before
- 210/211 I try to manage as best I can, but sometimes it gets....when I try to wash my own hair it gets very....it won't release
- 226/227 I can't write very well you see, because of the pins and needles here, it looses you know
- M24AD 646/647 I didn't necessarily like the result because I thought they would say OK it's fine to go climbing....maybe I was unrealistic
- 648/649 I thought after physio I'd be able to do whatever I want with my shoulder
- 659-661 It would have been nice to know that I could still go back to climb at that level (hard stuff) and not worry about my shoulder
- 676/677 I mean, I feel it's pretty good....maybe 75% maybe...
- 677-680 but there's still times when you think....you're lifting something or you're carrying something heavy or....you swam too many lengths and it's getting tired....it doesn't feel completely normal
- 682-685 You sometimes worry about that...I haven't played football yet either, so I guess I'm not feeling....in my head....I suppose I don't thinkBut I have had exams and pressures at work and a holiday
- F26. 149 I didn't get the result necessarily that I wanted really
- 149-151 I wanted to come out being vital and new and you know....almost I suppose I was expecting more like a bionic man

APPENDIX 3.

3.5 Sample peer review of statements attributed to the principal topic categories following content analysis of multiphase interview transcripts (acute $n=19$, inner city)

i) Percentage agreement of statements relating to the principal topic categories following content analysis of the preliminary *unstructured phase* of the multiphase interviews in which subjects described the salient aspects of their care.

Salient aspects of care.

Of 265 statements identified and initially grouped under the categories of Expectations, Personal beliefs, Content, Explanation/Information, Pain, Organisation, Therapist, Result of treatment and Self-help, there was 95% agreement. Alternative categorisation was suggested for 13 statements as follows;

1 Information → Content

- I was given my homework...I had to do various exercises

4 Therapist → Organisation

- Having the same one every session that helps, quite a lot of visits and I got used to that young lady
- If you had a different one every time I don't think I would have liked it so much
- I think its best to stick with the same therapistthey know what the problem is and what position you were in after that
- Had the same therapist all throughgood because she knew exactly what was going on....she knew exactly where we were with the whole set up.

1 Organisation → Content

- Then she said to me we'll try you with hydrotherapy...I had 6 of those

1 'Pain' → Expectations

- It hurt a lot less than I though it would

1 'Pain' → Information

- The therapist said once it starts to hurt then we stop....respect the way, not pushing it too far

1 Therapist → Information

- For him to tell me what exercises I need to do, what would be the *best* exercises to do

2 'Beliefs' → Outcome

- I'm not sure I feel cured yet
- I mean I've only just got these lifts in my shoes and I do find they are making a difference...

1 'Beliefs' → Content

- They lift the arches up because I've got very flat feet

3.5 Sample peer review of statements attributed to the principal topic categories following content analysis of multiphase interview transcripts (acute n=19, inner city) (cont.)

ii) Percentage agreement of statements relating to the principal topic categories following content analysis of the *card ranking phase* of the multiphase interviews

1. Expectations of treatment

Of 62 statements grouped under the category 'Expectations of treatment', 79% agreement was reached with alternative categorisation suggested for the following;

11 statements → Outcome

- I was hoping to make a good recovery
- I just thought they were going to make it all better
- I though (my finger) would get better completely
- Sort of , resume as normal.....movement of my hand as soon as feasible
- Get full health back....to get my hand back in full working order
- I was more concerned that I would want the shoulder looking how it should do, I wasn't expecting it to be 100%
- I expected to be able to do everything again from physiotherapy
- (Expected getting back to normal and going back to my job
- Well I suppose I came out with the idea that eventually this pain would be gone
- I was just.....hoped they would help get my shoulder better
- I suppose I hadn't really thought that it might not get back to 100%

1 statement → Content

- I was a bit nervous at first because my arm was so painful didn't fancy anyone pulling it around

1 statement → Explanation/Information

- If they'd explained it to me more, I would have known.....what to expect

2. Explanation/information

Of 170 statements grouped under the category heading 'Explanation /Information' 98% agreement was reached with alternate categorisation suggested for the following;

1 statement → Outcome

- The consultant said it would probably never be 100%

2 statements → Organisation

- The receptionist said book your appointment for the simple reason it'll take at least a month. But it didn't.
- Physiotherapist said, the next time I went she said that would be my last

3.5 Sample peer review of statements attributed to the principal topic categories following content analysis of multiphase interview transcripts (acute $n=19$, inner city) (cont.)

3. Content of treatment sessions

Of 166 statements grouped under the category heading 'Content of treatment' 100% was reached.

4. Therapist

Of 82 statements grouped under the category 'Therapist' 100% agreement was reached.

5. Organisation

Of 218 statements grouped under the category 'Organisation', 98% agreement was reached with a query as to whether 5 statements reflected this category;

- They said that if I had any problems I could give them a ring and speak to them about it
- I used to have to get a cab (to the hospital)
- I had a student for a couple of weeks (before the physio)
- Me boy drives....when he was around he'd drop me off but most of the time it was minicab (to come up)
- I think there could have been better liaison between physio and the consultant possibly because I think it would have been interesting to have the physiotherapist's point of view at the point where my arm was going to be in a sling for two weeks. I think that's where the bulk of the damage was done

6. Result of treatment

Of 83 statements grouped under the category 'Therapist' 96% agreement was reached with alternative categorisation suggested for the following;

1 statement → Content

- On the whole I thought the treatment was pretty good the way got on

It was suggested that 3 statements from *Result* did not fit any headings;

- To be honest most of my improvement came from my own (doing)
- I wasn't really sure in my heart that I was (doing well) but I was hoping what the (physiotherapist) was telling me would come true
- I'm waiting for an operation

APPENDIX 3. Table 3.1 Results of card ranking by individual subjects in multiphase interviews: acute group $n = 19$ (inner city)

F	AGE	Expectations	Therapist	Content	Organisation	Explanation	Result
M	43	3	1	4	5	6	2
F	66	4	2	6	3	5	1
F	27	3	2	5	6	4	1
F	53	1	5	4	6	3	2
F	72	3	6	2	5	4	1
M	33	2	6	4	5	3	1
M	25	6	2	3	4	5	1
F	67HH	6	1	5	4	3	2
F	69	6	1	5	3	4	2
F	67BB	2	1	6	5	3	4
M	24RT	6	1	5	3	2	4
F	33	2	5	6	3	1	4
F	26	6	5	2=	2=	4	1
M	24AD	6	3	1	4	2	5
F	43	5	4	3	6	2	1
F	51	5	6	1	2	3	4
F	30	3	2	4	6	1	5
M	60	5	3	2	4	1	6
M	71	4	1	3	2	5	6

APPENDIX 3. Table 3.2 Summary of card ranking by all subjects in multiphase interviews: acute group $n = 19$ (inner city)

	Expectations		Therapist		Content		Organisation		Explanations		Result	
	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n
Most Important	1	1	1	6	1	2	1	0	1	3	1	7
	2	3	2	4	2	3	2	3	2	3	2	4
	3	4	3	2	3	3	3	4	3	5	3	0
	4	2	4	1	4	4	4	4	4	4	4	4
	5	3	5	3	5	4	5	4	5	3	5	2
Least Important	6	6	6	3	6	3	6	4	6	1	6	2

APPENDIX 3. Table 3.3 Results of card ranking by individual subjects in multiphase interviews: acute group $n = 15$ (suburban)

M/F	AGE	Expectations	Therapist	Content	Organisation	Explanation	Result
M	48	5	1	3	4	2	6
M	84	4	1	5	3	2	6
F	22	6	1	4	3	2	5
F	57	6	1	3	4	2	5
F	86	2	1	5	4	3	6
F	53	2=	1	5	2=	4	6
M	37	5	2	1	4	3	6
M	20	1	2	5	3	4	6
F	31	4	3	2	5	6	1
M	19	6	3=	3=	2	5	1
M	29	6	2	3	4	5	1
F	75	3	2	5	6	4	1
M	56	4	1	2	6	5	3
M	55	3	4	5	1	2	6
F	66	1	3	4	5	2	6

APPENDIX 3. Table 3.4 Summary of card ranking by all subjects in multiphase interviews: acute group $n = 15$ (suburban)

	Expectations		Therapist		Content		Organisation		Explanations		Result	
	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n
Most Important	1	2	1	7	1	1	1	1	1	0	1	4
	2	2	2	4	2	2	2	2	2	6	2	0
	3	2	3	3	3	4	3	3	3	2	3	1
	4	3	4	1	4	2	4	5	4	3	4	0
	5	2	5	0	5	6	5	2	5	3	5	2
Least Important	6	4	6	0	6	0	6	2	6	1	6	7

APPENDIX 3. Table 3.5 Results of card ranking by individual subjects in multiphase interviews: chronic group $n = 17$ (inner city)

M/F	AGE	Expectations	Therapist	Content	Organisation	Explanation	Result
M	66	3	1	5	2	4	6
F	68MD	3	1	2	4	5	6
F	75	4	1	3	2	5	6
F	71	1	2	5	4	3	6
M	64	6	2	3	4	1	5
F	68JW	3	1	4	5	2	6
F	69	2	1	3	6	4	5
M	61	6	1	5	4	2	3
F	55JH	3	2	6	4	5	1
F	40	5	2	4	6	3	1
F	55GS	2	1	5	6	4	3
M	79	5	3	4	1	2	6
F	50	5	3	2	1	4	6
M	45	1	3	4	6	5	2
F	87	5	1	3	4	6	2
F	62	6	1	2	5	4	3
M	72	1	6	3	4	2	5

APPENDIX 3. Table 3.6 Summary of card ranking by all subjects in multiphase interviews: chronic group $n = 17$ (inner city)

	Expectations		Therapist		Content		Organisation		Explanations		Result	
	Card No.	<i>n</i>	Card No.	<i>n</i>	Card No.	<i>n</i>	Card No.	<i>n</i>	Card No.	<i>n</i>	Card No.	<i>n</i>
Most Important	1	3	1	9	1	0	1	2	1	1	1	2
	2	2	2	4	2	3	2	2	2	4	2	2
	3	4	3	3	3	5	3	0	3	2	3	3
	4	1	4	0	4	4	4	7	4	5	4	0
	5	4	5	0	5	4	5	2	5	4	5	3
Least Important	6	3	6	1	6	1	6	4	6	1	6	7

APPENDIX 3. Table 3.7 Results of card ranking by individual subjects in multiphase interviews: chronic group $n = 15$ (suburban)

M/F	AGE	Expectations	Therapist	Content	Organisation	Explanation	Result
M	62	1	2	4	3	5	6
M	77	1	4	5	2	3	6
M	68	1	6	3	2	4	5
M	54	1	2	5	3	4	6
F	83	1	5	3	4	2	6
F	53	5	6	2	4	3	1
M	47	6	5	2	4	3	1
F	71	6	4	5	1	2	3
M	73	1	2	6	5	4	3
F	48	1	3	5	6	4	2
F	77	6	3	2	4	1	5
F	79	5	4	3	1	2	6
F	69	3	1	4	2	5	6
F	43	2	3	1	4=	4=	6
F	66	2	6	3	1	5	4

APPENDIX 3. Table 3.8 Summary of card ranking by all subjects in multiphase interviews: chronic group $n = 15$ (suburban)

	Expectations		Therapist		Content		Organisation		Explanations		Result	
	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n	Card No.	n
Most Important	1	7	1	1	1	1	1	3	1	1	1	2
	2	2	2	3	2	3	2	3	2	3	2	1
	3	1	3	3	3	4	3	2	3	3	3	2
	4	0	4	3	4	4	4	5	4	4	4	1
	5	2	5	2	5	4	5	1	5	3	5	2
Least Important	6	3	6	3	6	1	6	1	6	0	6	7

APPENDIX 4

- 4.1 Draft layout of pilot questionnaire with 5-point Likert response scale showing reversed order scoring for negatively worded statements**
- 4.2 Sample questionnaire used in the pilot survey $n=120$**
- 4.3 Physiotherapy questionnaire pre-test check sheet**
- 4.4 Sample questionnaire used in the main survey $n=420$**

APPENDIX 4.

4.1 Draft layout of satisfaction questionnaire with a 5 -point Likert response scale showing reversed order scoring for negatively worded statements

Statement	strongly agree	agree	not sure	disagree	strongly disagree
1. My therapist gave me confidence that I was going to get better	5	4	3	2	1
2. I was always seen very promptly for my treatment sessions	5	4	3	2	1
3. I had confidence that the therapist knew what (s)he was doing	5	4	3	2	1
4. I should have got a better result from the treatment I was given in this department	1	2	3	4	5
5. The treatment was very comfortable and soothing	5	4	3	2	1
6. I expected the treatment would help relieve my pain	5	4	3	2	1
7. My therapist did not listen to what I had to say	1	2	3	4	5
8. I have made a full recovery as a result of treatment	5	4	3	2	1
9. I did not have any of my treatment sessions cancelled	5	4	3	2	1
10. I expected the treatment would get me better	5	4	3	2	1
11. The treatment helped me at the time but the effect did not last	1	2	3	4	4
12. My therapist gave me encouragement and praise	5	4	3	2	1
13. I was happy to be left to work on my own during the session	5	4	3	2	1
14. I expected the treatment would cure my problem	5	4	3	2	1
15. The treatment was too rushed	1	2	3	4	5
16. I am completely satisfied with all aspects of my visit to the physiotherapy department	5	4	3	2	1
17. The therapist explained my condition to me in great detail	5	4	3	2	1
18. I did not think treatment would be able to help me	1	2	3	4	5
19. I was able to choose the appointment times for treatment	5	4	3	2	1
20. The treatment has helped me in some ways but I am not completely better	1	2	3	4	5
21. My therapist did not seem interested in me	1	2	3	4	5
22. It was important for me to see the same therapist throughout my treatment	5	4	3	2	1
23. I did not know what the treatment would be able to do for me	1	2	3	4	5
24. The treatment was tailored to my needs	5	4	3	2	1
25. I was able to ask the therapist about anything connected with my treatment	5	4	3	2	1
26. I had to wait a long time to get my first appointment for treatment	1	2	3	4	5
27. The treatment sessions were too short	1	2	3	4	5
28. The treatment has not helped me at all	1	2	3	4	5
29. My therapist put me at ease and was very kind to me	5	4	3	2	1
30. The therapist did not answer all my questions	1	2	3	4	5
31. I expected the treatment would be painful	1	2	3	4	5
32. I got on very well with my therapist	5	4	3	2	1
33. Treatment sessions were too infrequent to get any benefit	1	2	3	4	5
34. The treatment was uncomfortable	1	2	3	4	5
35. I am now completely pain free as a result of treatment	5	4	3	2	1
36. I was made aware of my responsibilities in managing my condition as a result of treatment	5	4	3	2	1
37. I felt I could not discuss my problem with the therapist	1	2	3	4	5
38. I did not have the undivided attention of the therapist during my treatment	1	2	3	4	5
39. I am completely satisfied with the treatment I received in this department	5	4	3	2	1
40. I have regained full mobility as a result of treatment	5	4	3	2	1
41. I was able to contact the department for help if I had any further problems after discharge	5	4	3	2	1
42. The quality of service I received in this department could have been better	1	2	3	4	5
43. My therapist did not have a good 'bedside manner'	1	2	3	4	5
44. The treatment was fully explained to me	5	4	3	2	2

APPENDIX 4.

4.2 Sample questionnaire used in the pilot survey $n=120$

(The questionnaire format is reproduced 70% normal size and single sided, to fulfil the margin size and style requirements of the thesis)

PHYSIOTHERAPY OUT- PATIENT SURVEY

Thank you for taking part in this survey

You are being asked to complete this questionnaire as you have recently had a course of outpatient physiotherapy treatment.

The purpose of the survey is to help us give you the best possible service in the Physiotherapy Department. To do this we need to know how you feel about the Department and the care that you have received.

On the following pages are some statements about physiotherapy. PLEASE READ EACH ONE CAREFULLY keeping in mind the physiotherapy treatment you recently had.

On the line next to each statement CIRCLE THE NUMBER for the opinion that is nearest to your own view about each statement. A response 'Not sure' indicates that you have no feelings either way.

PLEASE RESPOND TO ALL THE STATEMENTS as honestly as possible, whether positive or negative, as your answers will be kept entirely confidential.

Please do not write your name on the form

When you have completed the form please RETURN IT TO THE PHYSIOTHERAPY DEPARTMENT in the enclosed stamped addressed envelope.

Thank you very much. We really appreciate your help.



4.2 Sample questionnaire used in the pilot survey $n=120$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. My therapist gave me confidence that I was going to get better	5	4	3	2	1
2. I was not always seen promptly for my treatment sessions	1	2	3	4	5
3. I did not have confidence that the therapist knew what (s)he was doing	1	2	3	4	5
4. I should have got a better result from the treatment I was given in this department	1	2	3	4	5
5. The treatment was very comfortable and soothing	5	4	3	2	1
6. I expected the treatment would help relieve my pain	5	4	3	2	1

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
7. My therapist did not listen to what I had to say	1	2	3	4	5
8. I have made a full recovery as a result of treatment	5	4	3	2	1
9. I did not have any of my treatment sessions cancelled	5	4	3	2	1
10. I expected the treatment would get me better	5	4	3	2	1
11. The treatment helped me at the time but the effect did not last	1	2	3	4	5
12. My therapist gave me encouragement and praise	5	4	3	2	1

4.2 Sample questionnaire used in the pilot survey $n=120$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
13. I was not happy to be left to work on my own during the session	1	2	3	4	5
14. I expected the treatment would cure my problem	5	4	3	2	1
15. The treatment was too rushed	1	2	3	4	5
16. I am completely satisfied with all aspects of my visit to the physiotherapy department	5	4	3	2	1
17. The therapist explained my condition to me in great detail	5	4	3	2	1
18. I did not think treatment would be able to help me	1	2	3	4	5

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
19. I was able to choose the appointment times for treatment	5	4	3	2	1
20. The treatment has helped me in some ways but I am not completely better	1	2	3	4	5
21. My therapist did not seem interested in me	1	2	3	4	5
22. It was important for me to see the same therapist throughout my treatment	5	4	3	2	1
23. I did not know what the treatment would be able to do for me	1	2	3	4	5
24. The treatment was tailored to my needs	5	4	3	2	1

4.2 Sample questionnaire used in the pilot survey $n=120$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
25. I was able to ask the therapist about anything connected with my treatment	5	4	3	2	1
26. I had to wait a long time to get my first appointment for treatment	1	2	3	4	5
27. The treatment sessions were too short	1	2	3	4	5
28. The treatment has not helped me at all	1	2	3	4	5
29. My therapist put me at ease and was very kind to me	5	4	3	2	1
30. The therapist did not answer all my questions	1	2	3	4	5

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
31. I expected the treatment would be painful	1	2	3	4	5
32. I got on very well with my therapist	5	4	3	2	1
33. Treatment sessions were too infrequent to get any benefit	1	2	3	4	5
34. The treatment was uncomfortable	1	2	3	4	5
35. I am now completely pain free as a result of treatment	5	4	3	2	1
36. I was made aware of my responsibilities in managing my condition as a result of treatment	5	4	3	2	1

continued....

4.2 Sample questionnaire used in the pilot survey $n=120$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
37. I felt I could not discuss my problem with the therapist	1	2	3	4	5
38. I did not have had the undivided attention of the therapist during my treatment	1	2	3	4	5
39. I am completely satisfied with the treatment I received in this department	5	4	3	2	1
40. I have regained full mobility as a result of treatment	5	4	3	2	1
41. I was able to contact the department for help if I had any further problems after discharge	5	4	3	2	1
42. The quality of service I received in this department could have been better	1	2	3	4	5
43. My therapist did not have a good 'bedside manner'	1	2	3	4	5
44. The treatment was fully explained to me	5	4	3	2	1

Finally.... Please CIRCLE THE NUMBER OF YOUR ANSWER to the following questions,

- | | | |
|----------------------|--------------------|--------------------------------------|
| Your gender. 1. Male | Your age. 1. 18-29 | Your employment status. 1. Full time |
| 2. Female | 2. 30-39 | 2. Part time |
| | 3. 40-49 | 3. Not employed |
| | 4. 50-59 | 4. Student |
| | 5. 60-69 | |
| | 6. 70-79 | |
| | 7. 80-89 | |

Please make sure that you have RESPONDED TO ALL THE STATEMENTS
 Thank you very much for taking the time to fill in this questionnaire.

APPENDIX 4.

4.3 Physiotherapy questionnaire pre-test check sheet

PLEASE CIRCLE YOUR ANSWER

- IS THE FRONT INSTRUCTION SHEET EASY TO UNDERSTAND? YES / NO

- IS THERE ENOUGH INFORMATION IN THE FRONT SHEET ABOUT THE REASON FOR THE SURVEY ? YES / NO

- ARE THERE CLEAR INSTRUCTIONS ABOUT HOW TO FILL IN THE QUESTIONNAIRE? YES / NO

- ARE THERE CLEAR INSTRUCTIONS ABOUT HOW TO RETURN THE QUESTIONNAIRE WHEN COMPLETED YES / NO

- IS THE GENERAL LAYOUT OF THE QUESTIONNAIRE EASY TO FOLLOW? YES / NO

- ARE THE STATEMENTS EASY TO UNDERSTAND? YES / NO

- WOULD YOU HAVE DIFFICULTY FILLING IN THIS QUESTIONNAIRE? YES / NO

If you answered YES, please say why,

.....
.....
.....

ANY OTHER COMMENTS ABOUT THE QUESTIONNAIRE?

.....
.....

THANK YOU VERY MUCH FOR YOUR HELP

APPENDIX 4.

4.4 Sample questionnaire used in the main survey n=420

(The questionnaire format is reproduced 70% normal size and single sided, to fulfil the margin size and style requirements of the thesis)

PHYSIOTHERAPY OUT- PATIENT SURVEY

Thank you for taking part in this survey

You are being asked to complete this questionnaire as you have recently had a course of out-patient physiotherapy treatment.

The purpose of the survey is to help us give you the best possible service in the Physiotherapy Department. To do this we need to know how you feel about the Department and the care that you have received.

On the following pages are some statements about physiotherapy. PLEASE READ EACH ONE CAREFULLY keeping in mind the physiotherapy treatment you RECENTLY had.

On the line next to each statement CIRCLE THE NUMBER for the opinion that is nearest to your own view about each statement. A response 'Not sure' indicates that you have no feelings either way.

PLEASE RESPOND TO ALL THE STATEMENTS as honestly as possible. THERE IS NO RIGHT OR WRONG ANSWER as we are simply interested in getting YOUR OPINION. All your answers will be kept entirely confidential.

Please do not write your name on the form

When you have completed the form please RETURN IT TO THE PHYSIOTHERAPY DEPARTMENT in the enclosed stamped addressed envelope.

Thank you very much. We really appreciate your help.



4.4 Sample questionnaire used in the main survey $n=420$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. My therapist gave me confidence that I was going to get better	5	4	3	2	1
2. I was not always seen promptly for my treatment sessions	5	4	3	2	1
3. I did not have confidence that the therapist knew what (s)he was doing	5	4	3	2	1
4. I should have got a better result from the treatment I was given in this department	5	4	3	2	1
5. I expected the treatment would help relieve my pain	5	4	3	2	1
6. My therapist did not listen to what I had to say	5	4	3	2	1

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
7. I have made a full recovery as a result of treatment	5	4	3	2	1
8. I did not have any of my treatment sessions cancelled	5	4	3	2	1
9. I expected the treatment would get me better	5	4	3	2	1
10. The treatment helped me at the time but the effect did not last	5	4	3	2	1
11. My therapist gave me encouragement and praise	5	4	3	2	1
12. I was not happy to be left to work on my own during the session	5	4	3	2	1

4.4 Sample questionnaire used in the main survey $n=420$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
13. I expected the treatment would cure my problem	5	4	3	2	1
14. The treatment was too rushed	5	4	3	2	1
15. I am completely satisfied with all aspects of my visit to the physiotherapy department	5	4	3	2	1
16. The therapist explained my condition to me in great detail	5	4	3	2	1
17. I did not think treatment would be able to help me	5	4	3	2	1

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
18. I was able to choose the appointment times for treatment	5	4	3	2	1
19. The treatment has helped me in some ways but I am not completely better	5	4	3	2	1
20. My therapist did not seem interested in me	5	4	3	2	1
21. It was important for me to see the same therapist throughout my treatment	5	4	3	2	1
22. The treatment was tailored to my needs	5	4	3	2	1
23. I was able to ask the therapist about anything connected with my treatment	5	4	3	2	1

4.4 Sample questionnaire used in the main survey $n=420$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
24. I had to wait a long time to get my first appointment for treatment	5	4	3	2	1
25. The treatment sessions were too short	5	4	3	2	1
26. The treatment has not helped me at all	5	4	3	2	1
27. My therapist put me at ease and was very kind to me	5	4	3	2	1
28. The therapist did not answer all my questions	5	4	3	2	1
29. I got on very well with my therapist	5	4	3	2	1

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
30. Treatment sessions were too infrequent to get any benefit	5	4	3	2	1
31. I am now completely pain free as a result of treatment	5	4	3	2	1
32. I was made aware of my responsibilities in managing my condition as a result of treatment	5	4	3	2	1
33. I did not have the undivided attention of the therapist during my treatment	5	4	3	2	1
34. I am completely satisfied with the treatment I received in this department	5	4	3	2	1
35. I have regained full mobility as a result of treatment	5	4	3	2	1

4.4 Sample questionnaire used in the main survey $n=420$ (cont.)

Statement	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
36. I was able to contact the department for help if I had any further problems after discharge	5	4	3	2	1
37. The quality of service I received in this department could have been better	5	4	3	2	1
38. The treatment was fully explained to me	5	4	3	2	1

ANY OTHER COMMENTS?

Finally.... Please CIRCLE THE NUMBER OF YOUR ANSWER to the following questions,

- | | | |
|----------------------|--------------------|--------------------------------------|
| Your gender. 1. Male | Your age. 1. 18-29 | Your employment status. 1. Full time |
| 2. Female | 2. 30-39 | 2. Part time |
| | 3. 40-49 | 3. Not employed |
| | 4. 50-59 | 4. Student |
| | 5. 60-69 | 5. Retired |
| | 6. 70-79 | |
| | 7. 80-89 | |

Please make sure that you have RESPONDED TO ALL THE STATEMENTS
Thank you very much for taking the time to fill in this questionnaire.

