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A qualitative exploration of community therapists' experiences of applying guidance on safe patient handling

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A Qualitative Exploration of Community Therapists' Experiences of Applying Guidance on Safe Patient Handling

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Abstract

Aim of the study: To explore the experiences of physiotherapists and occupational therapists in implementing guidance on safe manual handling practice; and how the guidance is applied in community settings.

Background: Manual handling injuries remain prevalent in the healthcare setting. With government policy moving towards interventions in the community, care and rehabilitation are more frequently provided in the home environment. Therapists are therefore carrying out an increasing number of manual handling manoeuvres and therapy interventions in variable community settings. Manual handling training is provided to employees in controlled environments with standardised methods, which do not necessarily match the environments found in practice with a result that methods have to be adapted accordingly.

Methods: A qualitative ethnographic approach informed data collection and analysis. Participant observations of community visits followed by semi-structured interviews were completed with three physiotherapists and three occupational therapists working within community rehabilitation teams.

Findings: Four main themes were derived from the data: 'Environmental Impact', 'Equipment Provision and Funding', 'Patient Choice and Family Influence' and 'Training, Experience and Therapeutic Handling'. Environmental challenges and benefits of working in a community setting were acknowledged by participants and impacted on both manual handling and therapeutic intervention. The patient's choice and family influence were important considerations. Participants reported that current training in moving and handling was too basic and was not always relevant to the community setting. Participants identified that manual handling was often integrated with therapeutic handling.

Conclusion: Manual handling is a complex task in a community setting and there was difficulty implementing guidance received from training. Educational programmes using problem-solving approaches may therefore be more beneficial for therapists in a community setting to support more effective application of safe manual handling guidance.

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Finally, I am grateful to the participants and patients who took part in this study. Without their contribution, this research could not have taken place.

Dedication

To my husband, Adam, and our baby son due to be born next month.

Preface to the Study

I am a qualified Physiotherapist, with a background in community rehabilitation over the last seven years. Whilst working as a community physiotherapist, I observed a difference between the theory and practice of the manual handling training received. In particular, it was identified that taught skills often needed to be adapted and modified in a community setting due to the environmental factors and different patient conditions. The manual handling training received was provided in a large room using height-adjustable beds. This did not seem appropriate, as the next day I would be treating patients on their divan bed pushed against the wall. I found myself trying to adapt what we had been taught.

Whilst working as a manual handling trainer at Coventry University for student nurses, my initial thoughts from my physiotherapy practice about the training issues were strengthened further. I found myself taking a big step back to remember 'the basics' to teach them and found it difficult to teach a basic sit-to-stand technique and realised that I would carry out a manual handling technique differently every time depending on the unique circumstance. The basic techniques taught seemed unrealistic and I found myself wanting to give more of an explanation and relevant examples.

Initially I was interested in exploring manual handling training and education programmes. However, after reviewing the appropriate literature, there was very limited research concerning the issues surrounding manual handling in a community setting. It therefore seemed pertinent to explore physiotherapists' and occupational therapists' experiences of applying safe manual handling guidance in a community setting.

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Chapter One

Introduction

1.1 Introduction to the Chapter

A rationale for the research study is provided, with a background of relevant literature. This includes the current manual handling legislation, injury rates, training provision and healthcare delivery in a community setting. The nature of the study and an introduction of the study purpose and objectives are given. The remaining chapters are also introduced and outlined.

1.2 Background

1.2.1 Current Manual Handling Legislation

The Manual Handling Operations Regulations (MHOR 1992) were introduced over 20 years ago and came into force on 1st January 1993, with the aim of reducing back injuries sustained by workers when handling loads at work. Despite the presence of legislation there has been considerable concern that the amount of sickness absence related to back injury in the NHS has continued to remain at a high level (HSE 2013).

The term ‘Manual Handling Operations’ refers to any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force. A ‘load’ is anything that can be moved, including a person. The regulation imposes the avoidance of manual handling so far as is reasonably practicable (MHOR 1992). In healthcare settings, these regulations underpin many daily tasks undertaken by healthcare workers. For example, physiotherapists and occupational therapists are often required to move inanimate objects during the course of their work, such as beds, tables and chairs. However, they are also

involved in moving, transporting or supporting people whilst implementing therapy treatments during the rehabilitation process.