APPENDIX 5

- 5.1 Letter to Superintendents confirming OP Dept. participation in the pilot questionnaire survey
- 5.2 Patient information letter accompanying questionnaire in pilot survey
- 5.3 Follow-up letter to patients inviting return of questionnaires in pilot survey
- 5.4.1 Principal components analysis of pilot questionnaire survey data ($n=77$)
9-factor solution (SPSS output)
- 5.4.2 Variance explained by the 9 factors produced by a principal components analysis of the pilot questionnaire survey data ($n=77$) (SPSS output)
- 5.5.1 Principal components analysis of pilot questionnaire survey data ($n=77$)
8-factor solution (SPSS output)
- 5.5.2 Variance explained by the 8 factors produced by a principal components analysis of the pilot questionnaire survey data ($n=77$) (SPSS output)
- 5.6.1 Principal components analysis of pilot questionnaire survey data ($n=77$)
7-factor solution (SPSS output)
- 5.6.2 Variance explained by the 7 factors produced by a principal components analysis of the pilot questionnaire survey data ($n=77$) (SPSS output)
- 5.7 Letter to Superintendents on conclusion of the pilot questionnaire survey



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

APPENDIX 5.

**5.1 Letter to Superintendents confirming OP Dept.
participation in the pilot questionnaire survey**

0171 377 7875 ansaphone
0171 377 7808 FAX

November 1999

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear (Superintendent)

**Re: An Examination of Patient Satisfaction with Outpatient Physiotherapy in Patients
with Acute and Chronic Musculoskeletal conditions**

Thank you very much for agreeing to take part in this study, by assisting in piloting the survey tool in your Outpatient Department. This forms part of the PhD I am currently undertaking part-time at King's College London and the survey comprises the second part of the overall research design.

At a North Thames Physiotherapy Managers meeting in September I gave out a presentation pack of the research to everyone there so (manager) has got a copy. However, in case you have not seen it, I enclose details of the background to the study, together with the entry criteria for patients and a copy of the questionnaire. As four other physiotherapy departments are also taking part in this pilot, the number of patients required on each site is only 20 [10 acute:10 chronic] so I hope this number will not prove too difficult to recruit.

Ethics Committee approval to conduct the survey in your District has now been given, so if you agree, I would like to arrange a time to come and talk to your staff about the study and discuss the arrangements for returning the completed questionnaires. Perhaps you would like to Fax me some dates and times that may be suitable and I could get back to you and confirm?

Once again, thank you for agreeing to participate in the study.

Yours Sincerely,

Rosemary Hills MSc MCSP
Superintendent Physiotherapist



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

APPENDIX 5.

5.2 Patient information letter accompanying
questionnaire in pilot survey

0171 377 7875 ansaphone

January 2000

Dear

Re: Physiotherapy Outpatient Survey

I am a physiotherapist working at The Royal London Hospital, Mile End, E1, and I am carrying out some research into what patients think about the physiotherapy treatment they have received.

Physiotherapists try to provide all their patients with the best possible care when they attend for treatment and in order to help us achieve a good standard we would greatly value your views as to whether this is being accomplished. Physiotherapy departments from selected hospitals in the London area are participating in the study and you are being asked to take part as you have recently completed a course of outpatient physiotherapy at

.....
Enclosed is a questionnaire covering a variety of topics relating to your physiotherapy treatment. *Please take the time to fill it in, as your opinion about these different aspects of your care will provide invaluable feedback about our service.* You are asked not to sign the form so that the information you give will be dealt with anonymously. Neither you nor the hospital where you had your treatment will be identified by name and group results only will be reported.

When you have completed the questionnaire, please return it in the enclosed stamped addressed envelope *within two weeks of receipt.*

If, however, you would rather not take part in the research, *please return the questionnaire anyway and tell us why you would prefer not to fill it in,* as this information will also be useful to us. Refusal to complete the questionnaire will in no way prejudice any further medical or physiotherapy treatment that you may have.

I hope you will agree to take part in the study.

Yours Sincerely,

Rosemary Hills MSc MCSP
Superintendent Physiotherapist



APPENDIX 5.

**5.3 Follow-up letters to patients inviting
return of questionnaires in pilot survey**

**TOWER HAMLETS HEALTHCARE
NHS Trust**

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

0171 377 7875 ansaphone

February 2000

Dear

Re: Physiotherapy Outpatient Survey

A few weeks ago you will have received a questionnaire asking for your views about your recent course of physiotherapy treatment together with a letter explaining the reason for the survey.

A number of completed questionnaires have now been returned but the more replies we receive the more representative the findings will be. Therefore please take the time to complete your questionnaire and return it to me as soon as possible. A stamped addressed envelope was previously included for your convenience.

Lost or mislaid your questionnaire? Simply telephone the number given above and request another copy.

Your response is of course voluntary but your views would be greatly valued. The feedback we receive will help us to ensure that we are providing all our patients with the best possible care. I therefore hope that you will agree to take part in this survey.

Yours Sincerely,

Rosemary Hills MSc MCSP
Superintendent Physiotherapist

APPENDIX 5.

5.4.1 Principal components analysis of pilot questionnaire survey data (n=77) 9-factor solution (SPSS output)

Rotated Component Matrix^a

	Component								
	1	2	3	4	5	6	7	8	9
Completely satisfied with the treatment	.778		.261	.181	.132	.152			
Explained condition in great detail	.757	.274	.155	.200		.123	.255		.186
Treatment was fully explained	.751	.154			.234	.251	.187	.182	.119
Treatment tailored to my needs	.691	.147	.313	.124		.277	.172		.318
Quality of service could have been better	.674	.214	.254	.395					
Did not have confidence therapist knew what she was doing	.651		-.131	.181	.284			.282	-.146
Completely satisfied with all aspects of visit	.645	.523	.265	.247	.189				-.104
should have got better result	.621	.167	.375	.232		.372		.161	
Able to ask anything connected with treatment	.541	.284	-.141			.346	.143	.213	.355
Got on well with therapist		.918			.118	.136			
Put at ease and very kind	.227	.857	.127		.194	.134			
Gave encouragement and praise	.339	.650	.123	.109	.440				
Made aware of responsibilities	.254	.588			.248			.427	
Therapist not interested	.385	.489	.132	.313	.121				.287
Able to choose appointment times	.164	.489	-.170			.204	.391	.147	.225
Treatment helped in some ways but not completely better		-.235	.729	.226			.232	.216	.149
Completely free of pain as result of treatment	.150	.114	.725	.146		.140	.306		
Made a full recovery	.317	.102	.724		.379		.101		-.145
Treatment effect did not last			.714				-.308	.108	-.140
Regained full mobility	.173	.149	.682	.225	.206	.303	.117		
Not happy to work on my own	.280	.144	.450	.159	-.117			.213	.299
Treatment sessions too short	.224		.181	.752	-.117	.207	-.167		
Treatment too rushed		.164	.255	.678					.405
Able to contact department	.230	.108	.156	.634		.206	.151		
Did not have undivided attention	.213		.168	.548	.207			.465	.177
Sessions too infrequent	.408	.102	.409	.409	.125	.315	-.121	.211	
Expected treatment to cure problem	.119	.244	.188		.820	.133			
Expected treatment would get me better		.191	.184		.794	.115		.143	.306
Did not think treatment would help	.183	.217		.254	.643	.324			
Therapist gave confidence	.408	.277	.154	.365	.482	.246			-.230
Important to see the same therapist		.158	.127			.771			.106
Did not answer all questions	.250	.162	.117		.216	.669			.268
Treatment has not helped at all	.500		.308	.182	.148	.583		.221	-.101
Did not know what treatment would be able to do	.182		-.120	.323	.140	.527		.223	
Had to wait long for appointment	.138	.151	.266	.211		.518			-.167
Treatment uncomfortable	.117						.840		
Expected treatment to be painful	-.129	.288	.135	-.173	-.286		.681	.227	
Treatment comfortable and soothing	.328	.243				.102	.617	-.168	
Treatment would relieve my pain	.255	-.173			.266	.343	.519	-.118	
Could not discuss my problem		.119	.193	-.143				.739	
Did not have good bedside manner	.267				.249	.175		.516	.173
Not always seen promptly	.314			.425				.509	-.125
No sessions cancelled				.267	.148	.111		.191	.690
Therapist did not listen	.563			-.152	.202		.121		.584

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 128 iterations.

APPENDIX 5.

5.4.2 Variance explained by the 9 factors produced by a principal components analysis of the pilot questionnaire survey data ($n=77$) (SPSS output)

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.047	31.924	31.924	6.448	14.650	14.650
2	3.392	7.708	39.633	4.076	9.263	23.913
3	2.635	5.968	45.621	4.045	9.194	33.107
4	2.496	5.573	51.294	3.314	7.531	40.638
5	2.044	4.648	55.940	3.189	7.247	47.885
6	1.829	4.156	60.096	3.171	7.208	55.092
7	1.800	3.837	63.733	2.555	5.807	60.900
8	1.564	3.554	67.287	2.157	4.902	65.802
9	1.330	3.022	70.309	1.983	4.506	70.309
10	1.291	2.935	73.243			
11	1.110	2.523	75.767			
12	1.027	2.334	78.100			
13	1.000	2.273	80.374			
14	.833	1.893	82.267			
15	.788	1.791	84.058			
16	.720	1.637	85.694			
17	.688	1.564	87.258			
18	.618	1.400	88.659			
19	.531	1.206	89.865			
20	.491	1.117	90.982			
21	.452	1.027	92.009			
22	.425	.967	92.975			
23	.401	.912	93.887			
24	.332	.756	94.643			
25	.308	.696	95.339			
26	.284	.646	95.984			

Extraction Method: Principal Component Analysis.

APPENDIX 5

5.5.1 Principal components analysis of pilot questionnaire survey data (n=77) 8-factor solution (SPSS output)

Rotated Component Matrix^a

	Component							
	1	2	3	4	5	6	7	8
I did not have confidence that the therapist knew what she was doing	.754	.132				.210		.157
I am completely satisfied with the treatment I received	.718	.118	.224	.186	.201	.161	.210	
The treatment was fully explained to me	.717	.160		.270	.123	.230	.280	.127
The quality of service I received could have been better	.680	.227	.185	.122	.392	-.123	.130	
The therapist explained my condition to me in great detail	.851	.236	.107	.201	.281	.172	.373	
I am completely satisfied with all aspects of my visit to physiotherapy	.643	.553	.292		.144	.138	.110	
I should have got a better result from the treatment I was given	.632	.174	.343	.403	.167			.115
Therapist gave me confidence that I was going to get better	.532	.314	.292	.285		.333	-.194	-.189
The treatment was tailored to my needs	.528	.160	.195	.313	.362	.161	.373	
I was not always seen promptly for my treatment sessions	.517		.112		.142			.398
Treatment sessions were too infrequent to get any benefit	.498	.114	.409	.343	.313		-.126	.152
I was able to ask the therapist about anything connected with my treatment	.408	.286	-.266	.357	.263		.303	.267
I was able to contact the department for help with any problems after discharge	.395	.156	.211	.220	.383	-.106		
I got on very well with my therapist		.914		.136			.114	
The therapist put me at ease and very kind to me	.204	.871	.135	.128		.131		
My therapist gave me encouragement and praise	.335	.683	.188			.377		
I was made aware of my responsibilities in managing my condition	.261	.598				.230		.424
My therapist did not seem interested in me	.330	.504		.121	.457	.128		
I was able to choose the appointment times for treatment		.470	-.212	.195	.168		.410	.193
I have made a full recovery as a result of treatment	.317	.148	.759			.288	.134	-.110
The treatment helped me at the time but the effect did not last			.708				-.232	.125
The treatment has helped me in some ways but I am not completely better		-.268	.703		.307		.244	.234
I am now completely free of pain as a result of treatment			.702	.150	.229	.120	.353	
I have regained full mobility as a result of treatment	.171	.138	.698	.321	.202	.190	.130	
It was important for me to see the same therapist throughout my treatment		.212		.742			.112	
The therapist did not answer all my questions	.166	.128		.698	.191	.262	.149	
The treatment has not helped me	.553		.319	.594				.162
I had to wait a long time to get my first appointment for treatment	.191	.120	.356	.538				
I did not know what the treatment would be able to do for me	.244			.531	.129	.201		.140
The treatment was too rushed	.168	.158	.202		.765			
I did not have any of my treatment sessions cancelled		-.113		.187	.594	.407		.225

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
^a. Rotation converged in 18 iterations.

APPENDIX 5.

5.5.1 Principal components analysis of pilot questionnaire survey data (n=77) 8-factor solution (SPSS output) (cont.)

Rotated Component Matrix^a

	Component							
	1	2	3	4	5	6	7	8
The treatment sessions were too short	.367		.193	.244	.579	-.200	-.259	-.172
I did not have the undivided attention of the therapist	.371		.209		.464	.189	-.144	.390
I was not happy to be left to work on my own during the session	.233	.124	.296		.420			.253
I expected the treatment would get me better		.220	.184	.133	.115	.806		.136
I expected the treatment would cure my problem	.136	.281	.259	.159		.764		
I did not think treatment would be able to help me	.249	.191	.168	.361		.620	-.138	
My therapist did not listen to what I had to say	.320	.101	-.228		.329	.402	.399	
The treatment was uncomfortable			.119				.764	
I expected the treatment would be painful	-.160	.228	.130		-.162	-.282	.653	.233
The treatment was very comfortable and soothing	.259	.253		.138			.627	-.198
I expected the treatment would help relieve my pain	.245	-.189		.360		.231	.397	-.252
I felt I could not discuss my problem with the therapist		.101	.132					.762
My therapist did not have a good bedside manner	.313	.114		.176	.138	.242		.520

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

APPENDIX 5.

5.5.2 Variance explained by the 8 factors produced by a principal components analysis of the pilot questionnaire data ($n=77$) (SPSS output)

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.813	31.393	31.393	6.411	14.571	14.571
2	3.399	7.725	39.118	4.265	9.694	24.265
3	2.657	6.038	45.156	4.073	9.258	33.522
4	2.475	5.628	50.781	3.462	7.868	41.390
5	2.161	4.911	55.692	3.156	7.173	48.563
6	1.834	4.169	59.861	3.082	7.005	55.568
7	1.579	3.589	63.450	2.938	6.673	62.241
8	1.533	3.484	66.935	2.065	4.694	66.935
9	1.305	2.967	69.901			
10	1.293	2.938	72.840			
11	1.098	2.497	75.336			
12	1.009	2.293	77.630			
13	.984	2.236	79.865			
14	.846	1.923	81.789			
15	.789	1.793	83.581			
16	.744	1.691	85.272			
17	.685	1.558	86.830			
18	.606	1.376	88.206			
19	.532	1.210	89.416			
20	.501	1.139	90.555			
21	.444	1.009	91.564			
22	.433	.984	92.548			
23	.401	.910	93.458			
24	.365	.829	94.287			
25	.308	.700	94.987			
26	.299	.679	95.667			
27	.271	.616	96.283			
28	.238	.541	96.824			
29	.218	.496	97.320			
30	.195	.443	97.763			
31	.179	.408	98.171			
32	.140	.318	98.489			
33	.135	.307	98.795			
34	.110	.251	99.046			
35	9.207E-02	.209	99.255			
36	8.780E-02	.200	99.455			
37	5.037E-02	.114	99.569			
38	4.855E-02	.110	99.680			
39	4.367E-02	9.925E-02	99.779			
40	3.459E-02	7.860E-02	99.857			
41	2.400E-02	5.455E-02	99.912			
42	1.874E-02	4.259E-02	99.955			
43	1.392E-02	3.164E-02	99.986			
44	6.076E-03	1.381E-02	100.000			

Extraction Method: Principal Component Analysis.

APPENDIX 5.

5.6.1 Principal components analysis of pilot questionnaire survey data (n=77) 7-factor solution (SPSS output)

Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
The quality of service I received could have been better	.801	.202	.135	.112	.169		
The treatment sessions were too short	.701	-.141		.160	-.217		-.102
I am completely satisfied with the treatment I received	.653	.211	.346	.159	.189	.139	
I should have got a better result from the treatment I was given	.637	.182	.456	.253		-.103	.170
The therapist explained my condition to me in great detail	.637	.296	.310		.363	.201	
Treatment sessions were too infrequent to get any benefit	.596	.133	.356	.359	-.118		.192
The treatment was tailored to my needs	.592	.187	.355	.180	.365	.243	
I was able to contact the department for help with any problems after discharge	.585	.103	.154	.171			
The treatment was too rushed	.580		-.136	.252		.351	
The treatment was fully explained to me	.569	.283	.444		.262	.199	.123
My therapist did not seem interested in me	.518	.477				.212	
I did not have the undivided attention of the therapist	.510			.217	-.155	.353	.378
I did not have confidence that the therapist knew what she was doing	.507	.286	.255	-.172		.102	.149
I was not always seen promptly for my treatment sessions	.468						.398
I was not happy to be left to work on my own during the session	.446		-.138	.298	.118	.116	.266
I was able to ask the therapist about anything connected with my treatment	.417	.262	.329	-.274	.341	.213	.287
The therapist put me at ease and very kind to me	.188	.865	.114	.101	.151		.130
I got on very well with my therapist		.853			.186		.107
My therapist gave me encouragement and praise	.238	.792	.133	.159		.150	
I was made aware of my responsibilities in managing my condition	.144	.852				.128	.424
I am completely satisfied with all aspects of my visit to physiotherapy	.800	.622	.182	.211	.123		
I expected the treatment would cure my problem		.512	.377	.282	-.116	.476	
Therapist gave me confidence that I was going to get better	.424	.451	.448	.224	-.226		-.173
The treatment has not helped me	.459		.692	.244			.199
The therapist did not answer all my questions	.187	.148	.664	.105	.138	.272	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 16 iterations.

APPENDIX 5.

5.6.1 Principal components analysis of pilot questionnaire survey data (n=77) 7-factor solution (SPSS output) (cont.)

Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
It was important for me to see the same therapist throughout my treatment		.147	.622		.146		
I did not know what the treatment would be able to do for me	.219		.542		-.104	.199	.154
I had to wait a long time to get my first appointment for treatment	.186	.123	.532	.318			
I expected the treatment would help relieve my pain			.505		.336	.145	-.284
I did not think treatment would be able to help me	.126	.366	.504	.182	-.210	.420	
The treatment has helped me in some ways but I am not completely better	.201	-.275		.742	.206	.160	.205
I have made a full recovery as a result of treatment	.265	.277	.245	.728			-.135
I am now completely free of pain as a result of treatment	.221	.101	.153	.722	.325	.119	
I have regained full mobility as a result of treatment	.268	.172	.336	.699	.103	.114	
The treatment helped me at the time but the effect did not last	.117	.140	.119	.675	-.249	-.101	.139
The treatment was uncomfortable				.131	.745		
I expected the treatment would be painful	-.174	.117		.135	.702	-.250	.238
The treatment was very comfortable and soothing	.235	.253	.185		.626		-.207
I was able to choose the appointment times for treatment	.145	.398	.103	-.194	.464	.109	.209
I did not have any of my treatment sessions cancelled	.207					.680	.179
I expected the treatment would get me better		.423	.281	.263		.859	
My therapist did not listen to what I had to say	.306	.187	.101	-.177	.357	.538	
I felt I could not discuss my problem with the therapist				.130			.766
My therapist did not have a good bedside manner	.249	.182	.240			.268	.507

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

APPENDIX 5.

5.6.2 Variance explained by the 7 factors produced by a principal components analysis of the pilot questionnaire data (n=77) (SPSS output)

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.813	31.393	31.393	7.030	15.977	15.977
2	3.399	7.725	39.118	5.061	11.501	27.478
3	2.657	6.038	45.156	4.371	9.933	37.411
4	2.475	5.628	50.781	3.812	8.664	46.075
5	2.181	4.911	55.692	3.005	6.829	52.904
6	1.834	4.169	59.861	2.541	5.774	58.678
7	1.579	3.589	63.450	2.100	4.772	63.450
8	1.533	3.484	66.935			
9	1.305	2.967	69.901			
10	1.293	2.938	72.840			
11	1.098	2.487	75.336			
12	1.009	2.293	77.630			
13	.984	2.236	79.865			
14	.846	1.923	81.789			
15	.789	1.793	83.581			
16	.744	1.691	85.272			
17	.885	1.558	86.830			
18	.606	1.376	88.206			
19	.532	1.210	89.416			
20	.501	1.139	90.555			
21	.444	1.009	91.564			
22	.433	.984	92.548			
23	.401	.910	93.458			
24	.365	.829	94.287			
25	.308	.700	94.987			
26	.299	.679	95.667			
27	.271	.616	96.283			
28	.238	.541	96.824			
29	.218	.496	97.320			
30	.185	.443	97.763			
31	.179	.408	98.171			
32	.140	.318	98.489			
33	.135	.307	98.795			
34	.110	.251	99.046			
35	9.207E-02	.209	99.255			
36	8.780E-02	.200	99.455			
37	5.037E-02	.114	99.569			
38	4.855E-02	.110	99.680			
39	4.367E-02	9.925E-02	99.779			
40	3.459E-02	7.860E-02	99.857			
41	2.400E-02	5.455E-02	99.912			
42	1.874E-02	4.259E-02	99.955			
43	1.392E-02	3.164E-02	99.986			
44	6.076E-03	1.381E-02	100.000			

Extraction Method: Principal Component Analysis.



APPENDIX 5.

5.7 Letter to Superintendents on conclusion of the pilot questionnaire survey

**TOWER HAMLETS HEALTHCARE
NHS Trust**

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

020 7377 7875
020 7377 7808 FAX

7th August 2000

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear

Re: Physiotherapy Out-Patient Survey

I enclose a brief summary of the results and analysis of the pre-test questionnaire survey that your staff were good enough to help me carry out a few months ago, which may be of interest. Your hospital is identified as '()' in Table 2, and produced a () % return rate. At this stage there are no results in terms of the patients' responses to the various aspects of their treatment since the purpose of this small study was to test the psychometric properties of the tool prior to the main survey.

I am now in the process of setting up the main pilot study in sites outside of the Thames Regions that will involve around 300 subjects. This will then comprise the last set of data collection before I try and draw the whole thing together and start writing it up.

Once again I should like to thank you and all your outpatient staff for taking the time to help me with this study. I really appreciated it. Hopefully you will be able to read more about it in the Journal before too many years have passed.

Best Wishes,

Rosemary Hills MSc MCSP

APPENDIX 6

- 6.1 Letters to Physiotherapy Managers inviting participation of their OP Depts. to participate in the main questionnaire survey**
- 6.2 Reply slip for PT Managers to indicating whether they agree/not to participate in the main questionnaire survey**
- 6.3 Letter to Superintendents confirming their participation in the main questionnaire survey**
- 6.4 Letter to Superintendents giving details of Phase One of the main questionnaire survey**
- 6.5 Protocol for Phase One of the main questionnaire survey**
- 6.6. Sample sheet showing inclusion criteria for the main questionnaire survey sent to Superintendents at participating hospitals**
- 6.7 Sample coding sheet for identifying patients meeting the entry criteria for the main questionnaire survey sent to Superintendents at participating hospitals**
- 6.8 Letter to Consultants (Orthopaedic, A&E, Rheumatology) advising them of the survey to be conducted in their Trust**
- 6.9 Letter to Superintendent physiotherapists giving details of Phase Two of the main questionnaire survey**
- 6.10 Protocol for Phase Two of the main questionnaire survey**
- 6.11 Patient information letter accompanying questionnaire in main survey**
- 6.12 Follow-up letters to patients inviting return of questionnaires in main survey**
- 6.13 Letter to Superintendents on conclusion of the main questionnaire survey**



APPENDIX 6.

**6.1 Letter to PT Managers inviting OP Depts.
to participate in main questionnaire survey**

TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

020 7377 7808 FAX
020 7377 7875 ansaphone

7th August 2000

Ms.....
Physiotherapy Manager,
.....Hospital,

Dear Ms.

Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions being met?'

I am writing to invite the Physiotherapy Musculoskeletal Out-patient Departments within your Trust to be considered for participation in this research project. The research is being undertaken at the School of Biomedical Sciences, Physiotherapy Group, King's College University of London as part of an MPhil/PhD degree.

Physiotherapy departments for inclusion in the study will be randomly chosen from all those invited to take part in three selected Health Regions throughout England. The participating departments should have a complement of ≥ 4 WTE out-patient staff and carry caseloads which include acute orthopaedic and chronic musculoskeletal conditions.

The research is concerned with examining patients' needs and expectations of their physiotherapy out-patient treatment and the degree to which these are met and will employ a survey design using mailed self-completion questionnaire. The questionnaire tool was developed following preliminary exploratory work and it is anticipated that following a successful survey, it will provide out-patient therapists with an instrument having sound psychometric properties that can be used to evaluate their service. There are currently few published qualitative studies in physiotherapy in which patients' experiences of their treatment experience have been investigated. This research therefore aims to fill that gap.

Participation in the research would require that each therapist in the out-patient department compile a list of patients fulfilling the entry criteria, who had been discharged from physiotherapy within 3 months from the start of the survey. Patients with acute conditions would be those having sustained recent fracture or trauma, and chronic patients those with spinal or peripheral degenerative joint disease. All patients should be over 18 years, English speaking and have attended for more than 3 sessions of treatment. The patient lists would then be coded and forwarded to me. Thirty patients [15 acute and 15 chronic] would subsequently be randomly selected to be sent questionnaires. A total of 420 patients will be involved in the survey. All data received will be dealt with confidentially and used for the purpose of the research only. Neither the hospitals nor the patients will be identified by name.

APPENDIX 6.

**6.1 Letter to PT Managers inviting OP Depts. to participate in main questionnaire survey
(cont.)**

MREC approval is currently being sought and the survey is scheduled to start around October 2000.

I hope that your out-patient department staff would be interested in participating in what we think is an exiting and useful project. In the meantime if you would like further information about the project, please do not hesitate to contact me on 020 7377 7875 work [ansaphone] and I will get back to you as soon as possible.

I enclose a reply slip for your convenience, and look forward to hearing from you within the next couple of weeks.

Yours Sincerely,

Rosemary Hills MSc MCSP
Superintendent Physiotherapist

APPENDIX 6.

6.2 Reply slip for PT Managers to indicate whether they agreed/not to participate in the main questionnaire survey

REPLY SLIP

Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions being met?'

Hospital:.....

Address:.....

.....

.....

Tel:

i) The staffing level and/or caseload in this physiotherapy department do not meet the criteria required for the study*

ii) Members of the physiotherapy outpatient staff in this department would like/do not wish* to participate in the research project.

[*Please delete as appropriate]

Signed:.....Date.....

Position:.....



APPENDIX 6.

6.3 Letter to Superintendents confirming their participation in the main questionnaire survey

TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

020 7377 7875 ansaphone
020 7377 7808 FAX

6 December 2000

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear Ms.

Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions being met?'

In August I wrote inviting your Out-patient Department to take part in this research, and you expressed your willingness to do so. I am now pleased to tell you that your Hospital has been one of those randomly selected to participate in the study.

You will recall from my letter that this would involve a survey, using self-completion mailed questionnaires, sent to patients with acute and chronic musculoskeletal conditions who have recently completed a course of out-patient physiotherapy in your department.

It was anticipated that the survey would begin around October 2000, but the start date has been delayed and the survey will now commence early in the new year.

Multi-Centre Research Ethics Committee [MREC] approval has been given to proceed with the research and a copy of the documentation has now been sent to your local Research Ethics Committee [LREC] for consideration at their next meeting. There will therefore be no need for you to seek Ethics approval as well.

Confidentiality of patients' details will be maintained by means of a coded system, so that names and addresses will not have to be disclosed to a third party. This is fully explained in the patient information sheet that will accompany the questionnaire.

I shall be contacting you again when I have had LREC approval with details of the study and the data collection process. In the meantime thank you and your staff for agreeing to participate in this research.

Yours Sincerely,

Rosemary Hills MSc MCSP



APPENDIX 6.

6.4 Letter to Superintendents giving details of Phase One of the main questionnaire survey

TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

0207 377 7875 ansaphone
0207 377 7808 FAX

March 2001

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear Ms.

Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions being met?'

Thank you for agreeing to take part in this research.

I have now received LREC approval to carry out the questionnaire survey in your area, and I am writing to you with further details of the study.

In accordance with initial MREC requirements, there will be two stages in the survey process in order that patients' names and addresses remain confidential and are known only to their local hospital.

In Phase One, patients meeting the entry criteria for the study will be drawn from the out-patient discharge lists of the last 3 months, coded, and sent to me for randomisation.

In Phase Two, 30 questionnaires will be sent out from your department, to the patients whose names correspond to the codes that result from the randomisation process.

The enclosed documentation provides full details for carrying out *Phase One* of the survey,

1. Protocol
2. Entry criteria for patients
3. Coding sheets and return envelope

The questionnaires, patient information letters and protocol for *Phase Two* will be forwarded to you after I have received the list of patient codes and randomly selected 30 for the survey.

APPENDIX 6.

6.4 Letter to Superintendents giving details of Phase One of the main questionnaire survey (cont.)

As stamped addressed envelopes will be included with each questionnaire, *please can you let me know to whom the questionnaires should be returned*, in your department, so that I can make appropriate labels. MREC has stipulated that patients should return their questionnaires to your department in the first instance, so that follow up of non-respondents can be carried out maintaining confidentiality of patients' details.

In accordance with MREC recommendations I am further required to advise relevant Consultants in your hospital that some of their patients may be involved in this research project. *Could you therefore please Fax me the names* of the lead Consultants in the A&E, Orthopaedic and Rheumatology Departments together with any others from whom patients will have been referred for out-patient physiotherapy [eg. Medical or Neurological Outpatients] so that I can inform them of the study.

I hope you may be able to start the initial patient selection process as soon as possible so that the coded lists could be sent to me within the next 3 weeks if at all practical.

Please 'phone or Fax me on the above numbers if you need further clarification about any of this.

Thank you once again for agreeing to participate in the study.

Yours Sincerely,

Rosemary Hills MSc MCSP

APPENDIX 6.

6.5 Protocol for Phase One of the main questionnaire survey

<p style="text-align: center;">PROTOCOL for the QUESTIONNAIRE SURVEY - <i>PHASE ONE</i></p>
--

- Therapy staff, in the participating physiotherapy out-patient departments, will draw up discharge lists of patients fulfilling the entry criteria for the study who have been discharged from physiotherapy within the previous 3 months (December 2000-February 2001).
- The lists will then be coded by the staff (so that patients' names and addresses remain confidential) and forwarded to the researcher.
- Randomisation of the codes will be conducted by the researcher and will result in 30 subjects (acute $n=15$: chronic $n=15$) being recruited from each physiotherapy department.
- The lists of codes, after randomisation, will then be returned to the participating physiotherapy departments by the researcher for decoding prior to the mailing of the self-completion patient questionnaires.

APPENDIX 6.

6.6 Sample sheet showing inclusion criteria for the main questionnaire survey sent to Superintendents at participating hospitals

PHYSIOTHERAPY OUT-PATIENT SURVEY

PATIENT INCLUSION CRITERIA

SUBJECTS:

- Patients with **ACUTE** and **CHRONIC MUSCULOSKELETAL** conditions meeting the entry criteria
- Patients who have **COMPLETED A COURSE** of physiotherapy [> 3 sessions] **WITHIN THE PREVIOUS 3 MONTHS** from the start of the survey

AGE:

- Patients **OVER 18 YEARS**

DIAGNOSIS:

- **1. ACUTE:** Patients with a diagnosis of **RECENT FRACTURE** or having sustained a **TRAUMATIC INJURY** within the month prior to referral to physiotherapy
- **2. CHRONIC:** Patients with a diagnosis of **CERVICAL** or **LUMBAR SPONDYLOSIS** or **PERIPHERAL DEGENERATIVE JOINT DISEASE** with *symptoms present for at least 6 months*

PATIENT EXCLUSION CRITERIA

- Patients for whom **ENGLISH IS NOT THEIR FIRST LANGUAGE**
- Patients with a **DIAGNOSIS OF COGNITIVE IMPAIRMENT**

APPENDIX 6.

6.7 Sample coding sheet for identifying patients meeting the entry criteria for the main questionnaire survey sent to Superintendents at participating hospitals

CODING SHEET FOR PATIENTS MEETING THE ENTRY CRITERIA FOR THE STUDY

Insert a CODE below in the ACUTE and CHRONIC boxes respectively for each patient fulfilling the entry criteria for the study. This should follow the format M/F XX YY where,

M=Male / F=Female
XX = patient's age
YY = Patient's identifying initials

When all codes for the patients have been entered, this sheet SHOULD BE RETURNED TO ME in the enclosed envelope.

Thirty codes (acute $n=15$: chronic $n=15$) will then be randomly chosen from these lists and highlighted on these sheets which will then be returned to you. Questionnaires should then be sent from your department to the patients whose names and addresses correspond to the highlighted codes.

ACUTE			CHRONIC		



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

APPENDIX 6.

**6.8 Letter to Consultants advising them of
the survey to be conducted in their Trust**

0207 377 7875 ansaphone
0207 377 7808 FAX

April 2001

Dr/Mr.....
Consultant.....
.....NHS Trust

Dear Dr/Mr

**MREC/00/4/052. An Examination of the Sources of Satisfaction with Out-patient Physiotherapy:
Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions
being met?**

I am writing to advise you of the research that I am currently undertaking. This will involve patients who have been treated in the physiotherapy department at Hospital, some of whom may have been referred to physiotherapy from one of your outpatient clinics.

The research is concerned with investigating patients' satisfaction with their physiotherapy treatment and will employ a survey design using self-completion mailed questionnaire. Fifteen sites throughout three Health Regions in England have been randomly selected to take part in the study, of which yours is one.

The subjects recruited will be patients with acute and chronic musculoskeletal conditions who have completed a course of physiotherapy within the previous 3 months from the start of the survey. Inclusion criteria for acute patients will be those with fracture or recent trauma sustained within the month prior to referral to physiotherapy, and for chronic conditions patients with degenerative spinal or peripheral joint disease with symptoms present for more than 6 months. Patients will be over 18 years and English speaking. It is anticipated that 30 patients will be recruited from your site, and the survey is scheduled to start early in 2001.

MREC and LREC approval has been given for the study, and the Physiotherapy Manager has agreed to the out-patient department being included in the project. All data received will be dealt with confidentially and used for the purpose of the research only. Neither the hospital nor the patients will be identified by name. The findings of the study will be of particular interest to physiotherapists and health care professionals, and the results will be published in the physiotherapists' professional Journal.

This research, which is towards a PhD degree, is being undertaken part-time in the School of Biomedical Sciences, Physiotherapy Group, King's College University of London. Should you require any further information about the study then please do not hesitate to contact me at work on the above number.

Yours Sincerely,

Rosemary Hills MSc MCSP



APPENDIX 6.

**6.9 Letter to Superintendents giving details of
Phase Two of the main questionnaire survey**

TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

0207 377 7875 ansaphone
0207 377 7808 FAX

April 2001

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear Ms.

**Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient
Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic
musculoskeletal conditions being met?'**

Thank you for sending me the list of patient codes. Thirty have now been randomly selected and these are highlighted on the sheets, which I am returning to you. I also enclose the following,

1. Protocol for Phase Two of the survey
2. 15 questionnaires coded 'A' (on the front sheet in the box) to be sent to patients with ACUTE conditions
3. 15 questionnaires coded 'C' (on the front sheet in the box) to be sent to patients with CHRONIC conditions
4. 30 Patient information letters (one to accompany each questionnaire)
5. 30 Stamped addressed envelopes (one to accompany each questionnaire)
6. 15 Follow-up letters (for non-respondents)
7. 4 spare questionnaires, sae, and information letters if patients report non-receipt of original. (Please insert either A or C on the front sheet in the box, and patient code missing from sequence of those returned, eg. 8A or 5C, on back sheet of questionnaire before sending out)

Patients have been asked to return their questionnaires *within 2 weeks of receipt*, therefore please *send out the follow-up letters after 2 weeks of initial mailing as required*.
If no further questionnaires are received 2 weeks after the follow-up letters have been sent, please return all the questionnaires to me.

I hope this will not prove to be too time consuming and I greatly appreciate your help with this research. As usual, if there are any problems please contact me either by 'phone or Fax on the above numbers.

Yours Sincerely,

Rosemary Hills MSc MCSP

APPENDIX 6.

6.10 Protocol for Phase Two of the main questionnaire survey

PROTOCOL for the QUESTIONNAIRE SURVEY - PHASE TWO
--

- Mailed self-completion questionnaires together with pre-typed explanatory letters and s.a.e will be sent out to the 30 patients corresponding to the randomly selected codes.
- Questionnaires marked 'A' on the front will be sent to patients with **ACUTE** conditions
- Questionnaires marked 'C' on the front will be sent to patients with **CHRONIC** conditions
- Questionnaires are sequentially coded to permit follow-up letters to be sent to non-respondents following the initial two-week deadline.
- **YOUR QUESTIONNAIRE CODES ARE,**

ACUTE:

CHRONIC:

- The patient explanatory letter, accompanying the questionnaire, should be completed with the patient's **NAME** and **HOSPITAL** added before it is sent. [*see sample*]
- Patients will be asked to *return the completed questionnaires to your department* within two weeks of receipt, using the enclosed stamped addressed envelope.
- Therapy staff / secretary will then **FOLLOW-UP** non-respondents after the 2-week deadline has expired by sending out a pre-typed letter. [*copies enclosed*]
- If no further returns are received after the second 2-week period all the returned questionnaires will be sent to the researcher for analysis. The survey will then have been completed.

GENERAL ADDITIONAL INFORMATION

- Patients will be advised in the accompanying letter that participation in the study is voluntary.
- Return of a completed questionnaire therefore assumes consent to take part in the study has been given by the patient.
- Patients will be advised that they have been randomly selected from a coded list and that their personal details will be unknown to the researcher.

APPENDIX 6.

6.10 Protocol for Phase Two of the main questionnaire survey (cont.)

SUPPLEMENTARY DOCUMENTATION

A. 4 EXTRA QUESTIONNAIRES, PATIENT INFORMATION LETTERS AND S.A.E

1. Please send these out IF PATIENTS REPORT LOSS OR NON-RECEIPT of initial questionnaire after the follow-up letter has been sent out.
2. Please remember to INSERT THE PATIENT'S CODE on the back sheet of the questionnaire.
[check the protocol for the code sequence allocated to your site]
3. Please remember to INSERT A [acute] or C [chronic] in the box on the front sheet of the questionnaire.

B. 15 FOLLOW-UP LETTERS

1. Please send these out if questionnaires are NOT RETURNED AFTER 2 WEEKS following the initial mailing [patients were initially sent a s.a.e. therefore these have not been supplied again]

APPENDIX 6.

6.11 Patient information letter accompanying questionnaire in main survey



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

0207 377 7875 ansaphone
0207 377 7808 FAX

May 2001

Dear

Re: Physiotherapy Out-Patient Survey

Physiotherapists try to provide all their patients with the best possible care when they attend for treatment, and in order to help us achieve a good standard we would greatly value your views as to whether this is being accomplished.

I am a physiotherapist with a special interest in treating patients with musculoskeletal conditions currently work at Mile End Hospital, Tower Hamlets Healthcare Trust, London E1. This research is being undertaken part-time at the School of Biomedical Sciences, King's College University of London, and Physiotherapy Departments from selected hospitals in England are participating in this research.

You are being asked to take part as you have recently completed a course of out-patient physiotherapy at

You have been selected at random from a coded list so that your personal details are known only to the hospital where you received your treatment.

Enclosed is a questionnaire, covering a variety of topics relating to your physiotherapy treatment. *Please take the time to fill it in, as your opinion about these different aspects of your care will provide invaluable feedback about our service.* You are asked *not* to sign the form so that the information you give will be dealt with anonymously.

The codes added to the questionnaire are used to identify the hospital where you attended for treatment only. When the questionnaire is returned it will be impossible to identify you personally.

When you have completed the questionnaire, please return it in the enclosed stamped addressed envelope *within two weeks of receipt.*

If you would rather not take part in the research, *please return the questionnaire anyway and tell us why you would prefer not to fill it in,* as this information will also be useful to us. Refusal to complete the questionnaire will in no way prejudice any further medical or physiotherapy treatment that you may have.

APPENDIX 6.

6.11 Patient information letter accompanying questionnaire in main survey (cont.)

Although I shall be analysing the information you provide in response to the questionnaire, I shall have no access to any of your personal details or medical records.

The findings of the study will be of particular interest to physiotherapists and health care professionals, and the results will be published in the physiotherapists' professional Journal.

If you have any problems, concerns or other questions about this study please do not hesitate to contact me at the address or 'phone number given in this letter.

If you have any complaints about the way the research has been carried out, you may contact,

Dr. Tony Leeds,
Chairman, Ethics Committee,
Department of Nutrition,
King's College London,
Franklin-Wilkins Building,
150 Stamford Street,
London SE1 8WA

Yours Sincerely,

Rosemary Hills MSc MCSP

APPENDIX 6.

**6.12 Follow-up letters to patients inviting
return of questionnaires in main survey**

020 7377 7875 ansaphone
020 7377 7808 FAX



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

May 2001

Dear

Re: Physiotherapy Out-Patient Survey

Two weeks ago you will have received a questionnaire asking for your views about your recent course of physiotherapy treatment, together with a letter explaining the reason for the survey.

A number of completed questionnaires have already been returned but the more replies we receive the more representative the findings will be. Therefore *please take the time to complete your questionnaire and return it to the physiotherapy department where you received your treatment as soon as possible*. A stamped addressed envelope was previously included for your convenience.

The feedback we receive will help us to ensure that we are providing all our patients with the best possible care, so we greatly value getting your views. I therefore hope that you will agree to take part in this survey.

Yours Sincerely,

Rosemary Hills MSc MCSP



TOWER HAMLETS HEALTHCARE
NHS Trust

Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

APPENDIX 6.

**6.13 Letter to Superintendents on conclusion of
the main questionnaire survey**

020 7377 7875 ansaphone
020 7377 7808 Fax

19th. June 2001

Ms.....
Superintendent Physiotherapist,
.....Hospital,

Dear Ms.

**Re: Research project. 'An Examination of the Sources of Satisfaction with Out-patient
Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic
Musculoskeletal Conditions being met?'**

Thank you for forwarding the questionnaires returned from the survey conducted at your site. I hope that participating in the research did not result in too much extra work for the staff.

I am very grateful to all of you for assisting in this study which I think will produce interesting results for physiotherapists particularly those working in Outpatient departments. Therefore please convey my thanks to all concerned.

Should any further questionnaire returns come in they should be forwarded to me as soon as possible together with any spare documentation.

With best wishes,

Yours Sincerely,

Rosemary Hills MSc MCSP

APPENDIX 7

- 7.1 'Not sure' responses from questionnaire statements (*n*=279)**
- 7.2 Open comments made by subjects on the questionnaire (*n*=279)**
- 7.3 Multiple regression stepwise analysis of main questionnaire survey data (*n*=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for males and females (SPSS output)**
- 7.4 Multiple regression stepwise analysis of main questionnaire survey data (*n*=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for the acute and chronic groups (SPSS output)**
- 7.5.1-7.5.13 Contingency tables Expectations * Outcome**
- 7.5 Principal components analysis of main questionnaire survey (*n*=279) 6-factor solution (SPSS output)**
- 7.6 Variance explained by the 6 factors produced by a principal components analysis of the main questionnaire survey data (*n*=279) (SPSS output)**
- 7.7 Number of responses on a 5-point Likert scale for each statement in the main survey questionnaire**

APPENDIX 7

7.1 'Not Sure' responses from questionnaire statements ($n=279$)

Key: Employment status 1. Full time 2. Part time 3. Not employed 4. Student 5. Retired
Age range 1. 18-29 2. 30-39 3. 40-49 4. 50-59 5. 60-69
6. 70-79 7. 70-89

Q. no.	No. Acute	%	No. Chronic	%	No. Male	%	No. Female	%	Total	Employment status							Age range						
										1	2	3	4	5	6	7	1	2	3	4	5	6	7
1	15	5	34	12	12	4	34	12	274	17	7	5	0	16	2	0	2	5	9	15	6	9	2
2	2	1	5	2	3	1	4	1	276	3	1	1	0	2	0	0	0	3	0	3	1	0	0
3	4	1	5	2	3	1	6	2	276	3	1	1	0	3	0	0	0	3	2	2	0	2	0
4	23	8	33	12	21	8	34	12	275	16	6	7	1	23	2	0	6	2	11	17	8	9	3
5	25	9	23	8	11	4	27	10	275	16	6	4	2	17	1	1	6	3	8	9	11	7	2
6	3	1	5	2	1	0.3	6	2	278	2	3	1	0	2	0	0	0	2	1	2	1	1	0
7	30	11	22	8	20	7	28	10	276	16	12	5	1	14	2	0	4	9	8	10	13	5	2
8	3	1	5	2	1	0.3	7	3	275	1	2	2	0	3	0	0	0	1	1	3	1	1	1

7.1 'Not Sure' responses from questionnaire data (n=279) (cont.)

Q. no.	No. Acute	%	No. Chronic	%	No. Male	%	No. Female	%	Total	Employment status						Age range							
										1	2	3	4	5	6	7	1	2	3	4	5	6	7
9	20	7	34	12	11	4	39	14	277	13	7	10	0	19	3	0	3	4	8	15	13	8	2
10	19	7	14	5	11	4	20	7	277	13	5	4	0	10	1	0	2	5	8	11	5	2	1
11	10	4	14	5	5	2	18	6	278	11	5	3	0	5	0	0	3	8	2	5	3	3	0
12	17	6	16	6	6	2	26	9	272	13	8	3	0	7	1	0	4	8	6	7	3	4	1
13	30	11	36	13	18	7	43	16	277	17	14	6	0	23	2	0	1	8	11	16	15	10	5
14	9	3	15	5	8	3	16	6	277	6	6	1	1	9	0	0	1	2	5	5	4	2	
15	18	6	16	6	11	4	23	8	276	11	7	3	0	13	0	0	4	4	6	10	6	3	1
16	7	3	13	5	6	2	4	1	278	5	7	1	1	6	0	0	2	2	2	5	6	2	1
17	27	10	30	11	16	6	38	14	275	15	9	4	0	25	2	0	1	5	9	16	12	8	5
18	5	2	8	3	6	2	7	3	277	4	3	1	0	3	1	0	0	2	4	5	2	0	0
19	8	3	10	4	5	2	10	4	278	10	0	0	0	6	0	0	1	1	1	4	1	6	1
20	4	1	7	3	3	1	7	4	276	5	1	1	0	4	0	0	0	3	3	3	0	0	0
21	9	3	15	5	9	3	13	5	279	8	6	5	0	4	0	0	1	2	6	9	3	3	0
22	22	8	24	9	17	6	27	10	278	17	7	4	0	15	1	0	2	7	10	12	10	4	1
23	1	0.3	8	3	2	1	6	2	279	5	0	0	0	4	0	0	0	2	3	1	0	2	1

7.1 'Not Sure' responses from questionnaire data (n=279) (cont.)

Q. no.	No. Acute	%	No. Chronic	%	No. Male	%	No. Female	%	Total	Employment status							Age range						
										1	2	3	4	5	6	7	1	2	3	4	5	6	7
24	11	4	4	1	7	3	6	2	277	4	1	1	0	8	1	0	1	3	1	2	4	4	0
25	18	6	20	7	13	5	24	9	279	12	8	5	0	13	0	0	2	1	7	15	4	6	3
26	14	5	23	8	10	4	25	9	276	13	4	2	1	14	1	0	3	3	10	5	9	6	1
27	4	1	3	1	2	1	4	1	278	2	1	2	0	2	0	0	0	2	0	3	2	0	0
28	9	3	14	5	8	3	14	5	278	11	1	3	0	7	0	0	1	4	5	5	3	3	2
29	5	2	5	2	1	0.3	8	3	279	5	1	0	0	4	0	0	2	1	1	3	1	2	0
30	18	6	29	10	14	5	32	12	276	11	6	5	1	20	2	0	1	3	10	13	9	9	2
31	18	6	13	5	9	3	29	10	277	9	3	1	1	14	1	0	0	5	4	5	10	7	0
32	7	3	18	6	6	2	17	6	278	8	7	1	0	8	0	0	1	1	8	7	5	2	1
33	6	2	10	4	8	3	8	3	275	7	2	0	0	6	1	0	2	2	3	5	1	3	0
34	10	4	20	7	8	3	21	8	276	10	4	3	0	10	1	0	2	2	8	8	5	3	2
35	23	8	20	7	14	5	28	10	277	10	9	3	2	16	1	0	3	6	5	12	9	5	3
36	15	5	32	11	11	4	35	13	277	16	10	5	0	15	1	0	4	6	8	13	5	9	1
37	15	5	14	5	10	4	19	7	278	15	7	1	0	4	0	1	2	3	6	13	1	2	1
38	4	1	4	1	2	1	6	2	273	3	2	1	0	2	0	0	0	3	2	2	2	0	1

APPENDIX 7.

7.2 Open comments made by subjects on the questionnaire: main survey (n=179)

NOTE. The comments were transcribed from the subjects' questionnaires verbatim, including spelling mistakes. Where names of hospitals, therapists or identifying terms have been used these have been replaced using ().

Key: (A) = acute Age. 1. 18-29
(C) = chronic 2. 30-39
F = female 3. 40-49
M = male 4. 50-59
 5. 60-69
 6. 70-79
 7. 80-89

- i) The prefix number for each comment indicates the number of the questionnaire
- ii) The comments are grouped according to themes under principal category headings

OUTCOME

1. After completing physio and getting to a condition that was better and more comfortable to live with, I then took a course of skeletal balance and body massage from a private Aromatherapist. The results from this were outstanding and I have gained a greater degree of mobility. (A) F age3, full time

10. Dear Sir or Madam. I suffer with arthritis of the spine my back can go at any time I've had this condition for a number of years. It is the first time my doctor as sent me for treatment I found the treatment I got relieved my arthritis Thank you. (A) M age 4, not employed/casual work.

12. The benefits of hydrotherapy gave me great relief from pain and stiffness, while the treatment lasted. I would need regular hydro treatment to be free of stiffness, which I know is not available. If it is any interest to you I've had pain in hips from early life. It is my honest opinion working hard from 12 years old, leaving school at 14 in 1942, and never seemed to have a spade out of my hands for next 3 years got into a lot of trouble from army MOS for complaining about hip pain I was a ----- to him. (C) no gender age 6, retired.

18. I still get a lot of pain from my left foot, and it is 6 months now since I broke it, but I was told it could take up to 12 months before it is back to normal. (A) M age 5, retired

32. I attended the neck school and was given a leaflet of exercises which I am sure help relieve my pain but it never goes away completely. (C) F age 4, not employed

41. I am still walking with a limp and my knee is well below being back to normal and I still get pains in my knee joints. (A) M age 5, full time.

47. Excellent treatment whilst attending, but still some pain occasionally since treatment stopped. (C) F age 2, full time.

68. I will never be fully mobile the result of a stroke but I still do all the exercises I was shown and it helps me a great deal. (A) M age 5, not employed.

78. After seeing the specialist I was told I required a hip replacement therefore I believe the therapist helped me as much as he could. (C) M age 4, full time.

80. Very pleased with treatment, but still troubled at times with pain from trapped nerve. (C) M age 5, retired.

7.2 Open comments made by subjects on the questionnaire (cont.)

OUTCOME (cont.)

85. Although my sprained ankle was not completely cured after physiotherapy I felt able to continue exercises at home and was made to feel confident that in time my ankle would be fully cured. (A) F age 5, retired.

99. I know that I will never be cured of my rheumatism but the treatment helped for a time and the advice given about the painkillers have been helpful. (C) F age 6, retired.

116. I felt that the treatment I had was of little value as it made no noticeable difference to my condition. (C) F age 2, ?employ.

122. In 1980 I had a RTA which resulted in having a total left hip replacement. Then in 1996 I had a left hip revision which now causes some pain. I had a total of 4 operations on the left hip. But with the help of () Physio Dept. I do exercises at home to help my mobility. I've had other problems but with the help of physio therapist I am 99% better. (signed) (A) M age 4, ?employ

147. The reason for A&B circles (note: responses to questionnaire) is that I received treatment from 2 therapists the only treatment that gave any relief was acupuncture which gave good results but after a few months the problem returned in my neck & shoulder & arms previous it was my hip and left leg, (C) F age 3, part time.

167. I have had a MRI scan, so my neck is damaged the physiotherapy treatment eased the pain. (C) F age 6, retired.

199. I am now having private physiotherapy the only treatment I had from the (hospital) was acupuncture which did not help me. (A) F age 4, part time.

206. In answer to No.35 (note: statement says I have regained full mobility) I have always had mobility- just at times painful to get around- the exercises given me in August of last year have helped me, they are done everyday regardless of how I feel. (C) F age 4, not employed.

211. Still get pain when coming down stairs. But early days. Finished with therapist in February. (C) M age 6, retired.

213. My shoulder problem has been made much easier with physiotherapy but it is not 100% cured. That may not be possible without further treatment & maybe cortisone injections. (C) M age 5, retired.