When manual handling activities cannot be avoided, it is advised that a number of principles are applied during the manual handling task to reduce the risk of personal injury. This ergonomic approach central to the MHOR considers manual handling as a whole, taking into account a range of relevant factors including the nature of the task, the load, the working environment and individual capability (MHOR 1992).

It is recognised that manual handling practice can lead to back pain and musculoskeletal disorders, which can lead to an inability to work, manual handling accidents, which can injure both the person being moved and the employee, discomfort and a lack of dignity for the person being moved.

1.2.2 Injury Prevalence Associated with Manual Handling

Injuries caused by manual handling accounted for 39% of reported injuries to health employees in 2011, compared with 31% across all industries (Health and Safety Executive (HSE) 2011). Between 2007/08 and 2013/14, manual handling injuries were the most common cause of staff absences lasting for more than three days in the health and social care setting (HSE 2014). The subsequent result of these injuries associated with patient handling activities cost the NHS more than £80m a year (HSE 2007). It is therefore pertinent for continued research to be undertaken to explore the causes of such incidents in order to find ways to minimise them.

Work-related musculoskeletal disorders, including manual handling injuries, are the most common type of occupational ill health in the UK (HSE 2007). These statistics include all workers carrying out manual handling. Physiotherapy and occupational therapy are professions that regularly carry out manual handling as part of their job role. Musculoskeletal disorders in healthcare workers have been attributed in large part to patient transfer and lifting activities. Patient handling presents considerable challenges to those employed in healthcare (Smallwood 2006).

Physiotherapists, in particular, due to the inherently physical nature of their roles, harbour the misconception that they are able to diminish the effects of an intrinsically

'heavy' occupation by their knowledge and ability to treat their own back problems (Hignett 1995). However, the prevalence of manual handling injuries among therapists has been found to be an international issue. In a Canadian study, musculoskeletal injuries were the most common work-related injuries experienced by occupational therapists and were attributed primarily to patient handling and equipment-related activities, even in non-hospital settings (Dyrkacz et al 2012). It was acknowledged in an Australian article that most physiotherapists experience work related musculoskeletal disorders at some time in their career. Many of these disorders are attributed to the manual handling of patients (Cromie et al 2001). An American study found that work-related musculoskeletal disorders are prevalent in physiotherapists, especially due to patient handling and manual therapy (Campo et al 2008). One of the recommendations made was to promote wider consideration of safe patient handling and movement policies within the profession. Other research has suggested the importance of training and education in relation to moving and handling (Hall and Bryer 2005).

1.2.3 Manual Handling Training

Preventative measures are needed to decrease the risks and costs associated with patient handling tasks; therefore, the importance of providing manual handling training has been identified. However, it has also been recognised that there has been no decline in the incidence of handling-related injuries in the healthcare setting, in spite of an increased awareness and training provision of manual handling in the UK (White and Gray 2004). Nonetheless, manual handling training has become increasingly important as musculoskeletal injuries frequently result in absence from work with associated economic costs. It is therefore recognised that manual handling training and the practice of safe techniques are essential considerations within healthcare professions.

Manual handling training programmes have been designed to reduce the likelihood of injury among the workforce; however, concerns have been raised over the efficacy of current manual handling training methods (Clemes et al 2010). Manual handling training is largely ineffective in reducing back pain and back injury. High priority should be given to developing and evaluating multidimensional interventions,

incorporating exercise training to promote strength and flexibility, which are tailored to the relevant organisation (Clemes et al 2010).

Research findings suggest that the principles of safe manual handling learnt during training are not always applied in the working environment (Clemes et al 2010). The most commonly used strategy of teaching manual handling to healthcare workers involves demonstrating prescriptive techniques required to handle specific categories of patients (Wanless and Wanless 2011). However, this has been suggested to be ineffective and has shown that this type of approach does not promote learning or effective application of skills in practice (Carta et al 2010). In addition, research findings suggest that simulation in a skills lab is no substitute for experience in the real world (Smallwood 2006).