218. I have an ongoing problem with my back which gives me pain in my legs and lower back. If I carry out the exercises shown to myself by my therapist I get relief, which I am very grateful for. Thanks very much. (signed) (C) M age 5, full time.

242. Broken leg- no pain during treatment. Some stiffness and swelling remains. (A) M age 6, retired.

244. My condition was not resolved but that was not the fault of the physio I was waiting for Orthopedic outpatients. (A) M age 1, full time.

251. Additional therapies ie. ultrasound acupuncture have had a good effect during my treatment. (C) F age 3, part time.

269. Due to a rheumatoid condition it is not sure that the treatment will be long lasting. (note: if this patient really had a rheumatoid condition she did not meet the entry criteria for this study) (C) F age 5, part time.

7.2 Open comments made by subjects on the questionnaire (cont.)

THERAPIST

21. I had a trainee physio for my treatment and I allowed an appraisal to take place whilst undergoing treatment. I think the positive attitude the young trainee showed helped improve my condition. (A) F age 2, full time/student
24. (name)was most professional in the treatment I received but when one reaches my age miracles cannot be achieved. (C) No gender, age 7, retired.
58. The therapists were very helpful and answered my questions as required. (A) F age 3, full time.
60. (name) was great. (A)F age 5, part time
61. Your physiotherapy staff are 100% in what they do and I admire them for this. I could not fault them in any way and I am grateful with the care and attention they showed me when I attended my appointments. May their care never cease. (A) M age 3, full time.
- 70 The girl was pleasant and helpful at all times. (C) no gender. Age 6, retired.
71. I was very pleased with the help I received from my therapist. (C) F age 4, not employed.
93. All staff were helpful, my physiotherapist showed me the right way to do things and soon told me if I did it the wrong way. (C) F age 4, not employed.
102. I had more than one therapist the second had a lot more experience than the first. As the majority of my treatment was with the second therapist I have answered questions about that experience. (A) F age 2, part time.
137. Based on first physio I saw who was a locum and left, I saw permanent physio who was much better more personal, explained things and treated me with more dignity than the first who failed to explain what she was doing – exercises we (?) every 2-3 hours. (C) M age 3, full time.
141. The therapist was very good to me and very helpful. (A) F age 6, retired.
162. () was my therapist, and he had just joined it was his first day when I attended. I found him to be professional in all aspects of his work. (A) M age 2, not employed.
163. I would like to thank the physiotherapist for all their help and guidance during my group sessions. (signed) (A) M age 4, full time.
179. I found () the physiotherapist most helpful during the course of the treatment. (A) F age 3, full time.
- 210 My physiotherapist at (hospital)Nov 200 (name) showed great skill and kindness and should be mentioned. (C) M age 6, part time
221. The physio was extremely helpful at all times. (A) F age 6, retired.
224. My physio () was excellent, very friendly made me feel at ease by the end of my treatment I felt we were more like friends quite sorry to finish my treatment with her. She listened all the time and always concerned on my pain and suffering. (A) F age 1, full time.
264. Staff were very pleasant and helpful. (A) F age 1, full time.

7.2 Open comments made by subjects on the questionnaire (cont.)

SATISFACTION

4. I found the staff very friendly the treatment was very good. (A) M age 3 full time
15. After treatment started I was completely satisfied. (C) F age 5, retired
19. I am very happy and the staff were very nice and help a lot. (A) F age 1, part time/student
31. I could not have had better treatment anywhere than I had from () Hospital (C) F age 7, retired
39. From the little time I spent in the dept, I believe a very professional job/service is being done/offered in difficult circumstances. (A) M age 1, full time.
66. The outpatient physiotherapist team at () Hospital are doing an excellent job within the available resources. (A) M age 3, not employed.
73. The treatment and staff where very good, and very helpful, they deserve nothing but praise for there kindness and attention they show there patients. (C) F age 4 ,not employed.
81. I found all staff at () General were very helpful and the atmosphere really helped the way you feel. Thank you all (signed) (A) F age 6, retired.
103. I was very happy with the treatment at () Hospital. (A) no gender age 6, ? employ
128. Treatment at all times was excellent- most professional yet kind and reassuring. Restores one's faith in the NHS. (A) F age 4, retired.
135. Everyone was very helpful and pleasant at all times. (C) M age 3, full time.
178. Very good treatment. Keep it up good work. Thank you. (A) M age 4, full time.
181. I have nothing but praise for the care I received at hospital and home. GOD BLESS YOU ALL (A) F age 6, retired.
201. Excellent treatment-can only praise staff and care. (A) F age 4, full time.
203. Could not have had better treatment "well satisfied". Many Thanks. (A) F age 6, retired.
276. A very good service. (C) ?gender. age 5, retired.

ORGANISATION

6. I do think that after the set time (or average) treatment for the complaint your time is up. I had knee replaced great. I have had muscular trouble come on for 16 months now and it ? creates pain (A) M age 4, full time
26. I attended a group meeting regarding my back. How to lift etc. What to do and not do. (C) F age 3, full time.
28. My answers are based on about 3 sessions only after which I was called to () Hospital to have my hip replacement. I think the full term would normally have been 6 sessions. (C) F age 7, retired.

7.2 Open comments made by subjects on the questionnaire (cont.)

ORGANISATION (cont.)

69. I would of liked to be able to ring back about further treatment when my pains came back. (A) F age 5 retired. (?? should have been designated (C))

96.I received only 3 appointments in the department each time each time I was given a Tens machine. After the third visit I was told they could do no more for me. I was forgotten on the second visit & left for an hour & the department was closing. I had to leave my cubicle and look for someone to remove the machine. (C) F age 5, retired.

125. Statement 8- The cancellations of 2 sessions was beyond the control of () or its staff- the hospital was flooded.

Statement 33- Mine were group sessions. (note: statement 33 was about having the undivided attention of the therapist) (A) F age 5, retired.

143. I have to wait 8 months for appointment I am in agony from now to November is too long to wait! (A) F age 6, retired. (note: ?? this is an *acute* referral)

172. I felt a few more sessions would have been beneficial- only had 7. (C) F age 6, retired.

220. The only reason for not being completely satisfied was the sessions were rushed, and better facilities both for patients and staff. (A) F age 3, full time.

227.Some answers are influenced by the Therapist having to look after too many patients at any one time plus I should have been referred for physio much sooner after my injury which may have resulted in more benefits. (C) M age 2, full time. (note: should this have been (A) ?)

253. Q.36. Able to contact department for a week only after treatment. A nagging (bearable) pain has recently returned. To be seen again I suppose I have to go via my GP and a long wait until 1st physio appointment. (Q.24). (note: Q.24. statement 'I had to wait a long time to get my first appointment for treatment) (C) M age 4 ,full time.

259.Time allotted was too short therefore all avenues not explored. (A) M age 4, part time.

270. I was only given a short time during which I could contact the therapist directly. After that the referral process had to be gone through again. (C) F age 4, part time.

274. Problem of waiting 3 months for first visit, total lack of parking facilities at the department. (C) F age 5, retired.

OUTCOME/THERAPIST

29. The treatment I had was ultra sound waves and heat on my shoulder that was and still is very stiff. This treatment didn't seem to be working and I was asked if I would like to try acupuncture. I was a bit wary but after it was explained to me I had the treatment, this did seem to take some of the pain away at the time, however my shoulder is still very sore and movement limited 6 months, after first going. I have made another appointment with my doctor as I thought maybe it would get better on its own but it hasn't. The people at () are really kind and friendly. (C) F age 3, part time.

95. Because my pain was to wide spread I only ever used the tens machine which helped at the time but did not last for very long, but the therapist made me feel at ease and was very helpful throughout my course, answering questions and anything I had to ask her. (C) F age 3, full time.

7.2 Open comments made by subjects on the questionnaire (cont.)

OUTCOME/THERAPIST (cont.)

124. The physiotherapist that treated me was a spinal specialist, this was very evident in the treatment & understanding of my condition. I was very pleased that treatment was good & made a real difference. (A) M age 3, full time.

133. My treatment helped my condition and enabled me to continue helpful exercises following discharge. Information imparted to me willingly, therapist extremely helpful and knowledgeable. (C) F age 3, full time.

183. I would like to say that () was very easy to talk to and helped me a great deal. She was always very professional and friendly. Also my "pain" will not go so I have tried to answer the questions honestly but they may reflect a negative view at times, but it is no way a fault in the treatment. I learnt a lot about my body and will now be able to manage at home! (physio). (A) F age 2, part time.

192. I found all the staff pleasant at () and my pain is not cured I can at least manage better in many ways in my daily life. The things I learned I can keep it up at home. (C) F age 4, not employed.

194. The therapist I saw was informative and helpful. My complaint was whiplash a tricky little number and I expect will take some time. I still do the exercises she advised me to carry out. (C) M age 6, retired.

197. () was very helpful, and made me feel very comfortable and at ease. My knee is 100% better after seeing () and for someone so young (I think!) she was very confident and had a lot of knowledge of my injury. Thanks. (A) M age 1, full time.

200. The girls were very nice & very good but over the years I have damage my (?leg) so much that I really do not think it will ever be really right & with out some pain. (A) F age 6, retired.

231. My therapist was () and she was excellent, both in communication and knowledge. Although I am not completely recovered my main complaint (slipped disc + trapped nerve) is now completely cured. (C) F age 2, part time.

249. I have chronic back pain which is very long term and I have to try to keep working to gain some pension. The physiotherapist helped me to learn to manage and live with it- I did not expect any cure- but I still keep hoping. The physiotherapist was excellent and helped me more than anything else has done. (C) F age 4, full time.

263. The problem was carefully investigated and exercises recommended which I conscientiously carried out. I felt that too much exercising may have aggravated the problem & resting it since had helped alleviate the pain. I think it is the first sign of arthritis. I am an active person and keep things as mobile as possible. I was fully in tune with my physio & appreciate all that was done but cannot say the exercises helped a great deal although I continue with them but less so. (A) F age 5 retired.

265. My therapist was not only extremely professional but exceptionally patient, kind and helpful in many ways. The result of my going to have physio has taught me to exercise properly to relieve my symptoms and pain. A job very well done. (A) F age 3, part time.

THERAPIST/ORGANISATION

7. My physiotherapist was very kind. Throug work commitments I was not always able to keep my appointments. I am waiting for surgery for my tennis elbow but unfortunately it is going to be difficult to keep future appointments for physio as I have recently had an operation on my right big toe for arthritis.(A) M age 3, full time

7.2 Open comments made by subjects on the questionnaire (cont.)

THERAPIST/ORGANISATION (cont.)

130. As you can see from my answers I was very impressed with the physiotherapy Department I was particularly pleased with the quick response in getting my 1st appointment and the caring attention of () – she's brilliant! Thank you! (A) F age 4, part time.

195. I was very grateful for the treatment I received but I felt 4 visits I had to my mind were not enough I would have benefited from a few more other than that I thought it was great & a super lady. (C) ?gender age 6, retired.

232. At all times my physiotherapist was helpful and patient. If there is any fault regarding the amount of treatment this surely lies within the restrictive system of the NHS. (C) F age 5, part time.

239. My therapist could not find my file on more than one occasion. She would confuse me with another patient with entirely a different problem. She seemed distracted and uninterested in my problem. I gave up treatment through frustration and have gone privately for treatment which is a shame as I have always maintained that there is no difference in standards of treatment. I have been proved very wrong. (A) F age 3, part time.

OUTCOME/SATISFACTION

33. My problem is chronic with acute spells. Having suffered for many years this was the first experience of physiotherapy I have had. The service I personally received could not have been better in respect from all staff in the physio dept. I have certainly seen an improvement in my condition although not cured. I wish I had been referred years earlier. (C) F age 3, full time.

42. My treatment in this department was for a torn ligament. I consider my treatment for this condition to have been a success, however the underlying problem was a torn cartilage. After my discharge from the physiotherapy department I was informed that I would be referred back to my consultant. Due to an administrative error this did not occur. It is this aspect of the service with which I am dissatisfied. (A) M age 3, full time.

114. The service I received was very good but I did not improve as I have since seen a doctor and I need a shoulder replacement and I am on the waiting list. (C) F age 5, part time.

198. I have generally agreed that the service & treatment was excellent which may contradict why I have not regained full mobility. This is probably because of my own approaches to managing my condition which could have been more thorough rather than any failing within the physiotherapy department. (A) M age 2, full time.

204. Extremely happy with the result. Great department and team. You should give the plastic surgery department some advice. Thank you very much! (A) F age 1, full time.

ORGANISATION/OUTCOME

158. I felt the treatment should have continued for a few more weeks as I was still having a great deal of pain & still do have when carrying on that wrist. Although it is now six months since my accident I am still not able to use the wrist as before my accident ie. carrying opening lids and twisting. (A) F age 4, full time.

173. I attended for treatment in 98/99 and received excellent treatment resulting in total pain relief. When I attended again in Oct.2000 after further problems I did not receive the same treatment nor the same level of care and attention. I had 3 different therapists in a short period of time and although I still do the exercises they recommended my problem persists. (C) F age 2, part time.

7.2 Open comments made by subjects on the questionnaire (cont.)

ORGANISATION/OUTCOME (cont.)

40. On Q.31 (note: Q.31 statement 'I am now completely free of pain) I am now pain free due to an injection not due to the treatment, which I had to go private to receive. I would have liked to have more physio, once a fortnight was too infrequent. (A) F age 5, part time.

271. Biggest hurdle was getting thro' a GP. Temporary help for a chronic problem. Still revert to other complementary therapies. (C) F age 3, full time.

COMMUNICATION/OUTCOME

3. My therapist was on holiday during the middle part of my treatment. I had to explain the problem to 2 other therapists as a result. The reason I am not sure if the physio cured my problem is because I went on to have surgery on the knee and either or both could have been responsible for the improvements. (A) F age 3, full time.

109. Physio helped me at the time, but I was told and since found out that my wrist injury would persist, ie because of the injury, my wrist would now always be weaker than it was. I also found that the staff wasn't always very understanding about the job I do (heavy lifting and carrying) and that I wasn't able to go to work to do "light duties" so they were encouraging me to return to work to keep the wrist exercised which only led to the injury persisting even longer & continuing still to be painful because it wasn't given sufficient rest to make it stronger before using it again. (A) F age 1, full time.

214. My knee problem was explained as a problem that would probably improve but not cure. Very pleased my mobility has greatly improved thanks to physiotherapy treatment. (C) M age 5, full time.

GENERAL COMMENT/OUTCOME

23. They gave me exercises to do at home I did not have any treatment. The exercises made it worse I was sent to a Back School. They said it was coming from my back I have now had a scan which I waited 13 months (C) ?gender age 6, retired

229. (Typed comments from this patient on separate sheet)

'A Few Comments on my experience:-

Over the last 6 years or more have been trying to get relief of pain in my left hip (this is not arthritis I've been told) and pains in my lower back.

The first time I went for Physio 6 years ago they tried with manipulation for the first 2 session, this didn't do any good so they tried acupuncture, this helped for as long as the treatment lasted.

A year after that I then decided to go to a chiropractor who after 20 session and not much improvement she wondered if I had any gynaecological problems? To cut a long story short I had to have an ovarian cyst drained. After this I had hoped things would improve with my lower back problem, as this sort of thing can be related to back pain. Alas I returned yet again to my doctor who referred me to the hospital for an X Ray. I was told that it was just wear & tear of the spine. I asked my doctor if he would mind referring me to a private back specialist, hoping that there might be some other way of easing the pain. This was a complete waste of time and money, as he told me I needed to exercises more often, that to me was rather an expensive joke as I told him I had given up going to the Gym because it was too painful. He said he'd get me booked in at the Physio Dept to go to there back client.

I went along for these sessions, but I did not feel that they had any knowledge of why I was there, except that it had been recommended by the specialist. I could not quite see how this was going to rid me of my pain, as I am not over weight, never been immobile, and have try to keep fit and active with the gym and swimming.

They were very pleasant and put me through and exercise routine, but after my 6 week course I really did not feel any relief. (cont.)

7.2 Open comments made by subjects on the questionnaire (cont.)

GENERAL COMMENT/OUTCOME (cont.)

(cont.) I have now return going to the Gym, and have been receiving treatment from the Sports Therapist who has concentrated on manipulating my back which has help me no end, and has improved my back pain.' (C) F age 4, full time.

236.I find it difficult to answer questions. I didn't have physio. as such but some electro magnetic treatment which didn't help + the physio arranged via my Dr. for X Ray which confirmed that the problem was caused by osteo arthritis, which I doubt that treatment was for. (C) F age 5, part time.

THERAPIST/SATISFACTION

202. My therapist was very kind she helped me all the way everyone in the department was very kind and helpful. (A) F age 6, retired.

EXPECTATION/OUTCOME

168. I did not expect to be cured from my complaint (OSTEOPOROSIS & ARTHRITIS), I found some of the exercises to do at home far too painful. But I was grateful for the attention I received. (C) F age 6, retired.

SATISFACTION/THERAPIST/OUTCOME

184. Overall I found the physiotherapy service I received to be full and comprehensive, with a very competent and helpful physio. I am very grateful for treatment I received, as I feel it has helped me immensely. (A) F age 1, full time.

SATISFACTION/ORGANISATION

247. I had polo as a child 3 years old my left leg will not take my weight but in the pool I have freedom although I cannot walk without aids I have complete freedom in the wonderful hydro pool it like freedom all my limbs are free its just wonderful I was so very happy at was wonderful treatment excelent I really do need more sessions. (C) F age 7, ?employ.

THERAPIST/EXPECTATIONS/ORGANISATION/ OUTCOME/SATISFACTION

52. My therapist was very kind and was very considerate. I have had neck trouble caused by whiplash 1958 so did not expect too much from the six sessions & consider this too short a period to give any lasting comfort. Very satisfied with my therists endeavours. (C) M age 6, retired.

GENERAL COMMENT/THERAPIST

250. Fortunately, the physiotherapist left the hospital. By then I had contacted my GP to request referral to a consultant (using my employer's private insurance). A second physiotherapist took over my treatment until I saw the consultant. He is now working with a physiotherapist at the private hospital to find a solution to my pain. The second physiotherapist at the county hospital had an excellent approach and manner. (C) F age 3, full time.

7.2 Open comments made by subjects on the questionnaire (cont.)

GENERAL COMMENTS

25. Last visit to Dr said I had a frozen shoulder (C) M age 6, retired
34. I was referred to () Orthotics Clinic in October by my therapist and despite telephone calls I have not as yet received the appointment. 9.5.01. (A) F age 3, part time.
49. I think I should have been to see a Rheumatology before hand. So I knew what was wrong. 21 weeks waiting list. (C) F age 4, part time.
67. I have a problem with my elbow which can re-occur at any time. This is due to the condition not the treatment. (A) F age 4, full time.
77. This form is not geared for my complaint Mono Salabic answer would be more easier to answer. Its confusing to read the Question and appropriate multi answer. (C) F age 5, retired.
87. The department could have better/more equipment as sometimes pieces of equipment were being used by other patients, i.e. bo-kinetic leg machine. (A) M age 2, full time.
101. NHS not enough resources more time needed on areas of disability. (C) F age 4, full time.
106. THANK-U (A) M age 1, not employed.
127. I had neck surgery approx. 5 years ago, so this problem occurs every so often. This time was caused by a car accident. (A) F age 3, part time.
138. I think sometimes a sense of humour helps put people at ease and it would help people to know exactly what is wrong and to go into detail with there problem so you are aware and know how to deal with your condition. (C) ?gender age 4, full time.
164. We would not live without your department. Very helpful. (A) ?gender. age 5, retired.
166. I went for physio on 2/4/2001 (after a wait of 9 months) I managed to have a few sessions at my Doctors Surgery in the meantime. Did not have any treatment on the 2nd. As I explained I was doing exercises at home and also got to () classes every week. I cannot take any anti-inflammatory tablets due to Hiatus Hernia. (C) ?gender age 6, ? employ
174. I don't think the statements allowed me to give the answers I would liked to have given. (C) F age 6, retired.
191. Due to depression I didn't continue treatment, so I have answered questions as honestly as possible. (C) F age 3, part time.
212. I believe that a more thorough investigation in depth might have helped to improve my condition. I am currently taking private acupuncture sessions in the hope that it will solve or ?erase my problem. (C) M age 6 self employed
219. Unfortunately the environment in which you treat the patients is not very welcoming or relaxing 7 very cold early in the morning. But this is not your staff fault !! (A) F age 2, full time.
234. Equipment is not up to standard. 3 yrs. Ago spent 6 mths. In Spain in physio after Colleys fracture to wrist. Every visit wrist placed in hot wax bath then wrapped in towel for easier mobility when exercising. Also electrodes placed on painful areas which helped a lot. Also therapist worked with an electric massage under water for circulation. Made a complete recovery and able to play the piano! (C) F age 5, retired.

7.2 Open comments made by subjects on the questionnaire (cont.)

GENERAL COMMENTS (cont.)

235. Pillow cases, sheets & blankets were not clean, as they had been used by other patients before, and sometimes were even dirty. I suggest Paper sheets, & Papercases, clean for each patient. (C) F age 4, not employed.

237. I had a road traffic accident in Nov.98 which resulted in a dislocated elbow & muscle in my fore arm & half my right hand. I had superb service from this Dept. But I should have had physio on my elbow/hand from the time of the accident & not from 2 yrs later when I am then informed by the Dept that my muscles in my hand are wasting away. But this is the fault of my GP for not referring me sooner. (note: this patient did not meet the entry criteria for the study) (A) F age 3, part time.

245. (typed comments stuck on form). At the risk of ruffling feathers this form is too detailed. Preferred would be a direct question and Yes No answer covering the facility, administration and staff performance.

One option:- The facility is well lit, light, airy and well equipped-judged on one condition. Reception is courteous. The treatment is empathic, professional, and efficient; all should bear in mind that humans cannot be processes like cans of beans. Each is given the time and attention needed. (A) M age 7, retired.

262. I have had to answer Not Sure to many questions because I had/have no knowledge of what to expect or what could be done. (A) F age 7, retired.

OTHER

(Not filled in, so not included in analysis) 'I have not filled in the survey because I only visited physiotherapy twice, don't feel I can answer questions fairly. All I can say is I didn't have to wait for my appointments I was treated very well'

One letter received. (patient's name and address supplied) 'Further to your reminder I would prefer not to answer your questionnaire'

2 questionnaires returned not filled in with comments as follows,

i) 'Gretta is unable to answer the questions due to communication difficulties'

ii) 'I am of the opinion that questions are not relevant in my case as I only saw the physio on two occasions

1. I was given an exercise program

2. Check up on how the programme was suiting me – no further contact has been made'

(C) F age 6, retired.

(note: neither of these patients fitted the entry criteria of the study and should not have been sent questionnaires)

One questionnaire returned, not filled in with the following comment;

'I came to () 6 times for 20 minutes each time. I can't really put this form to really good use for you. I saw a Student Therapist who was very nice and of course she was learning her job.'

APPENDIX 7.

7.3 Multiple regression stepwise analysis of main questionnaire survey data (n=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for males and females (SPSS output)

Model Summary

male/female	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
no valid answer	1	.902 ^a	.814	.787	39.70395
male	1	.728 ^b	.530	.525	58.20079
	2	.811 ^c	.658	.650	49.96274
	3	.848 ^d	.719	.709	45.56247
	4	.858 ^e	.736	.724	44.38571
	5	.868 ^f	.750	.736	43.41118
female	1	.708 ^g	.501	.498	55.33728
	2	.754 ^h	.569	.564	51.59230
	3	.773 ^h	.597	.590	50.00500

- a. Predictors: (Constant), RANK of ORGANIZE
- b. Predictors: (Constant), RANK of THERAP
- c. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME
- d. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC
- e. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC, RANK of EXPECT
- f. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC, RANK of EXPECT, RANK of ORGANIZE
- g. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC
- h. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC, RANK of OUTCOME

ANOVA¹

male/female	Model		Sum of Squares	df	Mean Square	F	Sig.
no valid answer	1	Regression	75885.833	1	75885.833	48.139	.000 ^a
		Residual	17340.436	11	1576.403		
		Total	93226.269	12			
male	1	Regression	344207.22	1	344207.215	101.616	.000 ^b
		Residual	304859.90	90	3387.332		
		Total	649067.12	91			
	2	Regression	426898.80	2	213449.301	85.507	.000 ^c
		Residual	222168.52	89	2496.275		
		Total	649067.12	91			
	3	Regression	466384.54	3	155461.514	74.887	.000 ^d
		Residual	182682.58	88	2075.938		
		Total	649067.12	91			
	4	Regression	477669.19	4	119417.298	60.615	.000 ^e
		Residual	171397.93	87	1970.091		
		Total	649067.12	91			
	5	Regression	486997.50	5	97399.500	51.684	.000 ^f
		Residual	162069.82	86	1884.530		
		Total	649067.12	91			
female	1	Regression	522704.13	1	522704.130	170.695	.000 ^g
		Residual	520576.52	170	3062.215		
		Total	1043280.7	171			
	2	Regression	593442.26	2	296721.128	111.475	.000 ^h
		Residual	449638.39	169	2661.786		
		Total	1043280.7	171			
	3	Regression	623196.58	3	207732.188	83.076	.000 ^h
		Residual	420084.09	168	2500.501		
		Total	1043280.7	171			

- a. Predictors: (Constant), RANK of ORGANIZE
- b. Predictors: (Constant), RANK of THERAP
- c. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME
- d. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC
- e. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC, RANK of EXPECT
- f. Predictors: (Constant), RANK of THERAP, RANK of OUTCOME, RANK of COMMUNIC, RANK of EXPECT, RANK of ORGANIZE
- g. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC
- h. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC, RANK of OUTCOME
- l. Dependent Variable: RANK of SATISFAC

APPENDIX 7.

7.3 Multiple regression stepwise analysis of main questionnaire survey data (n=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for males and females (SPSS output) (cont.)

Coefficients (a)

male/female	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
no valid answer	1	(Constant)	3.508	23.710		.148	.885
		RANK of ORGANIZE	.838	.135	.902	6.938	.000
male	1	(Constant)	25.651	12.873		1.993	.049
		RANK of THERAP	.769	.076	.728	10.080	.000
	2	(Constant)	-14.814	13.098		-1.131	.261
		RANK of THERAP	.643	.069	.609	9.312	.000
		RANK of OUTCOME	.394	.068	.376	5.756	.000
	3	(Constant)	-29.966	12.439		-2.409	.018
		RANK of THERAP	.382	.067	.362	4.393	.000
		RANK of OUTCOME	.363	.063	.347	5.790	.000
	4	(Constant)	.402	.092	.357	4.361	.000
		(Constant)	-18.221	13.074		-1.394	.167
		RANK of THERAP	.393	.065	.373	4.640	.000
		RANK of OUTCOME	.400	.063	.382	6.347	.000
	5	RANK of COMMUNIC	.441	.091	.391	4.830	.000
		RANK of EXPECT	-.161	.067	-.146	-2.393	.019
		(Constant)	-20.404	12.825		-1.581	.115
RANK of ORGANIZE		.185	.063	.176	2.225	.029	
RANK of THERAP		.414	.063	.392	4.960	.000	
female	1	RANK of OUTCOME	.349	.066	.333	5.299	.000
		RANK of COMMUNIC	.307	.108	.272	2.848	.005
	RANK of EXPECT	-.161	.068	-.147	-2.457	.016	
	2	(Constant)	44.188	8.437		5.237	.000
		RANK of ORGANIZE	.689	.053	.708	13.065	.000
	3	(Constant)	32.659	8.178		3.994	.000
RANK of ORGANIZE		.426	.071	.437	6.000	.000	
RANK of COMMUNIC		.352	.068	.376	5.155	.000	
3	(Constant)	19.090	8.848		2.157	.032	
	RANK of ORGANIZE	.389	.070	.400	5.595	.000	
	RANK of OUTCOME	.184	.053	.187	3.450	.001	
	RANK of COMMUNIC	.307	.067	.328	4.551	.000	

a. Dependent variable: Rank of SATISFACTION

APPENDIX 7.

7.4 Multiple regression stepwise analysis of main questionnaire survey data (n=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for the acute and chronic groups (SPSS output)

Model Summary

acute/chronic	Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
acute	1	.736 ^a	.542	.539	53.72245
	2	.790 ^b	.624	.619	48.85561
	3	.818 ^c	.670	.662	45.97127
	4	.826 ^d	.682	.672	45.28792
chronic	1	.704 ^e	.496	.492	57.74728
	2	.753 ^f	.568	.561	53.68328
	3	.777 ^g	.604	.595	51.56602

- a. Predictors: (Constant), RANK of COMMUNIC
- b. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME
- c. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME, RANK of THERAP
- d. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME, RANK of THERAP, RANK of ORGANIZE
- e. Predictors: (Constant), RANK of ORGANIZE
- f. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC
- g. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC, RANK of OUTCOME

ANOVA^a

acute/chronic	Model		Sum of Squares	df	Mean Square	F	Sig.
acute	1	Regression	451167.78	1	451167.755	156.324	.000 ^a
		Residual	380965.45	132	2886.102		
		Total	832133.20	133			
	2	Regression	519453.18	2	259726.578	108.815	.000 ^b
		Residual	312680.05	131	2386.871		
		Total	832133.20	133			
	3	Regression	557396.70	3	185798.899	67.916	.000 ^c
		Residual	274736.51	130	2113.358		
		Total	832133.20	133			
	4	Regression	567554.73	4	141888.684	69.180	.000 ^d
		Residual	264578.47	129	2050.996		
		Total	832133.20	133			
chronic	1	Regression	462000.72	1	462000.724	138.541	.000 ^e
		Residual	470199.23	141	3334.748		
		Total	932199.95	142			
	2	Regression	529035.35	2	264517.676	81.854	.000 ^f
		Residual	403164.60	140	2879.747		
		Total	932199.95	142			
	3	Regression	562591.43	3	187530.477	70.525	.000 ^g
		Residual	369608.52	139	2659.054		
		Total	932199.95	142			

- a. Predictors: (Constant), RANK of COMMUNIC
- b. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME
- c. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME, RANK of THERAP
- d. Predictors: (Constant), RANK of COMMUNIC, RANK of OUTCOME, RANK of THERAP, RANK of ORGANIZE
- e. Predictors: (Constant), RANK of ORGANIZE
- f. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC
- g. Predictors: (Constant), RANK of ORGANIZE, RANK of COMMUNIC, RANK of OUTCOME
- h. Dependent Variable: RANK of SATISFAC

APPENDIX 7.

7.4 Multiple regression stepwise analysis of main questionnaire survey data (n=279) with satisfaction regressed on the 5 independent variables of the therapeutic encounter and outcome of care for the acute and chronic groups (SPSS output) (cont.)

Coefficients (a)

acute/chronic	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
			B	Std. Error	Beta			
acute	1	(Constant)	39.354	9.959		3.952	.000	
		RANK of COMMUNIC	.756	.060	.736	12.503	.000	
	2	(Constant)	7.565	10.832		.698	.488	
		RANK of COMMUNIC	.611	.061	.595	9.977	.000	
		RANK of OUTCOME	.320	.060	.319	5.349	.000	
	3	(Constant)	-.819	10.383		-.079	.937	
		RANK of COMMUNIC	.396	.077	.386	5.157	.000	
		RANK of OUTCOME	.264	.057	.283	4.991	.000	
		RANK of THERAP	.309	.073	.312	4.237	.000	
	4	(Constant)	-4.278	10.348		-.413	.680	
		RANK of COMMUNIC	.262	.067	.255	2.710	.008	
		RANK of OUTCOME	.248	.058	.248	4.261	.000	
		RANK of THERAP	.317	.072	.321	4.411	.000	
		RANK of ORGANIZE	.182	.062	.181	2.225	.028	
	chronic	1	(Constant)	39.070	9.222		4.237	.000
			RANK of ORGANIZE	.711	.060	.704	11.770	.000
2		(Constant)	22.307	9.247		2.412	.017	
		RANK of COMMUNIC	.337	.070	.346	4.825	.000	
		RANK of ORGANIZE	.490	.073	.485	6.752	.000	
3		(Constant)	5.778	10.031		.576	.566	
		RANK of COMMUNIC	.310	.068	.319	4.592	.000	
		RANK of OUTCOME	.217	.061	.199	3.552	.001	
		RANK of ORGANIZE	.452	.070	.447	6.411	.000	

a. Dependent variable: RANK of SATISFACTION

APPENDIX 7

7.5.1 Contingency table: Expected treatment to relieve my pain* Now completely free of pain (SPSS output)

Crosstabulation: Expected treatment to relieve my pain * Now completely pain free

acute/chronic		Now completely free of pain					Total
		strongly disagree	disagree	not sure	agree	strongly agree	
acute	Expected treatment to relieve pain	strongly disagree	Count 1 % within Expected treatment to relieve pain 16.7% % within Now completely free of pain 3.6%	Count 2 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 4.3%	Count 2 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 8.1%	Count 2 % within Expected treatment to relieve pain 16.7% % within Now completely free of pain 14.3%	Count 6 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 4.5%
		disagree	Count 1 % within Expected treatment to relieve pain 14.3% % within Now completely free of pain 2.6%	Count 2 % within Expected treatment to relieve pain 28.6% % within Now completely free of pain 4.3%	Count 2 % within Expected treatment to relieve pain 28.6% % within Now completely free of pain 11.1%	Count 2 % within Expected treatment to relieve pain 28.6% % within Now completely free of pain 8.1%	Count 7 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 8.3%
	not sure	Count 6 % within Expected treatment to relieve pain 24.0% % within Now completely free of pain 21.4%	Count 8 % within Expected treatment to relieve pain 36.0% % within Now completely free of pain 18.6%	Count 6 % within Expected treatment to relieve pain 24.0% % within Now completely free of pain 33.3%	Count 4 % within Expected treatment to relieve pain 16.0% % within Now completely free of pain 12.1%	Count 25 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 18.9%	
	agree	Count 13 % within Expected treatment to relieve pain 18.8% % within Now completely free of pain 46.4%	Count 23 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 80.0%	Count 9 % within Expected treatment to relieve pain 13.0% % within Now completely free of pain 80.0%	Count 22 % within Expected treatment to relieve pain 31.8% % within Now completely free of pain 86.7%	Count 2 % within Expected treatment to relieve pain 2.9% % within Now completely free of pain 28.6%	Count 69 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 82.3%
	strongly agree	Count 7 % within Expected treatment to relieve pain 28.0% % within Now completely free of pain 25.0%	Count 10 % within Expected treatment to relieve pain 40.0% % within Now completely free of pain 21.7%	Count 1 % within Expected treatment to relieve pain 4.0% % within Now completely free of pain 5.6%	Count 3 % within Expected treatment to relieve pain 12.0% % within Now completely free of pain 8.1%	Count 4 % within Expected treatment to relieve pain 16.0% % within Now completely free of pain 57.1%	Count 25 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 18.9%
	Total	Count 28 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 46 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 18 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 23 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 7 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 132 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%
chronic	Expected treatment to relieve pain	strongly disagree	Count 1 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 1.7%	Count 1 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 1.6%	Count 1 % within Expected treatment to relieve pain 33.3% % within Now completely free of pain 7.7%	Count 0 % within Expected treatment to relieve pain 0.0% % within Now completely free of pain 0.0%	Count 3 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 2.1%
		disagree	Count 6 % within Expected treatment to relieve pain 83.3% % within Now completely free of pain 8.6%	Count 1 % within Expected treatment to relieve pain 16.7% % within Now completely free of pain 1.6%	Count 0 % within Expected treatment to relieve pain 0.0% % within Now completely free of pain 0.0%	Count 0 % within Expected treatment to relieve pain 0.0% % within Now completely free of pain 0.0%	Count 7 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 4.2%
	not sure	Count 6 % within Expected treatment to relieve pain 40.0% % within Now completely free of pain 13.8%	Count 7 % within Expected treatment to relieve pain 35.0% % within Now completely free of pain 12.5%	Count 3 % within Expected treatment to relieve pain 15.0% % within Now completely free of pain 23.1%	Count 2 % within Expected treatment to relieve pain 10.0% % within Now completely free of pain 15.4%	Count 20 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 14.1%	
	agree	Count 21 % within Expected treatment to relieve pain 36.9% % within Now completely free of pain 83.4%	Count 39 % within Expected treatment to relieve pain 46.4% % within Now completely free of pain 89.5%	Count 8 % within Expected treatment to relieve pain 9.5% % within Now completely free of pain 61.5%	Count 6 % within Expected treatment to relieve pain 7.1% % within Now completely free of pain 46.2%	Count 0 % within Expected treatment to relieve pain 0.0% % within Now completely free of pain 0.0%	Count 84 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 59.2%
	strongly agree	Count 13 % within Expected treatment to relieve pain 44.8% % within Now completely free of pain 22.4%	Count 8 % within Expected treatment to relieve pain 27.8% % within Now completely free of pain 14.3%	Count 2 % within Expected treatment to relieve pain 6.9% % within Now completely free of pain 15.4%	Count 4 % within Expected treatment to relieve pain 13.8% % within Now completely free of pain 30.8%	Count 2 % within Expected treatment to relieve pain 6.9% % within Now completely free of pain 100.0%	Count 29 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 20.4%
	Total	Count 66 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 56 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 13 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 13 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 2 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%	Count 142 % within Expected treatment to relieve pain 100.0% % within Now completely free of pain 100.0%

Expected treatment to relieve my pain * Now completely pain free

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	20.330 ^a	16	.206
	Likelihood Ratio	20.946	16	.180
	Linear-by-Linear Association	.153	1	.686
	N of Valid Cases	132		
chronic	Pearson Chi-Square	19.191 ^b	16	.259
	Likelihood Ratio	17.857	16	.332
	Linear-by-Linear Association	.909	1	.318
	N of Valid Cases	142		

a. 15 cells (90.0%) have expected count less than 5. The minimum expected count is .32.

b. 17 cells (88.0%) have expected count less than 5. The minimum expected count is .04.

APPENDIX 7

7.5.2 Contingency table: Expected treatment to relieve my pain* Treatment helped in some ways (SPSS output)

Crosstabulation: Expected treatment to relieve my pain * Treatment helped in some ways

			Treatment helped in some ways					
			strongly agree	agree	not sure	disagree	strongly disagree	Total
acute	Expected treatment to relieve pain	strongly disagree	Count 1	Count 3	Count 4	Count 3	Count 1	Count 6
		% within Expected treatment to relieve pain	16.7%	60.0%	16.7%	16.7%	100.0%	
	disagree	Count	4	Count 4	Count 2	Count 1	Count 7	
		% within Expected treatment to relieve pain	4.0%	57.1%	28.6%	14.3%	100.0%	
	not sure	Count	4	Count 13	Count 4	Count 3	Count 24	
		% within Expected treatment to relieve pain	16.7%	84.2%	16.7%	12.0%	100.0%	
	agree	Count	11	Count 38	Count 3	Count 15	Count 67	
% within Expected treatment to relieve pain		16.7%	81.4%	4.3%	21.4%	100.0%		
strongly agree	Count	9	Count 6	Count 1	Count 8	Count 24		
	% within Expected treatment to relieve pain	36.0%	24.0%	4.0%	24.0%	100.0%		
Total			Count 25	Count 82	Count 8	Count 27	Count 10	
			% within Treatment helped in some ways	18.9%	47.0%	5.1%	20.9%	7.8%
			% within Treatment helped in some ways	100.0%	100.0%	100.0%	100.0%	100.0%
chronic	Expected treatment to relieve pain	strongly disagree	Count 1	Count 2	Count 1	Count 1	Count 3	
		% within Expected treatment to relieve pain	33.3%	66.7%			100.0%	
	disagree	Count	1	Count 4	Count 1	Count 1	Count 6	
		% within Expected treatment to relieve pain	16.7%	66.7%	16.7%	16.7%	100.0%	
	not sure	Count	1	Count 11	Count 2	Count 5	Count 20	
		% within Expected treatment to relieve pain	5.0%	55.0%	10.0%	25.0%	100.0%	
	agree	Count	12	Count 54	Count 8	Count 8	Count 82	
% within Expected treatment to relieve pain		14.3%	64.3%	7.1%	9.8%	100.0%		
strongly agree	Count	6	Count 14	Count 2	Count 3	Count 25		
	% within Expected treatment to relieve pain	17.2%	46.3%	8.9%	10.3%	100.0%		
Total			Count 20	Count 85	Count 10	Count 17	Count 142	
			% within Treatment helped in some ways	14.1%	59.9%	7.0%	12.0%	7.0%
			% within Treatment helped in some ways	100.0%	100.0%	100.0%	100.0%	100.0%

Expected treatment to relieve my pain * Treatment helped in some ways

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	19.659 ^a	16	.234
	Likelihood Ratio	21.784	16	.150
	Linear-by-Linear Association	.057	1	.811
	N of Valid Cases	132		
chronic	Pearson Chi-Square	13.801 ^b	16	.628
	Likelihood Ratio	13.581	16	.630
	Linear-by-Linear Association	.778	1	.378
	N of Valid Cases	142		

a. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .36.

b. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .21.

APPENDIX 7

7.5.3 Contingency table: Expected treatment to relieve my pain* Treatment helped but the effect did not last (SPSS output)

Crosstabulation: Expected the treatment to relieve my pain * Treatment helped but the effect did not last

acute/chronic		Treatment helped but effect did not last					Total		
		strongly agree	agree	not sure	disagree	strongly disagree			
acute	Expected treatment to relieve pain	strongly disagree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	1 16.7%	1 16.7%		3 30.0%	1 16.7%	6 100.0%
		disagree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last			2 28.6%	2 28.6%	3 42.9%	7 100.0%
	not sure	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	2 8.0%	5 20.0%	6 24.0%	11 44.0%	1 4.0%	25 100.0%	
	agree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	7 20.0%	18 15.6%	9 31.6%	27 22.6%	9 4.2%	70 18.8%	
	strongly agree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last		8 22.0%	2 8.0%	6 20.0%	10 40.0%	25 100.0%	
	Total	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	10 7.8%	32 24.1%	19 14.3%	48 36.1%	24 18.0%	133 100.0%	
chronic	Expected treatment to relieve pain	strongly disagree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last		2 86.7%			1 33.3%	3 100.0%
		disagree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	2 33.3%	2 33.3%	2 33.3%			6 100.0%
	not sure	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	3 15.0%	6 30.0%	4 20.0%	7 35.0%		20 100.0%	
	agree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	8 16.0%	41 82.0%	6 12.0%	24 48.0%	4 8.0%	84 100.0%	
	strongly agree	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	8 22.2%	9 25.0%	2 5.6%	2 5.6%	8 22.2%	27 77.8%	
	Total	Count % within Expected treatment to relieve pain % within Treatment helped but did not last	20 14.3%	60 42.9%	14 10.0%	23 16.5%	13 9.3%	140 100.0%	

Expected treatment to relieve my pain * Treatment helped but the effect did not last

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	26.306 ^a	16	.050
	Likelihood Ratio	29.894	16	.018
	Linear-by-Linear Association	.013	1	.908
	N of Valid Cases	133		
chronic	Pearson Chi-Square	38.178 ^b	16	.001
	Likelihood Ratio	37.468	16	.002
	Linear-by-Linear Association	.662	1	.416
	N of Valid Cases	140		

- a. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .45.
- b. 17 cells (88.0%) have expected count less than 5. The minimum expected count is .28.

APPENDIX 7

7.5.4 Contingency table: Expected treatment to relieve my pain* Treatment has not helped at all (SPSS output)

Crosstabulation: Expected the treatment to relieve my pain * Treatment has not helped at all

acute/chronic		Treatment has not helped at all					Total		
		strongly agree	agree	not sure	disagree	strongly disagree			
acute	Expected treatment to relieve pain	strongly disagree	Count				3	3	6
			% within Expected treatment to relieve pain				80.0%	80.0%	100.0%
		% within Treatment has not helped at all				8.6%	6.1%	4.6%	
	disagree	Count			2	4	1	7	
		% within Expected treatment to relieve pain			28.6%	57.1%	14.3%	100.0%	
		% within Treatment has not helped at all			14.3%	7.9%	2.0%	5.3%	
	not sure	Count	1	1	6	9	8	25	
	% within Expected treatment to relieve pain	4.0%	4.0%	24.0%	36.0%	32.0%	100.0%		
	% within Treatment has not helped at all	16.7%	14.3%	42.9%	16.4%	16.3%	18.1%		
agree	Count	4	4	4	35	20	65		
	% within Expected treatment to relieve pain	6.9%	6.9%	6.9%	62.9%	29.4%	100.0%		
	% within Treatment has not helped at all	66.7%	57.1%	28.6%	65.5%	40.5%	51.9%		
strongly agree	Count	1	2	2	3	17	25		
	% within Expected treatment to relieve pain	4.0%	8.0%	6.0%	12.0%	65.0%	100.0%		
	% within Treatment has not helped at all	16.7%	28.6%	14.3%	8.6%	34.7%	18.1%		
Total		Count	6	7	14	55	49	131	
		% within Expected treatment to relieve pain	4.6%	8.3%	10.7%	42.0%	37.4%	100.0%	
		% within Treatment has not helped at all	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
chronic	Expected treatment to relieve pain	strongly disagree	Count			1	1	1	3
			% within Expected treatment to relieve pain				33.3%	33.3%	100.0%
		% within Treatment has not helped at all				4.3%	1.6%	3.3%	
	disagree	Count		4		2		6	
		% within Expected treatment to relieve pain		66.7%		33.3%		100.0%	
		% within Treatment has not helped at all		22.2%		3.1%		4.3%	
	not sure	Count	1	1	6	10	3	20	
	% within Expected treatment to relieve pain	6.0%	6.0%	26.0%	50.0%	16.0%	100.0%		
	% within Treatment has not helped at all	16.7%	6.9%	21.7%	15.6%	10.0%	14.2%		
agree	Count	2	7	19	43	15	83		
	% within Expected treatment to relieve pain	2.4%	6.4%	19.3%	51.8%	18.1%	100.0%		
	% within Treatment has not helped at all	33.3%	38.6%	66.6%	67.2%	60.0%	58.9%		
strongly agree	Count	3	5	1	6	11	29		
	% within Expected treatment to relieve pain	10.3%	20.7%	3.4%	27.6%	37.9%	100.0%		
	% within Treatment has not helped at all	50.0%	33.3%	4.3%	12.5%	36.7%	20.6%		
Total		Count	6	16	23	64	30	141	
		% within Expected treatment to relieve pain	4.3%	12.8%	16.3%	46.4%	21.3%	100.0%	
		% within Treatment has not helped at all	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Expected treatment to relieve my pain * Treatment has not helped at all

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	27.404 ^a	16	.037
	Likelihood Ratio	26.923	16	.024
	Linear-by-Linear Association	.162	1	.688
	N of Valid Cases	131		
chronic	Pearson Chi-Square	36.249 ^b	16	.003
	Likelihood Ratio	32.763	16	.008
	Linear-by-Linear Association	.554	1	.457
	N of Valid Cases	141		

a. 16 cells (72.0%) have expected count less than 5. The minimum expected count is .27.

b. 16 cells (72.0%) have expected count less than 5. The minimum expected count is .13.

APPENDIX 7

7.5.5 Contingency table: Expected treatment to cure my problem* Made a full recovery (SPSS output)

Crosstabulation: Expected treatment to cure my problem * Made a full recovery

acute/chronic		Made a full recovery					Total	
		strongly disagree	disagree	not sure	agree	strongly agree		
acute	Expected treatment to cure problem	strongly disagree	Count 2	Count 0	Count 1	Count 1	Count 2	Count 6
		% within Expected treatment to cure problem	33.3%		16.7%	16.7%	33.3%	100.0%
		% within Made a full recovery	10.0%		3.4%	2.8%	11.8%	4.8%
	disagree	Count	1	8	6	2	3	20
		% within Expected treatment to cure problem	5.0%	40.0%	30.0%	10.0%	15.0%	100.0%
		% within Made a full recovery	5.0%	26.7%	20.7%	5.6%	17.6%	18.2%
	not sure	Count	4	6	14	5	1	30
% within Expected treatment to cure problem		13.3%	20.0%	46.7%	16.7%	3.3%	100.0%	
	% within Made a full recovery	20.0%	20.0%	48.3%	13.0%	3.9%	22.7%	
agree	Count	6	14	7	24	4	55	
	% within Expected treatment to cure problem	10.0%	25.5%	12.7%	43.6%	7.3%	100.0%	
	% within Made a full recovery	30.0%	46.7%	24.1%	66.7%	23.6%	41.7%	
strongly agree	Count	7	2	1	4	7	21	
	% within Expected treatment to cure problem	33.3%	9.5%	4.8%	18.0%	33.3%	100.0%	
	% within Made a full recovery	35.0%	6.7%	3.4%	11.1%	41.2%	15.9%	
Total		Count	20	30	28	38	17	132
		% within Expected treatment to cure problem	15.2%	22.7%	22.0%	27.3%	12.8%	100.0%
		% within Made a full recovery	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
chronic	Expected treatment to cure problem	strongly disagree	Count 4	Count 2	Count 0	Count 1	Count 0	Count 7
		% within Expected treatment to cure problem	57.1%	28.6%		14.3%		100.0%
		% within Made a full recovery	11.8%	3.3%		6.7%		5.0%
	disagree	Count	4	25		1		30
		% within Expected treatment to cure problem	13.3%	83.3%		3.3%		100.0%
		% within Made a full recovery	11.8%	41.0%		6.7%		21.5%
	not sure	Count	10	16	10	3	1	40
% within Expected treatment to cure problem		25.0%	40.0%	25.0%	7.5%	2.5%	100.0%	
	% within Made a full recovery	29.4%	26.2%	45.5%	20.0%	11.1%	28.4%	
agree	Count	8	16	10	8	3	45	
	% within Expected treatment to cure problem	19.8%	34.8%	21.7%	17.4%	6.8%	100.0%	
	% within Made a full recovery	26.5%	28.2%	45.5%	53.5%	33.5%	32.6%	
strongly agree	Count	7	2	2	2	5	18	
	% within Expected treatment to cure problem	38.9%	11.1%	11.1%	11.1%	27.8%	100.0%	
	% within Made a full recovery	20.8%	3.3%	9.1%	13.3%	53.6%	12.8%	
Total		Count	34	61	22	15	9	141
		% within Expected treatment to cure problem	34.1%	43.3%	18.8%	10.8%	6.4%	100.0%
		% within Made a full recovery	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Expected treatment to cure my problem * Made a full recovery

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	48.700 ^a	16	.000
	Likelihood Ratio	48.318	16	.000
	Linear-by-Linear Association	.405	1	.524
	N of Valid Cases	132		
chronic	Pearson Chi-Square	52.832 ^b	16	.000
	Likelihood Ratio	53.578	16	.000
	Linear-by-Linear Association	10.598	1	.001
	N of Valid Cases	141		

a. 15 cells (80.0%) have expected count less than 5. The minimum expected count is .77.

b. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .45.

APPENDIX 7

7.5.6 Contingency table: Expected treatment to cure my problem* Now completely free of pain (SPSS output)

Crosstabulation: Expected treatment to cure my problem * Now completely pain free

			Now completely free of pain						
			strongly disagree	disagree	not sure	agree	strongly agree	Total	
acute/chronic	acute	strongly disagree	Count	8	2			1	6
			% within Expected treatment to cure problem	80.0%	20.0%			16.7%	100.0%
		% within Now completely free of pain	10.7%	4.3%			14.3%	4.8%	
		disagree	Count	2	10	3	3	2	20
		% within Expected treatment to cure problem	10.0%	60.0%	15.0%	15.0%	10.0%	100.0%	
	% within Now completely free of pain	7.1%	21.7%	17.8%	8.8%	28.6%	16.2%		
	not sure	Count	6	13	9	2		30	
	% within Expected treatment to cure problem	20.0%	43.3%	30.0%	6.7%		100.0%		
	% within Now completely free of pain	21.4%	28.3%	32.8%	5.9%		22.7%		
	agree	Count	10	16	3	28	1	58	
% within Expected treatment to cure problem	18.2%	27.3%	5.8%	47.3%	1.6%	100.0%			
% within Now completely free of pain	35.7%	32.6%	17.8%	76.9%	14.3%	41.7%			
strongly agree	Count	7	6	2	3	3	21		
% within Expected treatment to cure problem	33.3%	28.6%	8.8%	14.3%	14.3%	100.0%			
% within Now completely free of pain	25.0%	13.0%	11.8%	8.8%	42.9%	18.8%			
Total	Count	28	48	17	34	7	132		
% within Expected treatment to cure problem	21.2%	34.8%	12.8%	25.8%	5.3%	100.0%			
% within Now completely free of pain	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
chronic	acute	strongly disagree	Count	5	2				7
			% within Expected treatment to cure problem	71.4%	28.6%				100.0%
		% within Now completely free of pain	8.6%	3.9%				4.8%	
		disagree	Count	12	17		1		30
		% within Expected treatment to cure problem	40.0%	68.7%		3.3%		100.0%	
	% within Now completely free of pain	20.7%	29.6%		7.7%		21.1%		
	not sure	Count	17	16	6	3		41	
	% within Expected treatment to cure problem	41.5%	36.6%	14.6%	7.3%		100.0%		
	% within Now completely free of pain	29.3%	28.3%	30.0%	23.1%		26.9%		
	agree	Count	14	19	5	7	1	46	
% within Expected treatment to cure problem	30.4%	41.3%	10.9%	16.2%	2.2%	100.0%			
% within Now completely free of pain	24.1%	33.3%	41.7%	33.6%	30.0%	32.4%			
strongly agree	Count	10	4	1	2	1	18		
% within Expected treatment to cure problem	55.6%	22.2%	5.8%	11.1%	5.6%	100.0%			
% within Now completely free of pain	17.2%	7.0%	6.3%	15.4%	30.0%	12.7%			
Total	Count	58	57	12	13	2	142		
% within Expected treatment to cure problem	40.8%	40.1%	8.8%	9.2%	1.4%	100.0%			
% within Now completely free of pain	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

Expected treatment to cure my problem * Now completely pain free

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	44.521 ^a	16	.000
	Likelihood Ratio	45.441	16	.000
	Linear-by-Linear Association	1.207	1	.272
	N of Valid Cases	132		
chronic	Pearson Chi-Square	20.437 ^b	16	.201
	Likelihood Ratio	23.862	16	.063
	Linear-by-Linear Association	4.722	1	.030
	N of Valid Cases	142		

a. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .22.

b. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .10.