In the National Health Service (NHS) Trust within which the research was completed, provision of manual handling training consists of a two day 'clinical manual handling' mandatory course for a newly employed staff member. The employee then attends a one-day refresher course annually. This is mandatory under the Trusts Manual Handling Policy and it is the responsibility of the employer to provide the training and the employee to attend. This training is completed by a mixture of healthcare professionals at any one time and is taught by a trainer employed by the Trust who has completed a Train-The-Trainer course.

1.2.4 Manual Handling Roles in Healthcare

Although the rationale for moving, positioning, and transferring patients differs amongst different healthcare staff, all health care workers are taught methods of patient handling and all are susceptible to injury as a result of their job descriptions (Frost and Barkley 2012). Physiotherapy and occupational therapy practice involves extensive handling of patients and manual handling is often part of a larger movement or activity. Effective manual handling of patients may play a crucial role in their care and rehabilitation. For example, it may not only be a method to move somebody safely from 'A' to 'B', but may be part of a therapeutic intervention aimed at maintaining function and strengthening muscles (Alexander 2008). For this

reason, it is vital that practitioners possess the necessary skills and knowledge to undertake these activities with patients.

In providing services to patients, practitioners are required to complete a suitable manual handling assessment, identify risk reduction measures and record the handling procedures used in their care plan. This is an essential component of the rehabilitation process where realistic goals are established alongside safe working practices (Tracey 1997b). Therapists play key roles in relation to manual handling and rehabilitation in a community setting. Further exploration of the perspectives of the therapists may identify previously overlooked contextual features that are critical to the resolution of manual handling issues (Kay et al 2014).

1.2.5 Community Services

Research regarding manual handling practice in the community is becoming more pertinent, as government policy moves towards interventions closer to home. The Department of Health's (2011) Transforming Community Services programme aims to provide essential care to many people, families and communities, from health promotion to end-of-life care. This care is provided in various settings, including the community, which encompasses the patient's home, nursing home or residential care. Research is therefore required to explore the issue of how recommended manual handling guidance is being applied in practice within this particular environment.

The researcher's experience has shown that using manual handling with patients in the community can be a challenging task. Complex issues arise when the moving and handling techniques that have been taught are applied in a community setting. For example, furniture may be in the way or the bed may not be adjustable. Alexander (2008) also recognises the challenges faced in a community environment, including lack of space, insufficient staff and lack of equipment.

This is not just an issue in the U.K.; community-based care is growing throughout Australia as consumers and governments embrace the notion of older people continuing to live in their own homes (Massy-Westropp and Rose 2004). There has been little research published on effective manual handling programs for workers in

community settings in Australia (Massy-Westropp and Rose 2004). Manual handling injuries to healthcare workers remains an issue of significant importance to the healthcare industry.

1.3 Nature of the Study

In order to gain an in-depth understanding of physiotherapists' and occupational therapists' experiences of manual handling and how they apply taught principles from training programmes, a qualitative interpretive study was undertaken. The study was conducted with three teams working for the Community Health Services in Coventry and involved participant observation followed by semi-structured interviews. This enabled the context to be taken into account and a meaningful and comprehensive understanding was gained.

1.4 Purpose of the Study and Objectives

The purpose of the research was to discover how physiotherapists and occupational therapists implement guidance on safe manual handling practice, and how they applied this guidance in a community setting.

Four core objectives were established:

1. To explore the current use of manual handling guidance in community settings
2. To explore therapists' perceptions of complex manual handling situations
3. To identify therapists' self-confidence in the application of manual handling guidance, including the use of equipment
4. To explore participants' experiences and views regarding manual handling training and its suitability for practice in a community setting

1.5 Outline of the Remainder of the Dissertation

Chapter 2 provides a synthesis of the available literature relating to manual handling practice, whilst focusing on healthcare professionals and community settings. An overview of the methodology and methods adopted for the study is given in Chapter 3. Chapter 4 presents the main themes identified during the data analysis process. The main themes identified are discussed in Chapter 5 with reference to relevant research and literature. Conclusions, limitations to the study and further recommendations are given in Chapter 6.