APPENDIX 7

7.5.7 Contingency table: Expected treatment to cure my problem* Regained full mobility (SPSS output)

Crosstabulation: Expected treatment to cure my problem * Regained full mobility

acute/chronic		Expected treatment to cure problem		Regained full mobility					Total
				strongly disagree	disagree	not sure	agree	strongly agree	
acute	strongly disagree	Count	1	3			2	6	
		% within Expected treatment to cure problem	16.7%	80.0%			33.3%	100.0%	
	% within Regained full mobility	5.9%	7.9%			10.5%	4.5%		
	disagree	Count	2	5	8	4	3	20	
		% within Expected treatment to cure problem	10.0%	25.0%	30.0%	20.0%	15.0%	100.0%	
	% within Regained full mobility	11.8%	12.8%	25.1%	11.8%	15.8%	15.0%		
not sure	Count	3	10	11	5	1	30		
	% within Expected treatment to cure problem	10.0%	33.3%	36.7%	16.7%	3.3%	100.0%		
% within Regained full mobility	17.6%	25.0%	47.6%	14.7%	5.3%	22.8%			
agree	Count	5	19	4	21	7	56		
	% within Expected treatment to cure problem	8.9%	33.9%	7.1%	37.9%	12.9%	100.0%		
% within Regained full mobility	28.4%	47.5%	17.4%	61.8%	36.8%	42.1%			
strongly agree	Count	6	3	2	4	6	21		
	% within Expected treatment to cure problem	26.8%	14.3%	8.8%	19.0%	26.8%	100.0%		
% within Regained full mobility	35.3%	7.5%	8.7%	11.8%	31.6%	15.8%			
Total		Count	17	40	28	34	19	133	
		% within Expected treatment to cure problem	12.8%	30.1%	17.8%	25.8%	14.3%	100.0%	
		% within Regained full mobility	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
chronic	strongly disagree	Count	4	1	1	1		7	
		% within Expected treatment to cure problem	67.1%	14.3%	14.3%	14.3%		100.0%	
	% within Regained full mobility	11.4%	1.9%	5.3%	3.7%		5.0%		
	disagree	Count	7	16	1	5	1	30	
		% within Expected treatment to cure problem	23.3%	63.5%	3.3%	16.7%	3.3%	100.0%	
	% within Regained full mobility	20.0%	30.2%	5.3%	18.8%	14.3%	21.3%		
not sure	Count	10	14	12	3	2	41		
	% within Expected treatment to cure problem	34.4%	34.1%	29.3%	7.3%	4.9%	100.0%		
% within Regained full mobility	28.6%	28.4%	63.2%	11.1%	28.6%	28.1%			
agree	Count	7	16	5	18	2	46		
	% within Expected treatment to cure problem	15.8%	35.6%	11.1%	33.3%	4.4%	100.0%		
% within Regained full mobility	20.0%	30.2%	28.2%	55.6%	28.6%	31.9%			
strongly agree	Count	7	6		3	2	18		
	% within Expected treatment to cure problem	26.9%	23.5%		16.7%	11.1%	100.0%		
% within Regained full mobility	20.0%	11.3%		11.1%	28.6%	12.8%			
Total		Count	35	53	19	27	7	141	
		% within Expected treatment to cure problem	24.8%	37.6%	13.6%	19.1%	5.0%	100.0%	
		% within Regained full mobility	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Expected treatment to cure my problem * Regained full mobility

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	35.042 ^a	16	.004
	Likelihood Ratio	35.617	16	.003
	Linear-by-Linear Association	.400	1	.527
	N of Valid Cases	133		
chronic	Pearson Chi-Square	31.587 ^b	16	.011
	Likelihood Ratio	32.518	16	.009
	Linear-by-Linear Association	2.339	1	.125
	N of Valid Cases	141		

a. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .77.

b. 13 cells (52.0%) have expected count less than 5. The minimum expected count is .35.

APPENDIX 7

7.5.8 Contingency table: Expected treatment to get me better * Made a full recovery (SPSS output)

Crosstabulation: Expected treatment to get me better * Made a full recovery

				Made a full recovery						
				strongly disagree	disagree	not sure	agree	strongly agree	Total	
acute/chronic	acute	Expected treatment to get me better	strongly disagree	Count	1				1	2
			% within Expected treatment to get me better	80.0%				80.0%	100.0%	
			% within Made a full recovery	5.0%				5.9%	1.5%	
			disagree	Count	1	3	1	1		6
			% within Expected treatment to get me better	16.7%	80.0%	16.7%	16.7%		100.0%	
			% within Made a full recovery	5.0%	10.5%	3.3%	2.9%		4.8%	
			not sure	Count	4	4	11	1		20
% within Expected treatment to get me better	20.0%	20.0%	88.0%	5.0%		100.0%				
% within Made a full recovery	20.0%	13.8%	36.7%	2.9%		15.2%				
agree	Count	7	18	15	38	2	73			
% within Expected treatment to get me better	8.6%	25.0%	20.0%	41.1%	2.7%	100.0%				
% within Made a full recovery	25.0%	65.9%	50.0%	63.5%	11.8%	65.3%				
strongly agree	Count	7	3	3	4	14	31			
% within Expected treatment to get me better	22.9%	9.7%	6.7%	12.9%	45.2%	100.0%				
% within Made a full recovery	25.0%	10.5%	10.0%	11.1%	32.4%	23.5%				
Total	Count	20	29	30	38	17	132			
% within Expected treatment to get me better	15.2%	22.0%	22.7%	27.3%	12.9%	100.0%				
% within Made a full recovery	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
chronic	chronic	Expected treatment to get me better	strongly disagree	Count	2	2				4
			% within Expected treatment to get me better	80.0%	80.0%				100.0%	
			% within Made a full recovery	5.9%	3.3%				2.8%	
			disagree	Count	7	11	1			19
			% within Expected treatment to get me better	35.0%	87.9%	5.3%			100.0%	
			% within Made a full recovery	20.8%	18.0%	4.3%			13.4%	
			not sure	Count	8	15	8	2	1	34
% within Expected treatment to get me better	23.8%	44.1%	23.8%	5.9%	2.9%	100.0%				
% within Made a full recovery	23.8%	24.6%	24.8%	13.5%	11.1%	23.9%				
agree	Count	12	32	11	10	2	67			
% within Expected treatment to get me better	17.9%	47.8%	16.4%	14.9%	3.0%	100.0%				
% within Made a full recovery	35.3%	82.9%	47.9%	68.7%	22.2%	47.2%				
strongly agree	Count	5	1	3	3	6	18			
% within Expected treatment to get me better	27.8%	5.6%	16.7%	16.7%	33.3%	100.0%				
% within Made a full recovery	14.7%	1.6%	13.0%	20.0%	66.7%	12.7%				
Total	Count	34	61	23	15	8	142			
% within Expected treatment to get me better	23.8%	43.0%	16.2%	10.8%	6.3%	100.0%				
% within Made a full recovery	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				

Expected treatment to get me better * Made a full recovery

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	70.328 ^a	16	.000
	Likelihood Ratio	65.249	16	.000
	Linear-by-Linear Association	7.700	1	.008
	N of Valid Cases	132		
	chronic	Pearson Chi-Square	42.972 ^b	16
Likelihood Ratio		40.757	16	.001
Linear-by-Linear Association		17.081	1	.000
N of Valid Cases		142		

- a. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .28.
- b. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .25.

APPENDIX 7

7.5.9 Contingency table: Expected treatment to get me better * Now completely free of pain (SPSS output)

Crosstabulation: Expected treatment to get me better * Now completely free of pain

			Now completely free of pain						
			strongly disagree	disagree	not sure	agree	strongly agree	Total	
acute/chronic	acute	Expected treatment to get me better	Count	1				1	2
		% within Expected treatment to get me better	80.0%				80.0%	100.0%	
		% within Now completely free of pain	3.7%				14.9%	1.8%	
		Count	2	3	1			6	
		% within Expected treatment to get me better	33.3%	80.0%	16.7%			100.0%	
		% within Now completely free of pain	7.4%	8.9%	5.0%			4.9%	
		Count	8	7	5	2		20	
	% within Expected treatment to get me better	30.0%	35.0%	25.0%	10.0%		100.0%		
	% within Now completely free of pain	22.2%	15.2%	27.8%	8.9%		15.2%		
	Count	12	25	10	23	2	72		
	% within Expected treatment to get me better	16.7%	34.7%	13.9%	31.9%	2.8%	100.0%		
	% within Now completely free of pain	44.4%	34.3%	35.8%	67.8%	28.6%	84.2%		
	Count	6	11	2	9	4	32		
	% within Expected treatment to get me better	18.8%	34.4%	6.3%	28.1%	12.8%	100.0%		
	% within Now completely free of pain	22.2%	23.9%	11.1%	28.6%	67.1%	34.2%		
	Count	27	48	18	34	7	132		
	% within Expected treatment to get me better	20.8%	34.8%	13.8%	25.8%	5.3%	100.0%		
	% within Now completely free of pain	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
chronic	chronic	Expected treatment to get me better	Count	3	1				4
		% within Expected treatment to get me better	75.0%	25.0%				100.0%	
		% within Now completely free of pain	5.2%	1.8%				2.8%	
		Count	8	8		2		18	
		% within Expected treatment to get me better	47.4%	42.1%		10.8%		100.0%	
		% within Now completely free of pain	15.5%	14.0%		15.4%		13.3%	
		Count	18	13	4	1		34	
	% within Expected treatment to get me better	47.1%	38.2%	11.8%	2.8%		100.0%		
	% within Now completely free of pain	27.8%	22.8%	30.8%	7.7%		23.8%		
	Count	23	30	8	6	1	68		
	% within Expected treatment to get me better	33.8%	44.1%	11.8%	8.8%	1.8%	100.0%		
	% within Now completely free of pain	36.7%	32.0%	61.5%	46.2%	80.0%	47.8%		
	Count	7	5	1	4	1	18		
	% within Expected treatment to get me better	35.9%	27.8%	5.0%	22.2%	5.0%	100.0%		
	% within Now completely free of pain	12.1%	8.8%	7.7%	30.8%	80.0%	12.8%		
	Count	68	57	13	13	2	143		
	% within Expected treatment to get me better	40.8%	38.8%	8.1%	8.1%	1.4%	100.0%		
	% within Now completely free of pain	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

Expected treatment to get me better * Now completely free of pain

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	25.400 ^a	16	.063
	Likelihood Ratio	24.282	16	.063
	Linear-by-Linear Association	3.063	1	.086
	N of Valid Cases	132		
chronic	Pearson Chi-Square	15.158 ^b	16	.513
	Likelihood Ratio	16.818	16	.307
	Linear-by-Linear Association	5.963	1	.015
	N of Valid Cases	143		

a. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .11.

b. 15 cells (80.0%) have expected count less than 5. The minimum expected count is .08.

APPENDIX 7

7.5.10 Contingency table: Expected treatment to get me better * Regained full mobility (SPSS output)

Crosstabulation: Expected treatment to get me better * Regained full mobility

acute/chronic				Regained full mobility					Total
Expected treatment to get me better				strongly disagree	disagree	not sure	agree	strongly agree	
acute	strongly disagree	Count	1					1	2
		% within Expected treatment to get me better	80.0%					80.0%	100.0%
		Count	1	2	2			1	6
	% within Expected treatment to get me better	16.7%	33.3%	33.3%			16.7%	100.0%	
	% within Regained full mobility	6.3%	4.8%	8.7%			5.3%	4.9%	
	disagree	Count	3	7	7	3			20
% within Expected treatment to get me better	15.0%	35.0%	35.0%	15.0%				100.0%	
% within Regained full mobility	18.8%	17.1%	30.4%	8.6%				15.0%	
agree	Count	7	25	10	23			73	
% within Expected treatment to get me better	9.8%	34.2%	13.7%	31.5%			11.0%	100.0%	
% within Regained full mobility	43.8%	61.0%	43.8%	57.8%			42.1%	54.8%	
strongly agree	Count	4	7	4	8			23	
% within Expected treatment to get me better	12.9%	21.9%	12.9%	25.0%			28.1%	100.0%	
% within Regained full mobility	25.0%	17.1%	17.4%	23.5%			47.4%	24.1%	
Total	Count	18	41	23	34			116	
% within Expected treatment to get me better	12.0%	30.8%	17.5%	25.6%			14.3%	100.0%	
% within Regained full mobility	100.0%	100.0%	100.0%	100.0%			100.0%	100.0%	
chronic	strongly disagree	Count	1	2	1			4	
		% within Expected treatment to get me better	25.0%	80.0%	25.0%			100.0%	
	% within Regained full mobility	2.9%	3.8%	5.0%			2.8%		
	disagree	Count	5	9	2	2		18	
	% within Expected treatment to get me better	27.8%	80.0%	11.1%	11.1%			100.0%	
	% within Regained full mobility	14.3%	17.0%	10.0%	7.4%			12.7%	
not sure	Count	10	11	9	3	1	34		
% within Expected treatment to get me better	29.4%	32.4%	26.5%	8.8%	2.9%		100.0%		
% within Regained full mobility	28.6%	20.8%	45.0%	11.1%	14.3%		23.9%		
agree	Count	13	28	8	18	3	68		
% within Expected treatment to get me better	19.1%	41.2%	11.8%	23.5%	4.4%		100.0%		
% within Regained full mobility	37.1%	62.8%	40.0%	56.3%	42.9%		47.9%		
strongly agree	Count	8	3		8	3	18		
% within Expected treatment to get me better	33.3%	16.7%		33.3%	16.7%		100.0%		
% within Regained full mobility	17.1%	8.7%		22.2%	42.9%		12.7%		
Total	Count	35	63	20	27	7	142		
% within Expected treatment to get me better	34.8%	37.3%	14.1%	19.0%	4.9%		100.0%		
% within Regained full mobility	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%		

Expected treatment to get me better * Regained full mobility

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	24.157 ^a	16	.066
	Likelihood Ratio	26.567	16	.047
	Linear-by-Linear Association	4.078	1	.043
	N of Valid Cases	133		
chronic	Pearson Chi-Square	24.533 ^b	16	.078
	Likelihood Ratio	26.812	16	.044
	Linear-by-Linear Association	5.501	1	.019
	N of Valid Cases	142		

a. 15 cells (80.0%) have expected count less than 5. The minimum expected count is .24.

b. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .20.

APPENDIX 7

7.5.11 Contingency table: Did not think treatment would help * Treatment has helped in some ways but not completely better (SPSS output)

Crosstabulation: Did not think treatment would help * Treatment has helped in some ways but not completely better

acute/chronic			Treatment helped in some ways					
			strongly agree	agree	not sure	disagree	strongly disagree	Total
acute	Did not think treatment would help	strongly agree	Count 2 86.7% 8.0%				1 33.3% 9.7%	3 100.0% 2.3%
		agree	Count 4 30.8% 16.0%	7 53.8% 11.8%		2 15.4% 7.1%		13 100.0% 9.8%
	not sure	Count 17 77.8% 27.8%	2 9.1% 25.0%	2 9.1% 25.0%	2 4.8% 7.1%	1 4.8% 9.7%	22 100.0% 16.8%	
		disagree	Count 12 17.9% 48.0%	30 44.8% 48.2%	4 8.0% 50.0%	16 23.8% 57.1%	5 7.9% 45.9%	67 100.0% 80.4%
	strongly disagree	Count 7 25.0% 28.0%	7 25.0% 11.8%	2 7.1% 25.0%	8 28.6% 28.6%	4 14.3% 36.4%	28 100.0% 21.1%	
		Total	Count 25 18.8% 100.0%	61 46.9% 100.0%	8 6.0% 100.0%	28 21.1% 100.0%	11 8.3% 100.0%	133 100.0% 100.0%
chronic	Did not think treatment would help	strongly agree	Count 1 80.0% 5.0%				1 50.0% 10.0%	2 100.0% 1.4%
		agree	Count 1 7.7% 5.0%	7 53.8% 8.3%	1 7.7% 11.1%	2 15.4% 11.1%	2 15.4% 20.0%	13 100.0% 9.2%
	not sure	Count 3 8.9% 15.0%	24 66.7% 38.8%	2 5.6% 22.2%	6 16.7% 33.3%	1 2.8% 10.0%	36 100.0% 25.8%	
		disagree	Count 10 14.9% 50.0%	43 64.2% 61.2%	3 4.5% 33.3%	8 11.9% 44.4%	3 4.8% 30.0%	67 100.0% 47.8%
	strongly disagree	Count 5 21.7% 25.0%	10 43.9% 11.8%	3 13.0% 33.3%	2 8.7% 11.1%	8 13.0% 30.0%	23 100.0% 16.3%	
		Total	Count 20 14.2% 100.0%	84 68.8% 100.0%	9 6.4% 100.0%	16 12.8% 100.0%	30 7.7% 100.0%	141 100.0% 100.0%

Did not think treatment would help * Treatment has helped in some ways but not completely better

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	28.048 ^a	16	.031
	Likelihood Ratio	33.405	16	.007
	Linear-by-Linear Association	3.741	1	.053
	N of Valid Cases	133		
chronic	Pearson Chi-Square	19.282 ^b	16	.254
	Likelihood Ratio	16.824	16	.397
	Linear-by-Linear Association	.944	1	.331
	N of Valid Cases	141		

a. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .18.

b. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .13.

APPENDIX 7

7.5.12 Contingency table: Did not think treatment would help * Treatment helped but the effect did not last (SPSS output)

Crosstabulation: Did not think treatment would help * Treatment helped but the effect did not last

acute/chronic				Treatment helped but the effect did not last					Total
				strongly agree	agree	not sure	disagree	strongly disagree	
acute	Did not think treatment would help	strongly agree	Count % within Did not think treatment would help % within Treatment helped but did not last			1 33.3%		2 88.7%	3 100.0%
		agree	Count % within Did not think treatment would help % within Treatment helped but did not last	4 30.8%	6 48.2%		2 15.4%	1 7.7%	13 100.0%
	not sure	Count % within Did not think treatment would help % within Treatment helped but did not last		8 38.4%	4 18.2%	9 40.9%	1 4.5%	22 100.0%	
		disagree	Count % within Did not think treatment would help % within Treatment helped but did not last	3 4.4%	12 17.8%	13 18.1%	30 44.1%	10 14.7%	68 100.0%
	strongly disagree	Count % within Did not think treatment would help % within Treatment helped but did not last	2 7.1%	6 21.4%	1 3.6%	7 25.0%	12 42.9%	28 100.0%	
		Total	Count % within Did not think treatment would help % within Treatment helped but did not last	9 8.7%	32 29.9%	18 14.2%	48 36.8%	28 19.4%	134 100.0%
	chronic	Did not think treatment would help	strongly agree	Count % within Did not think treatment would help % within Treatment helped but did not last	1 30.0%				1 80.0%
agree			Count % within Did not think treatment would help % within Treatment helped but did not last		9 69.2%	2 15.4%	1 7.7%	1 7.7%	13 100.0%
not sure		Count % within Did not think treatment would help % within Treatment helped but did not last	7 18.4%	18 44.4%	4 11.1%	9 25.0%		38 100.0%	
		disagree	Count % within Did not think treatment would help % within Treatment helped but did not last	9 13.8%	27 40.9%	8 8.1%	18 27.9%	6 8.1%	68 100.0%
strongly disagree		Count % within Did not think treatment would help % within Treatment helped but did not last	3 18.8%	7 31.8%	2 8.1%	5 22.7%	5 22.7%	22 100.0%	
		Total	Count % within Did not think treatment would help % within Treatment helped but did not last	20 14.4%	69 48.4%	14 10.1%	33 23.7%	13 8.4%	139 100.0%

Did not think treatment would help * Treatment helped but the effect did not last

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	46.270 ^a	16	.000
	Likelihood Ratio	44.820	16	.000
	Linear-by-Linear Association	7.298	1	.007
	N of Valid Cases	134		
chronic	Pearson Chi-Square	22.115 ^b	16	.140
	Likelihood Ratio	25.244	16	.088
	Linear-by-Linear Association	2.727	1	.099
	N of Valid Cases	139		

a. 16 cells (84.0%) have expected count less than 5. The minimum expected count is .20.

b. 14 cells (56.0%) have expected count less than 5. The minimum expected count is .19.

APPENDIX 7

7.5.13 Contingency table: Did not think treatment would help * Treatment has not helped me at all (SPSS output)

Crosstabulation: Did not think treatment would help * Treatment has not helped me at all

acute/chronic				Treatment has not helped at all						
				strongly agree	agree	not sure	disagree	strongly disagree	Total	
acute	Did not think treatment would help	strongly agree	Count					3	3	
			% within Did not think treatment would help					100.0%	100.0%	
			% within Treatment has not helped at all					6.0%	2.3%	
		agree	Count	2	1	2	4	2	11	
			% within Did not think treatment would help	18.2%	8.1%	18.2%	36.4%	18.2%	100.0%	
			% within Treatment has not helped at all	33.3%	14.9%	14.3%	7.3%	4.0%	8.3%	
	not sure	Count		3	5	9	5	22		
	% within Did not think treatment would help			18.8%	22.7%	40.9%	22.7%	100.0%		
	% within Treatment has not helped at all			42.9%	35.7%	16.4%	10.0%	16.7%		
	disagree	Count	3	3	6	34	22	68		
	% within Did not think treatment would help			4.4%	4.4%	8.8%	80.0%	32.4%	100.0%	
	% within Treatment has not helped at all			50.0%	42.9%	42.6%	61.6%	44.0%	81.3%	
	strongly disagree	Count	1		1	6	18	26		
	% within Did not think treatment would help			3.6%		3.6%	28.6%	84.3%	100.0%	
	% within Treatment has not helped at all			16.7%		7.1%	14.6%	36.0%	21.2%	
	Total	Count	6	7	14	55	50	132		
	% within Did not think treatment would help			4.6%	5.3%	10.6%	41.7%	37.6%	100.0%	
	% within Treatment has not helped at all			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
chronic	Did not think treatment would help	strongly agree	Count		1			1	2	
			% within Did not think treatment would help			80.0%			80.0%	100.0%
			% within Treatment has not helped at all			5.6%			3.3%	1.4%
		agree	Count		4	3	4	1	12	
			% within Did not think treatment would help			33.3%	25.0%	33.3%	8.3%	100.0%
			% within Treatment has not helped at all			22.2%	15.0%	6.6%	3.3%	8.6%
	not sure	Count	2	6	11	11	6	36		
	% within Did not think treatment would help			5.6%	16.7%	30.6%	30.6%	16.7%	100.0%	
	% within Treatment has not helped at all			26.6%	33.3%	47.6%	17.7%	20.0%	25.7%	
	disagree	Count	3	8	9	40	9	67		
	% within Did not think treatment would help			4.8%	8.0%	13.4%	88.7%	13.4%	100.0%	
	% within Treatment has not helped at all			42.9%	33.3%	36.1%	64.6%	30.0%	47.9%	
	strongly disagree	Count	2	1		7	13	23		
	% within Did not think treatment would help			6.7%	4.3%		30.4%	86.9%	100.0%	
	% within Treatment has not helped at all			26.6%	5.6%		11.3%	43.3%	16.4%	
	Total	Count	7	18	23	62	30	140		
	% within Did not think treatment would help			5.0%	12.9%	16.4%	44.3%	21.4%	100.0%	
	% within Treatment has not helped at all			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Did not think treatment would help * Treatment has not helped me at all

Chi-Square Tests

acute/chronic		Value	df	Asymp. Sig. (2-sided)
acute	Pearson Chi-Square	30.925 ^a	16	.014
	Likelihood Ratio	30.743	16	.015
	Linear-by-Linear Association	5.951	1	.015
	N of Valid Cases	132		
chronic	Pearson Chi-Square	43.980 ^b	16	.000
	Likelihood Ratio	43.271	16	.000
	Linear-by-Linear Association	9.284	1	.002
	N of Valid Cases	140		

a. 16 cells (72.0%) have expected count less than 5. The minimum expected count is .14.

b. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .10.

APPENDIX 7.

7.6.1 Principal components analysis of main questionnaire survey data (n=279) 6-factor solution (SPSS output)

Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
Treatment fully explained	.780	.151		.113		.165
Able to ask therapist about anything	.775	.101		.179		.270
Therapist gave encouragement and praise	.759	.245	.188			-.188
Therapist put me at ease	.748	.294				
Therapist explained condition	.715	.141	.143			.126
Got on very well with therapist	.697	.262				
Treatment tailored to my needs	.674		.212	.228		
Completely satisfied with treatment	.652	.234	.358	.183	-.259	
Made aware of my responsibilities	.602		.163	.260		-.120
Completely satisfied with all aspects	.585	.265	.434	.163	-.233	-.123
Therapist did not answer all questions	.523	.488	-.124	.360	.123	
Therapist gave me confidence	.523		.482		.191	-.156
Important to see the same therapist	.329	.139	.138	-.322	.114	-.126
Therapist did not listen	.155	.797	.131			
Did not have confidence therapist knew	.241	.774	.172			
Therapist not interested	.367	.636		.220		
Not always seen promptly		.589				.120
Not happy to work on my own	.114	.555		.253		
Should have got a better result	.322	.510	.304	.313	-.108	
Did not have undivided attention	-.296	.455		.354		
Quality of service could be better	.400	.414	.196	.382	-.122	
Made a full recovery	.273		.859		.114	
Regained full mobility	.210		.833			.112
Now completely free of pain	.145		.820			.101
Treatment helped but did not last		.225	.480	.312	.189	.280
Treatment has not helped at all	.347	.381	.434	.229		-.126
Treatment too rushed	.301	.336		.654		
Treatment sessions too short	.151	.258	.153	.652		
Treatment too infrequent	.127	.284	.319	.628	.116	
Had to wait a long time for appointment		.130		.515		.172
Able to contact the department if problems	.321		.290	.403	-.148	.257
Expected treatment to get me better			.328	-.144	.753	
Expected treatment to cure problem			.141		.741	.200
Expected treatment to relieve pain			-.112	.111	.682	-.221
Did not think treatment would help		.343			.437	.133
Did not have treatment cancelled	.107					.722
Treatment helped in some ways	-.300		.320		.129	.461
Choose appointment times	.284			.242	.138	.372

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

APPENDIX 7.