Chapter 2

Literature Review

2.1 Introduction to the Chapter

This chapter provides a synthesis of the available literature relating to manual handling practice, whilst focusing on healthcare professionals and community settings. Furthermore, the education and training that healthcare professionals receive is considered in some depth from the trainers', recipients' and patients' points of view. This is amplified by examining the theory-practice gap and the application of taught techniques. The complexities associated with manual handling practice are discussed with reference to available equipment and individual requirements.

2.2 Search Strategy

The electronic search strategy used to find literature relevant to the research topic is detailed in appendix 1. In addition to the electronic searches using MEDLINE, CINAHL, AMED and PsycINFO databases, further searches were carried out using the reference lists from relevant articles.

The terms 'Moving and Handling' and 'Manual Handling' are used synonymously within the literature and essentially have the same definition, i.e. they are activities which require the use of bodily force to lift, push, pull, carry or otherwise move any object, including a person (HSE 1992). In my research study, I have used these terms interchangeably.

Database scoping identified that much of the literature regarding manual handling in a healthcare setting concentrates on the implementation and evaluation of moving and handling training. A large volume of research also examines the incidence of

back pain and is reflected in searches by other authors (Kay et al 2014). Limited literature was found with reference to physiotherapists and occupational therapists carrying out moving and handling within community settings. However, the existing literature is relevant to the research topic, because the training that physiotherapists and occupational therapists receive will influence their moving and handling practice.

Therefore, in this literature review, a number of research studies, articles and reports have contributed to the exploration of the components of the research question and aims. Upon reading the literature, a number of themes developed giving rise to the subheadings in this chapter.

2.3 University-Based Education for Moving and Handling Practice

Universities have a legal responsibility to prepare healthcare students for patient handling activities in practice (Health and Safety Commission 2004). Although the present research study concentrates on qualified healthcare professionals, attention was given to the research focusing on university students, as it is in these education programmes that moving and handling training begins. There were also a greater number of papers found for nursing students' experiences than for other healthcare students or qualified staff, therefore the first three subsections concentrate on nursing students, with a final subsection concentrating on other healthcare students. A consideration of university-based education for moving and handling practice proved to be an excellent springboard from which to explore the current literature and to develop the rationale for my research study.

2.3.1 Theory-Practice Gap

Several researchers (Swain et al 2003, Smallwood 2006, Cornish and Jones 2007) have conducted studies with an emphasis on how nursing students learn during their university degree courses. They have shown that a theory-practice gap exists between the theoretical concepts that nursing students learn in a classroom setting regarding moving and handling, and how those concepts are then applied in a practical clinical setting. In addition, Smallwood (2006) asserts that classroom

teaching does not reflect the demands of practice. Safe patient handling is a skilled activity which necessitates the sound underpinning of theoretical knowledge combined with practical experience (Kneafsey and Haigh 2007).

In another study, Jootun and MacInnes (2005) completed a seven-item questionnaire followed by a semi-structured group interview with ten undergraduate third-year nursing students. They aimed to explore the extent to which undergraduates apply taught principles when performing moving and handling activities, and the factors that influence them. They concluded that there were many situations where students felt unable to apply the taught principles, as they were under the guidance of existing staff and observing their practice on the wards. It was acknowledged that there were constraints posed by the environment, resources and time, which limited their ability to apply the taught principles. Therefore, a gap is identified between theory and practice.

2.3.2 Use of Taught Principles in Practice

Following the identification of a theory-practice gap, it is important to explore within the literature how and to what extent the taught principles are used in clinical practice.

At one university, inter-professional education for moving and handling was introduced as opposed to the more traditional uni-professional training. Kneafsey et al (2012) explored the views of undergraduate nursing and physiotherapy students regarding their education for patient handling. In the researchers' questionnaire survey of 371 students (162 physiotherapy students, 207 nursing students, 2 missing data), just over two-thirds (64%) of respondents agreed that university-taught moving and handling prepared them for clinical practice. However, 40% admitted undertaking unsafe moving and handling activities whilst on placement. This finding is supported by previous studies in this field. In an earlier study, Kneafsey and Haigh (2007) found that almost half of the respondents (48%) reported that they were unable to carry out taught techniques 'sometimes' or 'never'.