7.6.2 Variance explained by the 6 factors produced by a principal components analysis of the main questionnaire survey data (n=279) (SPSS output)

Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.861	28.581	28.581	6.851	18.030	18.030
2	3.175	8.356	36.937	4.229	11.129	29.160
3	2.695	7.092	44.029	3.903	10.271	39.431
4	1.926	5.069	49.099	2.901	7.634	47.065
5	1.624	4.274	53.373	2.144	5.642	52.708
6	1.224	3.220	56.593	1.477	3.887	56.593
7	1.188	3.127	59.720			
8	1.080	2.843	62.563			
9	1.019	2.682	65.245			
10	.972	2.557	67.802			
11	.945	2.486	70.288			
12	.852	2.242	72.530			
13	.808	2.127	74.657			
14	.783	2.061	76.718			
15	.734	1.931	78.649			
16	.644	1.693	80.342			
17	.609	1.603	81.945			
18	.569	1.497	83.443			
19	.545	1.433	84.876			
20	.511	1.345	86.221			
21	.458	1.208	87.427			
22	.451	1.186	88.613			
23	.425	1.119	89.731			
24	.411	1.082	90.813			
25	.369	.972	91.785			
26	.345	.909	92.694			
27	.336	.883	93.577			
28	.315	.830	94.407			
29	.299	.787	95.194			
30	.283	.745	95.938			
31	.268	.705	96.644			
32	.233	.613	97.257			
33	.205	.540	97.797			
34	.204	.536	98.333			
35	.188	.494	98.827			
36	.164	.431	99.258			
37	.146	.385	99.643			
38	.136	.357	100.000			

Extraction Method: Principal Component Analysis.

APPENDIX 7

7.7 Number of responses on a 5-point Likert scale for each statement in the main survey questionnaire

Key to table: 5 = Strongly agree 3 = Not sure 1 = Strongly disagree
 4 = Agree 2 = Disagree

Table 7.7.1 Questionnaire responses relating to the category 'Expectations'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
EXPECTATIONS											
I expected the treatment would get me better	49	18	141	51	54	20	25	9	6	2	275
I did not think the treatment would be able to help me	5	2	26	10	58	21	134	49	49	18	272
I expected the treatment would cure my problem	38	14	102	37	71	26	50	18	12	4	273
Therapist gave me confidence that I would get better	73	27	123	45	47	17	20	7	8	3	271
I expected the treatment would help relieve my pain	53	19	153	55	43	16	18	6	10	4	277

Table 7.7.2 Questionnaire responses relating to the category 'Communication'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
COMMUNICATION											
I did not have confidence my therapist knew what she was doing	14	5	13	5	9	3	97	36	138	51	271
The therapist explained my condition to me in great detail	104	38	118	43	20	7	29	11	4	1	275
I was able to ask the therapist about anything connected with my treatment	125	45	134	49	9	3	7	3	1	0.4	276
The treatment was fully explained to me	96	35	153	56	9	3	13	5	0	0	271
My therapist did not listen to what I had to say	13	5	15	5	8	3	75	27	163	59	274
The therapist did not answer all my questions	5	2	14	5	22	8	129	47	104	38	274

7.7 Number of responses on a 5-point Likert scale for each statement in the main survey questionnaire (cont.)

Table 7.7.3 Questionnaire responses relating to the category 'Therapist'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
THERAPIST											
My therapist put me at ease and was very kind to me	142	52	119	43	6	2	7	3	1	0.4	275
My therapist did not seem interested in me	10	4	11	4	12	4	92	34	148	54	273
I got on very well with my therapist	131	47	126	46	10	4	6	2	3	1	276
My therapist gave me encouragement and praise	88	32	146	53	25	9	11	4	5	2	275
I was made aware of my responsibilities in managing my condition as a result of treatment	66	24	170	62	25	9	11	4	3	16	275
It was important for me to see the same therapist throughout my treatment	106	38	111	40	24	9	30	11	5	2	276

Table 7.7.4 Questionnaire responses relating to the category 'Organisation'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
ORGANISATION											
The treatment sessions were too short	10	4	44	16	38	14	146	53	37	13	275
Treatment sessions were too infrequent to get any benefit	9	3	32	12	47	17	128	47	56	21	272
I was able to contact the department for help if I had any further problems after discharge	70	26	119	43	45	16	29	11	11	4	274
I did not have any of my treatment sessions cancelled	123	45	91	33	8	3	33	12	17	6	272
I was not always seen promptly for my treatment sessions	28	10	30	11	7	3	106	38	106	38	277
The treatment was too rushed	14	5	17	6	25	9	136	50	80	29	272
I did not have the undivided attention of the therapist during my treatment	14	5	23	8	16	6	135	50	84	31	272
I was not happy to be left to work on my own during the treatment session	12	4	16	6	32	12	130	48	80	30	270

7.7 Number of responses on a 5-point Likert scale for each statement in the main survey questionnaire (cont.)

Table 7.7.5 Questionnaire responses relating to the category 'Outcome'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
OUTCOME											
I have made a full recovery as a result of treatment	26	10	49	18	53	19	91	33	54	20	273
I am now completely free of pain as a result of treatment	9	3	46	17	31	11	102	37	86	31	274
The treatment has helped me in some ways but I am not completely better	44	16	145	53	18	7	47	17	20	7	274
I have gained full mobility as a result of treatment	26	9	59	22	43	16	95	35	51	19	274
The treatment helped me at the time but the effect <i>did not</i> last	30	11	91	33	33	12	80	29	39	14	273
The treatment has not helped me at all	12	4	26	10	37	14	120	44	78	29	273

Table 7.7.6 Questionnaire responses relating to the category 'General Satisfaction'

Statement	5		4		3		2		1		Total No. responses
	No.	%	No.	%	No.	%	No.	%	No.	%	
GENERAL SATISFACTION											
I am completely satisfied with the treatment I received in this department	91	34	123	45	29	11	20	7	8	3	271
The quality of service I received in this department could have been better	11	4	38	14	29	11	119	43	77	28	274
I am completely satisfied with all aspects of my visit to the physiotherapy department	91	33	111	41	34	12	29	11	8	3	273
I should have got a better result from the treatment I received in this department	11	4	23	8	57	21	96	35	84	31	271
The treatment was tailored to my needs	68	25	144	52	46	17	13	5	4	1	275
I had to wait a long time to get my first appointment for treatment	32	12	46	17	14	5	112	41	69	25	273
I was able to choose the appointment times for treatment	71	26	147	54	13	5	33	12	10	4	274

APPENDIX 8

- 8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews**
- 8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey**
- 8.3 Ethics Committee letters of approval to conduct the main questionnaire survey**

APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews



East London and The City HEALTH AUTHORITY

All correspondence to be addressed to:
THE SECRETARY, ELCHA RESEARCH ETHICS COMMITTEE
61 PHILPOT STREET, LONDON, E1 2 JH

Tel: 0171-377-7325

Rosemary Hills
Superintendent Physiotherapist
Physiotherapy Dept
The Royal London Hospital
Whitechapel
E1 1BB

Our ref: ms/je/P/96/238/s

20 August 1996

Dear Ms Hills

Re: P/96/238/s - Satisfaction with outpatient physiotherapy in patients with acute and chronic musculoskeletal conditions

I can confirm that the Standing Advisory Group of the ELCHA Research Ethics Committee has considered the above protocol. Before approval can be given, a number of issues need to be clarified:

- a) I confirm that at this stage, ethical approval will be given to Part A of the study only.
- b) You mention a semi structured interview and a draft schedule of this would be helpful.
- c) The information sheet needs to state how subjects will be able to contact the researcher.

Following written clarification of the above issues I should be able to approve the protocol on behalf of the Committee with a view to ratification at a future meeting.

Yours sincerely

PROFESSOR M SWASH MD FRCP FRCPATH
Chairman
ELCHA Research Ethics Committee

Please address all communications to 61 Philpot Street, as above, and not to ELCHA headquarters.

Chairman Professor Frances Heidensohn

Tradegar House - 97 - 99 Bow Road - London E3 2AN - Tel: 0181 983 2900 - Fax: 0181 983 4122



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)



East London and The City **HEALTH AUTHORITY**

All correspondence to be addressed to:
THE SECRETARY, ELCHA RESEARCH ETHICS COMMITTEE
61 PHILPOT STREET, LONDON, E1 2 J H

Tel: 0171-377-7325

Rosemary Hills
Superintendent Physiotherapist
Physiotherapy Dept
The Royal London Hospital
Whitechapel
E1 1BB

Our ref: ms/jc/P/96/238/s

12 November 1996

Dear Ms Hills

Re: P/96/238/s - Satisfaction with outpatient physiotherapy in patients with acute and chronic musculoskeletal conditions

Thank you for your letter, dated 8th November, in response to my earlier letter.

I accept the points you make and am happy to approve the protocol under Chairman's action, subject to the following provisos:-

- a) Please clarify why the contact point details on the information sheet have been left blank? We will need a completed copy for our files.
- b) We will need a copy of the semi structured interview schedule for our files when this is available.

Please note the following conditions to the approval:

1. The Committee's approval is for the length of time specified in your application. If you expect your project to take longer to complete (i.e. collection of data), a letter from the principal investigator to the Chairman will be required to further extend the research. This will help the Committee to maintain comprehensive records.
2. Any changes to the protocol must be notified to the Committee. Such changes may not be implemented without the Committee or Chairman's approval.
3. The Committee should be notified immediately of any serious adverse events or if the study is terminated prematurely.
4. You are responsible for consulting with colleagues and/or other groups who may be involved or affected by the research, such as extra work for laboratories.

Please address all communications to 61 Philpot Street, as above, and not to ELCHA headquarters.

Chairman: Professor Frances Heidensohn

Tredegar House - 97 - 99 Bow Road - London E3 2AN - Tel: 0181 983 2900 - Fax: 0181 983 4122



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)

5. You must ensure that, where appropriate, nursing and other staff are made aware that research in progress on patients with whom they are concerned has been approved by the Committee.
6. The Committee should be sent one copy of any publication arising from your study, or a summary if there is to be no publication.

I should be grateful if you would inform all concerned with the study of the above decision.

Your application has been approved on the understanding that you comply with Good Clinical Practice and that all raw data is retained and available for inspection for 15 years.

Please quote the above study number in any future related correspondence.

Yours sincerely

PROFESSOR M SWASH MD FRCP FRCPATH
Chairman
ELCHA Research Ethics Committee

Please address all communications to 61 Philpot Street, as above, and not to ELCHA headquarters.

APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)



East London and The City HEALTH AUTHORITY

Ms Rosemary E Hills MSc MCSP
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
The Royal London Hospital
Whitechapel
London, E1 1BB

Our ref: MS/SK/P238s

7th January 1998

Dear Ms Hills

Re: P/96/238s - Satisfaction with out-patient physiotherapy in patients with acute chronic musculoskeletal conditions.

Further to your letter dated 3 November 1997 requesting approval to carry out group interviews. I confirm that I am able to give Chairman's approval on behalf of the Committee for this to take place. However, the following provisos apply.

- a) Written consent is required.
- b) A new information sheet should be produced for these groups.
- c) Please confirm that tapes/videos will only be used for the stated purpose and will be destroyed at the end of the study.

Please note the following conditions to the approval:

1. The Committee's approval is for the length of time specified in your application. If you expect your project to take longer to complete (i.e. collection of data), a letter from the principal investigator to the Chairman will be required to further extend the research. This will help the Committee to maintain comprehensive records.
2. Any changes to the protocol must be notified to the Committee. Such changes may not be implemented without the Committee or Chairman's approval.
3. The Committee should be notified immediately of any serious adverse events or if the study is terminated prematurely.
4. You are responsible for consulting with colleagues and/or other groups who may be involved or affected by the research, such as extra work for laboratories.

Chairman: Professor Frances Heidensohn

81-91 Commercial Road · London E1 1RD · Tel: 0171 655 6600 · Fax: 0171 655 6666



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)

5. You must ensure that, where appropriate, nursing and other staff are made aware that research in progress on patients with whom they are concerned has been approved by the Committee.
6. The Committee should be sent one copy of any publication arising from your study, or a summary if there is to be no publication.

I should be grateful if you would inform all concerned with the study of the above decision.

Your application has been approved on the understanding that you comply with Good Clinical Practice and that all raw data is retained and available for inspection for 15 years.

Please quote the above study number in any future related correspondence.

Yours sincerely

S. Kundra .

PP PROFESSOR M SWASH MD FRCP FRCPath
Chairman
ELCHA Research Ethics Committee

APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)



East London and The City HEALTH AUTHORITY

Ms Rosemary E Hills MSc MCSP
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
The Royal London Hospital
Whitechapel
London, E1 1BB

Our ref: MS/je/P238s

29th January 1998

Dear Ms Hills

Re: P/96/238s - Satisfaction with out-patient physiotherapy in patients with acute chronic musculoskeletal conditions.

Thank you for your letter, dated 22 January. I am sorry you have experienced delays in receiving our responses. As the Research Ethics Office is now permanently relocated and there is a full complement of staff following return from maternity leave, we hope to achieve a quicker turnaround of correspondence.

In response to the points made in your letter, I confirm that these are satisfactory. However, in view of the expansion of recruitment sources, you are advised to produce a letter to G.P.s and to the A & E Consultant, informing them of the research.

We will need a copy of your standard letters for our records, as well as the interview schedule, when this is available.

I trust this is satisfactory.

Yours sincerely

MS PROFESSOR M SWASH MD FRCP FRCPATH
Chairman
ELCHA Research Ethics Committee

Chairman: Professor Frances Heidensohn

81-91 Commercial Road · London E1 1RD · Tel: 0171 655 6600 · Fax: 0171 655 6666



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)



East London and The City **HEALTH AUTHORITY**

Ms Rosemary E Hills MSc MCSP
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Our ref: MS/sk/P96238s

3rd March 1998

Dear Ms Hills

Re: P/96/238s - Satisfaction with out-patient physiotherapy in patients with acute chronic musculoskeletal conditions.

I acknowledge receipt of your letter dated 16th February 1998 and thank you for enclosing a copy of the standard letter to be sent to the A&E Department and GP surgeries. This has been noted for our records.

Yours sincerely



PP **PROFESSOR M SWASH MD FRCP FRCPath**
Chairman
ELCHA Research Ethics Committee

Chairman: Professor Frances Heidensohn

81-91 Commercial Road · London E1 1RD · Tel: 0171 655 6600 · Fax: 0171 655 6666



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)



East London and The City HEALTH AUTHORITY

Ms Rosemary E Hills MSc MCSP
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Our ref: RS/sk/P96238s

10th September 1998

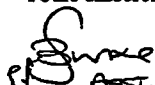
Dear Ms Hills

Re: P/96/238s - Satisfaction with out-patient physiotherapy in patients with acute chronic musculoskeletal conditions.

Thank you for your letter dated 21st August 1998 enclosing the schedule for the 40 in-depth semi structured interviews which will follow a card sort format, that you intend to carry out.

I confirm these are ethically satisfactory and the samples have been added to our records.

Yours sincerely


Asst. Administrator
Mr Richard Smith
Vice Chairman
ELCHA Research Ethics Committee

Chairman Professor Frances Heidensohn

81-91 Commercial Road · London E1 1RD · Tel: 0171 655 6600 · Fax: 0171 655 6666



APPENDIX 8.

8.1 Ethics Committee letters of approval to conduct the developmental and focus group interviews (cont.)

MERTON, SUTTON & WANDSWORTH HEALTH AUTHORITY

MERTON & SUTTON LOCAL RESEARCH ETHICS COMMITTEE

Tel: 0181 296 2231

Fax: 0181 641 4717

Rosemary Hills, MSc, MCSP.
Physiotherapy Department
Tower Hamlets Healthcare NHS Trust
Mile End Hospital
Bancroft Road
London E1 4DG

13th February 1998

Dear Rosemary

Re: Satisfaction with Out-patient physiotherapy in Patients with acute and chronic musculoskeletal conditions

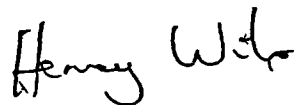
Thank you for submitting this project for ethical approval. I am happy to take Chairman's Action in approving Part A of the study on behalf of Merton and Sutton LREC. Please contact me when you would like the next part approved.

Permission is granted on the understanding that:

1. any ethical problem such as a serious adverse event arising in the course of the project will be reported to the committee
2. any change or amendment to the protocol will be reported to the committee
3. a brief report will be submitted after completion
4. the study is commenced within the next 12 months. Should the start of the study be delayed beyond the period of 1 year, a re-application to the committee will be required.

With best wishes

Yours sincerely



Dr A H Wilcox
Chairman: Merton and Sutton LREC.

All Correspondence to: Chairman's Office (LREC), The St Helier NHS Trust,
Wrythe Lane, Carshalton, Surrey. SM5 1AA

APPENDIX 8.

8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey



East London and The City HEALTH AUTHORITY

Ms Rosemary E Hills MSc MCSP
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Our ref: MS/KH/P/96/238s

9th October 1999

Dear Ms Hills

Re: P/96/238s - Satisfaction with out-patient physiotherapy in patients with acute chronic musculoskeletal conditions.

I wish to acknowledge receipt of your letter dated 26th October 1999 enclosing a copy of the questionnaire and explanatory sheet for the patients. These have now been added to our records.

Yours sincerely

PROFESSOR M SWASH MD FRCP FRCPATH
Chairman
ELCHA Research Ethics Committee

Chairman: Professor Elaine Murphy
Aneurin Bevan House 81 Commercial Road · London E1 1RD
Tel: 0171 655 6600 · Fax: 0171 655 6666

NHS

APPENDIX 8.

8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey (cont.)

ROYAL FREE HOSPITAL
POND STREET
LONDON NW3 2QG
TELEPHONE 020 7794 0500
FAX 020 7830 2981



CHAIRMAN JOHN CARRIER

CHIEF EXECUTIVE M T ELSE

REPLY TO EXTENSION

5628

02 December 1999

Ms Rosemary Hills
Superintendent Physiotherapist
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Dear Ms Hills

Re: SATISFACTION WITH OUT-PATIENT PHYSIOTHERAPY IN PATIENTS WITH ACUTE AND CHRONIC MUSCULOSKELETAL CONDITIONS

I am pleased to be able to inform you that your recent submission to the Royal Free Hospital & Medical School Local Research Ethics Committee has now received approval by Chairman's Action. This approval will be formally documented at the next meeting of the full committee.

This approval does not mean that the study may commence. The study may only begin following approval by the Trust through the office of the Director of Research & Development (please contact Sadaf Zaidi on extension 8304).

Please note the code number (255-99) that the submission has been given and quote this in all correspondence.

Yours sincerely

Maureen Carroll
Secretary
Royal Free Hospital & Medical School
Local Research Ethics Committee

cc Mr J Farrell, Head of Pharmaceutical Services
Ms S Zaidi, Research & Development

APPENDIX 8.

8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey (cont.)

16-12-1999 11:52

Clinical Audit Dept.

0171 830 2233

P.02



CLINICAL INFORMATION CENTRE

Royal Free Hampstead NHS Trust

The Royal Free Hospital, Pond Street, London NW3 2QG
Switchboard: 0171 794 0500 Ext. 8304 Fax: 0171 830 2233
Direct line: 0171 830 2816 e mail: Sadaf.Zaidi@rnh.nthames.nhs.uk

December 16, 1999

Dear Dr. Hills

Re: Satisfaction with out-patient physiotherapy in patients with acute and chronic Musculoskeletal conditions

R&D ID:
Ethics ID: 255-99

Following the approval of your ethics application your project has been fully registered with the R&D department. I would be grateful if you would inform me of any changes regarding funding, project status etc

Should you have any queries please quote the R&D ID number.

You may proceed with your project.

Sincerely,

Sadaf Zaidi
Research & Development Officer
Clinical Information Centre

APPENDIX 8.

8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey (cont.)

Barnet 
Health Authority

Hyde House
The Hyde
Edgware Road
London
NW9 6QQ

BARNET RESEARCH ETHICS COMMITTEE

Tel: 0181 201 4700
Fax: 0181 201 4701

Please quote protocol reference in all correspondence

(From April 22nd 2000) Tel: 020 8201 4700
Fax: 020 8201 4701

22nd November, 1999

Rosemary Hill,
Superintendent Physiotherapist,
Tower Hamlets Healthcare NHS Trust,
Mike End Hospital,
Bancroft Road,
London E1 4DG.

Dear Ms. Hill,

Satisfaction with out-patient physiotherapy in patients with acute and chronic musculoskeletal conditions

Thank you for your letter dated 15th November regarding the above research which you are currently undertaking as part of a PhD part-time at King's College.

We acknowledge receipt of the research protocol, correspondence with Professor Swash and a copy of the questionnaire.

We are pleased to report that this study has been approved under 'Chairman's Action'.

Yours sincerely,



Michael Beaman
Chairman

Chair - Antony Jacobson
Chief Executive - Judy Hargaden

APPENDIX 8.

8.2 Ethics Committee letters of approval to conduct the pilot questionnaire survey (cont.)

18/01/2000 16:44

+4401819675768

CLINICALAUDIT

PAGE 02

LOCAL RESEARCH ETHICS COMMITTEE

Ealing Hospital NHS Trust

Level One, Uxbridge Road, Southall, Middlesex, UB1 3HW

Tel: 0181 967 5319 Fax: 0181 967 5768

Ms Rosemary Hills MSc MCSP
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London, E1 4DG

10.01.00

Dear Ms Hills

Re: Satisfaction with outpatient physiotherapy in patients with acute and chronic musculoskeletal conditions

Thank you for submitting the above audit project. This project was put forward at the meeting on the 14th December 1999 and the committee has delegated me chairman's action to approve the study forthwith.

Yours sincerely

p.p.  LREC Administrator

Dr William Lynn
Chairman - LREC

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey

TRENT MULTICENTRE RESEARCH **ETHICS COMMITTEE**

CHAIRMAN – Dr Brian Scott
ADMINISTRATOR – Jill Marshall

Tel: 01332 386 569
Fax: 01332 370 952
e-mail: jill_marshall-tmrec@mail-sderby-ha.trent.nhs.uk

Please reply to:
MREC Administrator
Department of Public Health
Southern Derbyshire Health
Derwent Court
Stuart Street
DERBY DE1 2FZ

Your ref:

14 November 2000

Miss R Hills
Physiotherapy Department
Royal London Hospital (Mile End)
Bancroft Road
London E1 4DG

Dear Miss Hills

MREC/00/4/052 – please quote this number in all correspondence
**AN EXAMINATION OF THE SOURCES OF SATISFACTION WITH OUT-PATIENT PHYSIOTHERAPY:
ARE THE EXPECTATIONS AND NEEDS OF PATIENTS WITH ACUTE AND CHRONIC
MUSCULOSKELETAL CONDITIONS BEING MET?**

The Chairman of the Trent MREC has considered the information/amendments submitted in response to the Committee's review of your application on 7 September 2000 as set out in our letters dated 18 September, 13 October and 3 November 2000. The documents considered were as follows:

- Application form dated 13 November 2000
- Protocol version 2 dated November 2000
- Patient information letter Version 4 dated November 2000
- Letter to head of clinical directorate
- Questionnaire (no reference or date)
- Method of initial recruitment to study
- Compensation for subjects
- Principal Investigator's CV – Ms Rosemary Hills

The Chairman, acting under delegated authority, is satisfied that these accord with the decision of the Committee and has agreed that there is no objection on ethical grounds to the proposed study. I am, therefore, happy to give you our approval on the understanding that you will follow the Conditions of Approval set out below. A full record of the review undertaken by the MREC is contained in the attached MREC Response Form. The project must be started within three years of the date on which MREC approval is given.

Conditions of Approval

- No research subject is to be admitted into the trial until agreement has been obtained from the appropriate local research ethics committees.
- You must follow the protocol agreed and any changes to the protocol will require prior MREC approval.

1 of 3

MREC/00/4/052

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

- If projects are approved before funding is received, the MREC must see, and approve, any major changes made by the funding body. The MREC would expect to see a copy of the final questionnaire before it is used.
- You must promptly inform the MREC and appropriate LRECs of:
 - (i) deviations from or changes to the protocol which are made to eliminate immediate hazards to the research subjects;
 - (ii) any changes that increase the risk to subjects and/or affect significantly the conduct of the research;
 - (iii) all adverse drug reactions that are both serious and unexpected;
 - (iv) *new information that may affect adversely the safety of the subjects or the conduct of the trial.*
- You must complete and return the standard progress report form to the MREC one year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the MREC when your research is completed.

Whilst the MREC has given approval for the study on ethical grounds, it is still necessary for you to obtain management approval from the relevant Clinical Directors and/or Chief Executive of the Trusts (or Health Boards/DHAs) in which the work will be done.

Local Submissions

It is your responsibility to ensure that any local researcher seeks the approval of the relevant LREC before starting their research. To do this you should submit the appropriate number of copies of the following to the relevant LRECs:

- this letter
- the MREC Application Form (including copies of any questionnaires)
- the attached MREC Response Form
- Annex D of the Application Form
- one copy of the protocol
- the final approved version of the Patient Information Sheet and Consent Form

It is important to check with the respective LRECs the precise numbers of copies required as this will vary and failure to supply sufficient copies could lead to a delay. In addition, you should submit to LRECs only the revised paperwork reflecting the requirements of the MREC, as referenced in the Response Form.

Local Sites

Whilst the MREC would like as much information as possible about local sites at the time you apply for ethical approval, it is understood that this is not always possible. You are asked, however, to send details of local sites as soon as a researcher has been recruited. This is essential to enable the MREC to monitor the research it approves.