Swain et al (2003) gathered data in relation to students' knowledge of procedures and how they practice the taught techniques. The research design incorporated

scenarios to gather information about the decisions that the nursing students make in certain moving and handling situations. Self-report questionnaires were distributed amongst adult nurse students (n=148) and 139 completed questionnaires were returned. The majority of students (94%) reported that they did not always use techniques that they believed to be recommended.

Furthermore, using a self-report questionnaire, Smallwood (2006) recruited a purposive sample of 51 participants. Following a discussion of the findings, she reported that approximately half (51%) of student nurses indicated that they 'frequently' or 'quite often' placed themselves at risk or (49%) failed to implement 'safe' techniques. Patient handling is also influenced by other conditions such as staffing levels, workload, space, and the patients themselves (Smallwood 2006).

It is therefore clear that taught principles are not always being used in clinical practice and the reasons for this are discussed in the next subsection.

2.3.3 Reasons for not being able to implement taught principles

The reasons for not being able to implement the taught principles need to be explored in order to gain some understanding of how and why the theory-practice gap exists.

Kneafsey et al (2012) found that the two most common reasons for not being able to implement the taught principles were lack of staff (26%) or a lack of equipment (24%). These results are broadly similar to another survey research study which used a questionnaire completed by student nurses at one university (n=432) (Kneafsey and Haigh (2007). The most common reasons selected for non-implementation of taught techniques were a lack of space (39%), lack of time (30%), lack of staff (32%) and lack of equipment (30%). Other reasons included 'patient difficult to deal with', 'copied ward staff' and 'could not remember how'. Although the results from the above studies were derived from different university student populations, the similarities in the figures suggest that the findings may have wider relevance to student populations across the UK. The limitations of a survey study include the non-provision of data from non-respondents. It is possible that non-responders had different views or may not have responded because they did not

want to admit to carrying out unsafe or controversial practice. One of the key factors in survey research is the issue of a low response rate, thus making the extrapolation and comparison of findings difficult in different pieces of research.

An earlier survey conducted by Swain et al (2003), found that student nurses gave similar reasons for not implementing taught techniques: 32% cited lack of time and 29% gave lack of equipment as a reason. However, the principal reason given was related to the influence and practices of other staff (40%). Additional reasons included lack of staff and the complex needs of some patients. Students are keen to be accepted as team members and contradicting a staff nurse who might assess them may jeopardise that (Swain et al 2003). Their discussion suggested that students are more likely to want to conform to the greater experience of colleagues and will carry out moving and handling techniques as observed on the wards. This data should be used tentatively as their sample was from one cohort on one nursing programme and used a single data collection method. Ethical approval was not sought for their study as it was classified as a college evaluation. In addition, the majority of students completed the evaluation since it was a feedback form at the end of the course, thus this may explain the high response rate.

The findings of the above studies are further supported by a questionnaire survey of 106 student nurses. Cornish and Jones (2007) aimed to explore students' experiences of moving and handling in a clinical setting in order to inform future educational development. They found that recommended techniques in moving and handling were frequently found to be difficult to implement or inappropriate due to a lack of manual handling aids, staff time, staff availability and individual patient requirements.

Cornish and Jones (2010) used focus groups in the final phase of their study to identify possible reasons for a lack of compliance with moving and handling regulations amongst student nurses. Seventeen second year nursing degree and diploma students participated and were split into three focus groups. The reasons highlighted by the students include poor practice, majority or staff member influence and unavailability of equipment. However, Jootun and MacInnes (2005) suggest that appropriate equipment is often available, but is simply not used. Cornish and Jones

(2010) further conclude that student nurses believe that qualified staff are competent to guide them and they are reluctant to undermine the nursing hierarchy.

Many of these studies (Swain et al 2003, Smallwood 2006, Cornish and Jones 2007, Kneafsey and Haigh 2007) rely upon self-reported data from questionnaires. As a result, the perspective of students may not be a true reflection of their behaviour. In other words, they may be unwilling to be totally truthful because of their position on an assessed degree programme. The self-reported data may show a conservative estimate of their behaviour and the percentages of reasons for not using taught principles in practice may be considerably higher. Furthermore, the students' perceptions of 'hazardous' or 'safe' practice may not be consistent because of their inexperience. Therefore study findings should be interpreted with these points in mind. However, generalisability is enhanced by the high degree of consistency between the results of the related studies.