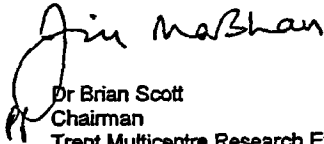
APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

ICH GCP Compliance

The MRECs are fully compliant with "the International Committee on Harmonisation/Good Clinical Practice (ICH/GCP) Guidelines for the Conduct of Trials Involving the Participation of Human Subjects" as they relate to the responsibilities, composition, function, operations and records of an Independent Ethics Committee/Independent Review Board. To this end, it undertakes to adhere as far as is consistent with its Constitution, to the relevant clauses of the ICH Harmonised Tripartite Guideline for Good Clinical Practice adopted by the Commission of the European Union on 17 January 1997. The Standing Orders and a Statement of Compliance, together with the guidelines and application form are available on request or on the internet at <http://dspace.dial.pipex.com/mrec>

Yours sincerely



Dr Brian Scott
Chairman
Trent Multicentre Research Ethics Committee

Encs: MREC Response Form

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Direct Dial: 01535 294809
Fax: 01535 655570
e-mail: julie.wiseman@group.airedale.northy.nhs.uk

Airedale 
NHS Trust

Airedale Local Research Ethics Committee
Airedale General Hospital
Skipton Road
Steeton
KEIGHLEY
West Yorkshire
BD20 6TD

PAT/JW

22 January 2001

Tel: 01535 652511

Miss R Hills
Musculoskeletal Clinical Specialist Superintendent, III
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
LONDON
E1 4DG

Dear Miss Hills

**MREC/00/4/052 NEEDS AND EXPECTATIONS OF MUSCULOSKELETAL
PATIENTS IN OUT-PATIENT PHYSIOTHERAPY**

LREC NUMBER: 00/12/126

Thank you for your letter dated 19 January which was received by fax today and which was in response to my letter of 18 January expressing the concerns of the LREC committee with regard to your study.

Your clear explanation of the various points have been noted and I am happy to confirm the approval of your study by the Airedale LREC.

Kind regards.

Yours sincerely



Professor Peter A Taylor
Chairman - Airedale Local Research Ethics Committee

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Direct Line: 0121-507-4396
Fax: 0121-507-5637

City Hospital 
NHS Trust

Ref: BS/SH

City Hospital NHS Trust
Dudley Road
Birmingham
B18 7QH

Ms R. Hills,
Physiotherapy Department,
Mile End Hospital,
Bancroft Road,
London, E1 4DG.

Tel: 0121 554 3801
www.cityhospital.org.uk

22nd February, 2001

Dear Ms Hills,

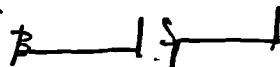
Re: LREC 00/12/189 - An examination of the sources of satisfaction with out-patient physiotherapy: Are the expectations and needs of patients with acute and chronic musculoskeletal conditions being met

Thank you for your letter of the 7th February, 2001 and for addressing the points I had raised in my earlier letter.

I am now happy to confirm approval for you to proceed with the study.

The study is subject to annual review in line with Good Clinical Practice Guidelines. The Committee would wish to be kept informed of any serious adverse events, amendments to the protocol or modifications to the patient information sheets and consent forms.

Yours sincerely,



B. SPECULAND,
Chairman - Research Ethics Committee

Copy to Ms Coyle.



A University of Birmingham Teaching Hospital



APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

County Durham and Darlington 
Health Authority

Direct Line: 0191 333 3274
Email Carol.Thorn@qual-perf.Durham-HA.Northy.NHS.UK

Appleton House
Lanchester Road
Durham
DH1 5XZ

Date: Thursday, 21 December 2000

Tel: 0191 333 3232
Fax: 0191 333 3233

Our Ref: ct/ethics/61dec00

Rosemary Hills
Tower Hamlets HealthCare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London
E1 4DG

Dear Ms Hills

Study 61/Dec00: MREC 00/4/052 Needs and Expectations of
Musculoskeletal Patients in Outpatient Physiotherapy
Rosemary Hill

(Please quote 61/Dec00 correspondence)

The above numbered study was approved at the sub committee of County Durham
and Darlington Local Research Ethics Committee held on 21 December 2000.

I shall write to you once a year for a progress review. Otherwise, I would be grateful
if you could forward a report to this office on completion of the project.

Yours sincerely



Mrs Jo Turnbull
Chairman- County Durham and Darlington Local Research Ethics Committee



Committed to a Policy of Equal Opportunities

Dr John Marshall Chairman
Ken Jerrold CBE Chief Executive

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

**GATESHEAD LOCAL RESEARCH ETHICS COMMITTEE
Response Form for Applicants**

Project Title: MREC 00/4/052 An examination of the Sources of Satisfaction with Out-Patient Physiotherapy: Are the Expectations and Needs of Patients with Acute and Chronic Musculoskeletal Conditions being met?

Researcher: Miss Hills

Ref No: 11/01

The above application has been considered by Gateshead LREC and the following documents were reviewed in connection with the study to be conducted by the above researcher:

LREC Application Form	✓	Patient Information Sheet	✓
Consent Form	✓	Protocol	✓

The following points were raised:

There were no local issues raised

Outcome of application: Members agreed to recommend approval of the Study.

Date of Review: 15/01/01

Signature of Chairman or Representative:


Dr M Mace (Chairman)

PLEASE NOTE:

1. No significant changes to the research protocol should be made without the appropriate research ethics committee/chairman's approval;
2. You must inform the Committee of deviations from or changes to the protocol which are made to eliminate immediate hazards to the research subject; of any changes that increase the risk of subjects and/or affect significantly the conduct of the research; all adverse drug reactions that are both serious and unexpected; new information that may adversely affect the safety of the subjects or the conduct of the trial.

List of Members in Attendance:

MM	(Medical) Chairman	JB	(Pharmacist)
DGR	(Non-clinical) Vice Chairman	JP	(Non-clinical)
IJS	(Secretary)		

PLEASE RETAIN THIS FORM FOR FUTURE REFERENCE

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Gloucestershire
Health Authority 

Victoria Warehouse
The Docks
Gloucester
GL1 2EL

Tel: (01452) 300222
Fax: (01452) 318800

Our Ref: 00_123G(30.1.01).doc

30 January 2001

Direct Tel: (01452) 318864
Direct Fax: (01452) 318868
Please contact: Sue Starck
(Administrator, Gloucestershire LREC)

Miss Rosemary Hills
Musculoskeletal Clinical Specialist, Superintendant 111
Physiotherapy Dept
Royal London Hospital (Mile End)
Bancroft Road
E1 4DG

Dear Miss Hills

Study No 00/123G : An examination of the Sources of Satisfaction with Out-Patient Physiotherapy: Are the Expectations and needs of patients with Acute Chronic Musculoskeletal Conditions being met

Thank you for your letter dated 19th January 2001, which gave clarity to the committees comments made in a letter dated 12th January 2001. We are able to give you full approval to proceed with the study in Gloucestershire.

The Committee draws your attention to:

- a) It is the responsibility of the investigator to notify the LREC immediately of any information received by him/her, or of which he/she becomes aware which would cast doubt upon, or alter, any information contained in the original application, a later amendment application or verbal resume submitted to the LREC. The committee should be informed immediately if this information would raise questions about the safety and/or continued conduct of the research.
- b) The need to comply with the Data Protection Act 1998.
- c) The need to comply, throughout the conduct of the study, with good clinical research practice standards.
- d) The need to refer proposed amendments to the protocol to the LREC for further review and to obtain LREC approval thereto prior to implementation (except only in cases of emergency where the welfare of the subject is paramount).

Chairman: Chris Creswick
Chief Executive: Jeff James

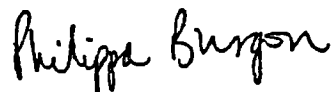
APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

- e) The requirement to furnish the LREC with details of the progress of the research project periodically (usually annually) and failure to do this could result in approval to continue with the study being withdrawn. Please also inform us of the conclusion and outcome of the research project and inform the LREC should the research be discontinued or any subject withdrawn altogether.
- f) It is the responsibility of the person conducting any Trial to ensure that all professional staff and management of NHS Trusts involved are notified that it is taking place.

A list of the members of the Gloucestershire LREC may be supplied if required.

Yours sincerely



**Mrs Philippa Burgon
Vice Chair, Gloucestershire LREC**

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)


HARTLEPOOL LOCAL RESEARCH
Ethics Committee

Chairman: Mr G Grove
Vice Chairman: Dr D Symon

Wynyard House
Wynyard Road
HARTLEPOOL
TS25 3LQ

Our Ref: a\ethics\corres\gg\du MIN 010/01

Tel: (01429) 263589
Fax: (01429) 862075

2 April 2001

Ms Rosemary Hills
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London
E1 4DG

Dear Ms Hills

RE **NEEDS AND EXPECTATIONS OF MUSCULOSKELETAL
PATIENTS IN OUT-PATIENT PHYSIOTHERAPY (23 January 2000)**

The information requested have been received therefore there is no ethical reason why this study cannot go ahead.

Yours sincerely


Dr D Symon
Vice Chairman

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)



North and East Devon Local
Research Ethics Committee
Department of Research Ethics and
Medical Affairs
Old Kenn Ward
Royal Devon & Exeter Hospital
(Wonford)
Barrack Road
EXETER
EX2 5DW

Tel: 01392 402369
Fax: 01392 402369
Email: medaffairs@hotmail.com

Our Ref: TJ/PM/2000/12/160

23 January, 2001

Miss R Hills
Physiotherapy Department
Mile End Hospital
Bancroft Road
LONDON E1 4DG

Dear Miss Hills

Study 2000/12/160 (MREC/00/4/052): Needs and Expectations of
Musculoskeletal Patients in Out-patient Physiotherapy

You will recall that on the 4th January I wrote giving Chairman's Approval on
research ethics grounds for this study.

I am writing to say that the Committee confirmed my action at its meeting on the 16th
January 2001.

Yours sincerely

Dr T Jones
Chairman
North and East Devon LREC

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Sandwell 
Health Authority

Kingston House
438 High Street
West Bromwich
B70 9LD

Telephone 0121 500 1500
Facsimile 0121 500 1501

Please reply to:
Janet Bayley: 0121 500 1650
Email: janet.bayley@sandwell-ha.wmids.nhs.uk

MD/JB/295 - 05.02.01 SEC 295 R Hills.doc

5th February 2001

Ms R Hills
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Dear Ms Hills

Re: SEC 295/120101
Needs and expectations of musculoskeletal patients in out-patient physiotherapy

I acknowledge receipt of your letter dated 25th January 2001.

I note your response to the Committee's concerns and acknowledge your reasons for using the exclusion criteria. Under the circumstances you outline I have decided to accept the use of this criteria for the study.

I note that this study has already been approved by the Trent Multicentre Research Ethics Committee on 11th November 2001.

I am therefore pleased to inform you that the committee have agreed to give local approval for this study.

I would be grateful if you would keep the LREC informed of the progress of the study by communicating the following information to Ms Janet Bayley at the Health Authority, as soon as it is practicable:

(Cont/2.....)

Michael J. O'Riordan Chairman



Neil Lockwood Chief Executive

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

- 2 -

Ms R Hills
5th February 2001

- a) any significant deviations from the protocol as submitted to the Local Research Ethics Committee and on the basis of which approval has been given;
- b) any unusual and/or unexpected developments during the course of the study which raises questions about the safety of subjects;
- c) the outcome of the study in the form of the final report and/or any publication that results; and
- d) full details if, for any reason, the study is abandoned before completion.

Please ensure you quote the above reference number in all future correspondence regarding this study.

Yours sincerely



Marion Drinkwater
CHAIR - LOCAL RESEARCH ETHICS COMMITTEE

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Solihull NHS
Health Authority

Ms Rosemary Hills
Physiotherapy Department
Royal London Hospital (Mile End)
Bancroft Road
London E1 4DG

6th Floor, Mell House
46 Drury Lane, Solihull
West Midlands
B91 3BU

Tel: 0121 712 8300
Fax: 0121 712 8301
Dx 709611 Solihull 6
E-mail: sha@solihull-ha.wmids.nhs.uk

26 January 2001

Dear Ms Hills

Solihull Local Research Ethics Committee

An examination of the sources of satisfaction with out-patient physiotherapy: Are the expectations and needs of patients with acute and chronic musculoskeletal conditions being met.

Our Ref: P03/01
MREC Ref: 00/4/052

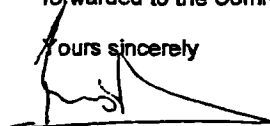
Paperwork Approved:

- MREC application form
- MREC response form
- MREC approval letter
- Letter to patients – Version 4
- Physiotherapy out-patient survey
- Research protocol – Version 2
- Annex D
- Curriculum Vitae

The Solihull Local Research Ethics Committee reviewed your application on 24 January 2001. The members of the Committee have considered that this is quite acceptable as outlined in your submission. This approval is on the understanding that you will follow the Protocol as agreed and that any untoward reactions and complications are immediately reported to the Committee.

It is also essential that a full, final report and progress reports on the study are forwarded to the Committee.

Yours sincerely



DR R POLSON
Chairman – Solihull LREC

Cc: Trent MREC

khca872.doc

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Sunderland 
Health Authority

Durham Road
Sunderland
SR3 4AF

Tel: 0191 565 6256
Fax: 0191 528 3455
Ext 45290

JOC/WB/HMW

30 January 2001

Ms R Hills
Tower Hamlets Healthcare NHS Trust
Physiotherapy Service
Mile End Hospital
Bancroft Road
LONDON E1 4DG

Dear Ms Hills

Needs and expectations of musculoskeletal patients in outpatient physiotherapy

The above MREC study was considered at the recent meeting of the Sunderland LREC. The Committee was happy to grant local approval for the project to take place. However, this is on the understanding that a local investigator has agreed to participate in this study. An Annex D form was not provided for Ms . . . or Ms . . . We were led to understand that Ms . . . is no longer employed at Ryhope Hospital. We would therefore be grateful if you could confirm the local investigator for this study. We seek mainly to ensure that the local physiotherapists have agreed to participate and will have sufficient time and resources to do so.

I look forward to hearing from you.

Best wishes.

Yours sincerely

J. O'Connell

Dr J E O'Connell BSc, MB ChB, FRCP
Chairman
Sunderland Local Research Ethics Committee

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Sunderland 
Health Authority

Durham Road
Sunderland
SR3 4AF

Tel: 0191 565 6256
Fax: 0191 528 3455
Ext 45290

JOC/WB/EMW

27 April 2001

Ms
Lead Therapist - Musculoskeletal Services
Ryhope General Hospital
Stockton Road
Ryhope
Sunderland

Dear Ms

Needs and expectations of musculoskeletal patients in outpatient physiotherapy

Thank you for returning the completed Annex D form for the above study.

I am happy to grant approval for this study to take place at Ryhope Hospital.

The Committee looks forward to receiving your progress report in due course.

Best wishes.

Yours sincerely

J. O'Connell

Dr J E O'Connell BSc MBChB FRCP
Chairman
Sunderland Local Research Ethics Committee

cc Ms R Hills, Tower Hamlets Healthcare NHS Trust

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Our Ref: GP/DM Your Ref: MREC 00/4/52

Direct Dial: (01305) 254646 (Secretary)



West Dorset General Hospitals NHS Trust

Dorset County Hospital, Williams Avenue,
Dorchester, Dorset DT1 2JY
Telephone: Dorchester (STD 01305) 251150

10 February 2001

Miss Rosemary Hills
Superintendent III
Physiotherapy Department
Royal London Hospital (Mile End)
Bancroft Road
LONDON E1 4DG

Dear Miss Hills

Title: Needs and Expectations of Musculoskeletal Patients in Out-Patient Department

Date of Submission: 23 January 2001

Date of Approval: 31 January 2001

Research Worker: Miss R Hills

Ethical approval is given for this project to be conducted to the submitted protocol in West Dorset for a period of two years. If the project is not started within this time, further approval should be sought.

You are required to notify us if the questionnaire changes significantly after the pilot.

You are required to keep raw data in hard copy for a period of ten years to avoid the fraudulent use of any data collected.

You must notify the NHS body under whose auspices the research will take. In the case of the West Dorset General Hospitals NHS Trust, this notification should be made to the Medical Director of the Trust. Your research must not proceed until the Medical Director has given you his agreement if your study involves patients within this Trust. Your study should also be registered in the National UK Research Register, (website: <http://www.doh.gov.uk/nr/htm>) and agree to make your results publicly accessible.

We wish you well with your project. You are required to provide this Committee with a brief report on progress of the project at least once a year.

Yours sincerely

DR GERRARD PHILLIPS
Chairman
W D Local Research Ethics Committee

c c Mr D Fakely Dorset Health Authority
Ms S Mooney Research Department
Dorset County Hospital

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

West Dorset General Hospitals 
NHS Trust

Our Ref: RJP/SBF Your Ref: LREC 004/52 Dorset County Hospital
Direct Dial: 01305 254648 Williams Avenue
E-mail: Richard.Purvis@dorch.wdgh-tr.swest.nhs.uk Dorchester
Dorset
DT1 2JY
Telephone: 01305 251150
Fax: 01305 254155
Minicom: 01305 254444

7 March 2001

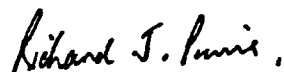
Miss Rosemary Hills
Superintendent III
Physiotherapy Department
Royal London Hospital (Mile End)
Bancroft Road
LONDON E1 4DG

Dear Miss Hills

Thank you for faxing through all the information about this study, for which local LREC approval has been given.

I am happy to give approval on behalf of the Trust with the usual proviso that this should not be at an extra cost to the Trust.

Yours sincerely



DR RICHARD PURVIS
Medical Director

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Wiltshire 
Health Authority

Ref: GF kp SW 61/2000

22 January 2001

Miss Rosemary Hills
Physiotherapy Service
Tower Hamlets Healthcare NHS Trusts
Mile End Hospital
Bancroft Road
London
E1 4DG

Southgate House
Pans Lane
Devizes
Wiltshire
SN10 5EQ

Tel: 01380 728899
Fax: 01380 722443
DX 121831

www.healthywiltshire.org.uk

Dear Miss Hills

SW 61/2000 (This number must be quoted in all correspondence)
**Needs and Expectations of Musculoskeletal In Out-Patient
Physiotherapy**

The above application, which included the documents listed below, was considered at the meeting of the Swindon Research Ethics Committee on 15 January 2001:

- a) Protocol
- b) Application Form

The study was approved. However, the Committee did feel that the paragraph asking the patients to return the questionnaire even if they were not taking part in the study, on the letter headed Physiotherapy Out-Patient Survey, was inappropriate and unnecessary.

Any changes or extensions to the protocol, or additional investigators, should be notified to the Committee for approval. Adverse events should also be reported to the Committee. May we remind you of the Data Protection Act 1998, and the need to conduct the trial in accordance with the Good Clinical Practice guidelines.

The Committee is required to audit progress of research and to produce a yearly report to the Wiltshire Health Authority and Department of Health. You are therefore required to provide a brief yearly report and a short final report.

The Swindon Research Ethics Committee is fully compliant with the International Conference on Harmonisation/Good Clinical Practice (ICH) Guidelines for the Conduct of Trials Involving the Participation of Human Subjects and undertakes to adhere to the relevant clauses of the guidelines for clinical practice adopted by the European Union in January 1997.

Yours sincerely



Godfrey Fowler (Mr)
Chairman - Swindon Research Ethics Committee

cc Trent MREC

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

WOLVERHAMPTON HEALTH AUTHORITY
WOLVERHAMPTON DISTRICT LOCAL RESEARCH ETHICS COMMITTEE

Chairman: Mr D. Little
Consultant Obstetrician & Gynaecologist
Maternity Department
New Cross Hospital
WOLVERHAMPTON
WV10 0GP

Telephone: (01902) 307999

Secretary: Dr C A. Birt
Consultant in Public Health Medicine
Wolverhampton Health Executive
Coniston House
Chapel Ash
WOLVERHAMPTON
WV3 0XE

Telephone: (01902) 444741
Fax: (01902) 444877

E-mail <RichardsV@ha.wilton-ha.wmids.nhs.uk >

Rosemary Hills,
Physiotherapy Service,
Tower Hamlets Healthcare NHS Trust,
Physiotherapy Dept.,
Mile End Hospital,
Bancroft Road,
LONDON.
E1 4DG

10th January, 2001

Dear Ms. Hills,

Re: Project No 660 - An Examination of the Sources of Satisfaction with out-patient physiotherapy : are the expectations and needs of patients with acute and chronic musculoskeletal conditions being met? By Rosemary Hills
MREC APPROVED Trent MREC REF MREC/00/4/052

I am pleased to say that the above study was approved at the meeting of Wolverhampton District Local Research Ethics Committee held on 20th December, 2000.

I would be glad if you would let me have information on recruitment and outcome in one years time, or on completion of the study, whichever is the sooner.

Yours sincerely



MR. D. LITTLE
Chairman
Wolverhampton District Local Research Ethics Committee

All Correspondence to -

Mrs. Val Richards, Administrator Wolverhampton District Local Research Ethics Committee, Department of Public Health, Coniston House, Chapel Ash, Wolverhampton. WV3 0XE Tel 01902 444741, Fax 01902 444752

Please note - Although Ethical approval may be given, approval must be sought from the organisations in which the research will take place

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Worcestershire 
Health Authority

**WORCESTERSHIRE
LOCAL RESEARCH ETHICS COMMITTEE**

Isaac Maddox House
Shrub Hill Road
Worcester
WR4 9RW

Tel: 01905 760000
Fax: 01905 26159
DX 709431 Worcester 7

Chairman:
Mrs Carol Thompson B.Sc.

Miss Rosemary Hills
Tower Hamlets Healthcare NHS Trust
Physiotherapy Department
Mile End Hospital
Bancroft Road
London E1 4DG

Our ref: KG/
Your ref:
21 December 2000

Direct Line: (01905) 760091
Fax Line: (01905) 617051

E-mail Number:
Kath.Garrad@wha.worcester-ha.wmids.nhs.uk

Dear Miss Hills

Re: LREC: 00/97 (*please use in all correspondence*)

MREC/00/4/052 – Needs and expectations of musculoskeletal patients in out-patient physiotherapy
(*Local Researcher: Miss Rosemary Hills*)

Papers reviewed:

- Annex D
- MREC application Form
- Trent MREC approval letter dated 14th November 2000
- Research protocol: version 2 dated November 2000
- Letter to patient: version 4 dated November 2000
- Physiotherapy out-patient survey questionnaire
- CV for Miss R Hills

Following consideration by the MREC sub-committee of the Local Research Ethics Committee (LREC) in respect of your research proposal submitted with your letter of 22nd November 2000, we write to confirm that the Committee had no objection to the research above proceeding, so long as the following matters are taken into account:

***** THIS APPLICATION HAS BEEN GIVEN A UNIQUE REFERENCE NUMBER.
PLEASE QUOTE THIS ON ALL CORRESPONDENCE.**

Chairman: Mrs Jacqueline M Cravos
Chief Executive: Mrs Pat Archer-Jones

APPENDIX 8.

8.3 Ethics Committee letters of approval to conduct the main questionnaire survey (cont.)

Miss R Hills
21 December 2000
2

- Satisfactory Indemnity arrangements being in place.
- You will no doubt realise that, whilst The Committee has no objection to the study on ethical grounds, it is still necessary for you to obtain approval from the relevant Clinical Directors and/or bodies in which the work will be carried out.
- In keeping with the Committee's protocol and in line with the Good Clinical Practice guidelines, would you please inform us of the results of the study when it is completed. If this is not within twelve months, please inform us of progress on an annual basis.
- Active approval is required until the study has been completed.
- The Committee would wish to be kept informed of serious adverse events, amendments and any other modifications to patient information sheets and patient consent forms.

If the project continues after THREE YEARS from the date of this letter Worcestershire Local Research Ethics Committee will wish to re-examine it.

Would you please communicate this approval immediately to all members of the investigating team and, where appropriate, the sponsoring commercial company.

Yours sincerely


Kath Garrad

Administrator, Worcestershire Local Research Ethics Committee

Cc:

All Marshall
Trust MREC Administrator
Department of Public Health
Southern Derbyshire Health
Derwent Court
Stuart Street
Derby DE1 2FZ

ERRATUM

- p. 30 *Change spelling* Manilowski to Malinowski (lines 1,2,9,13,17)
- p. 34 *Change spelling* Houstutler to Hostutler (lines 21,34) & p.35 (line 9)
- p. 46 *Change spelling* Wurtle to Wurtele (line 32)
- p. 74 *Change* Al-Bashir & Armstrong 1990 to 1991 (line 14)
- p.168 *Change* Cataldo et al. 1978 to 1970 (line 24) & p.169 (line10)
- p.203 *Change* Payton & Nelson 1995 to 1996 (line 34)
- p.303 *Change* Dillman 1982 to 1983 (line 26)
- p.304. *Change* Grogan et al. 2000 to 1995 (line 5)
- p.311 *Change* Cherkin D. Hart G. Rosenblatt R. 1987 to 1988 (refs)
- p.316 *Change spelling* Houstler to Hostutler (refs)
- p.322 *Change spelling* Montagu to Montague A.M.F.1957 (refs)
- p.323 *Insert* Norman P. (1991) Social learning theory and the prediction of attendance at screening. *Psychology and Health*, 5: 231-239
- p.327 *Insert* Snyder M.K. Ware J.E. (1974) A study of twenty-two hypothesised dimensions of patient attitudes regarding medical care. Publication No. PB-239-518/AS. National Technical Information Service, Springfield, Va.22151
- p.328 *Insert* Turk D.C. Okifuji A. Scharff L. (1995) Chronic pain and depression: role of perceived impact and perceived control in different age cohorts. *Pain* 61: 93-101
- p.329 *Insert* Wallston K.A. Wallston B.S. De Vellis R. (1978) Development of the multidimensional health locus of control (MHLC) scales. *Health Education Monographs*. 6: 160-170
- p.330 *Insert* Ware J.E. Young J. (1979) Issues in the conceptualisation and measurement of value placed on health. In Mushkin S. (Ed.) *Health: what is it worth?* 141. New York: Pergamon Press
- p.331 *Insert* Winters J.C.Sobel J.S. Groenier K.H. Arendzen H.J. Meyboom-de-Jong B. (1997) Comparison of physiotherapy, manipulation, and corticosteroid injection for treating shoulder complaints in general practice: randomised, single blind study. *British Medical Journal*. 314: 1320-1325
- p.331 *Insert* Zastowny T.R. Roughmann K.J. Hengst A. (1983) Satisfaction with medical care: replications and theoretical reevaluation. *Medical Care*. 21: 294-322