A greater understanding of why taught principles are not applied in practice is emerging. Table 1 summarises the identified barriers to safe patient handling as reported by student nurses in the studies discussed in this section.

Table 1: Summary of the identified barriers to safe patient handling as reported by student nurses.

Identified barriers to safe patient handling	Authors
Lack of space	Jootun and MacInnes (2005), Smallwood (2006), Kneafsey and Haigh (2007), Kneafsey et al (2012)
Lack of time	Swain et al (2003), Jootun and MacInnes (2005), Smallwood (2006), Kneafsey and Haigh (2007), Cornish and Jones (2007),
Lack of staff	Swain et al (2003), Smallwood (2006), Kneafsey and Haigh (2007), Cornish and Jones (2007), Kneafsey et al (2012)
Patient difficult to deal with	Swain et al (2003), Smallwood (2006), Kneafsey and Haigh (2007), Cornish and Jones (2007)
Equipment is unavailable or insufficient	Swain et al (2003), Jootun and MacInnes (2005), Cornish and Jones (2007), Kneafsey et al (2012)
Peer pressure/desire to be accepted/ influence of staff	Swain et al (2003), Cornish and Jones (2010), Kneafsey et al (2012)

The current research study aims to extend these findings by exploring whether the barriers, identified by student nurses, are also experienced by qualified healthcare staff, how these barriers may differ in a community setting, and how moving and handling techniques may need to be modified accordingly.

2.3.4 Studies involving Other Healthcare Students

The literature discussed up to this point concentrates primarily on student nurses. However, Ambrose and Keating (2001) also found a theory-practice gap in moving and handling techniques amongst physiotherapy students. A questionnaire was completed to establish the knowledge and clinical reasoning used by final year

students and clinical practice patterns in final year placements. A response rate of 71% was achieved out of a sample size of 149. On analysis the authors found that the correlation between knowledge and correct clinical reasoning for hypothetical scenarios was much stronger than between knowledge and actual clinical practice patterns. This suggests that physiotherapy students can apply their learned knowledge to a theoretical situation, but have some difficulty in its application to a real clinical setting. A further study using a self-report questionnaire has also shown that a theory-practice gap exists between what is taught to occupational therapy students and how they implement the teaching in real practice (Frost and Barkley 2012).

Kneafsey et al (2012) involved physiotherapy students as participants in their study to explore the views of undergraduate nursing (n=207) and physiotherapy (n=162) students regarding the education received for patient handling. Physiotherapy students were more likely to report being supervised when moving and handling, and reported being more assertive about adhering to safe practice. Compared to nursing students, physiotherapy students learn more about patient handling and human movement within their curriculum; therefore, they may have more confidence in applying moving and handling techniques. Despite this, the literature shows that a theory-practice gap still exists for physiotherapy students.

The literature reviewed focuses primarily on student healthcare professionals, whereas the aim of my research is to explore the experiences of qualified physiotherapists and occupational therapists. Upon qualification, these healthcare professionals can work autonomously in a community setting and there may be other reasons why taught techniques are not applied in practice. There could be parity with the reasons given by healthcare students. Since qualified staff work autonomously and are not in a position of being assessed on a degree course, it is unlikely that other colleagues will influence their practice, which was one of the principal factors identified by healthcare students. Furthermore, there may be a gap between the theory of the annual moving and handling refresher courses and their continued application in clinical practice. The evidence identifies many challenges for nursing and healthcare students. It is possible that the issues discussed could continue to pose difficulties for qualified staff. However, there is limited research examining the

experience of qualified staff in relation to the implementation of moving and handling training.

2.4 Moving and Handling Training from the Trainers' Point of View

Once qualified, all registered practitioners are obliged to attend training. Typically training includes a review of the current legislation, anatomy of the spine, back care and recommended positioning, followed by an overview and practice of moving and handling techniques. The training has been reviewed by several researchers to establish the effectiveness with regard to the organisation, client group and relevance to the workplace. This is for a number of different companies and organisations, including the National Health Service. A number of research papers concentrate on healthcare moving and handling training programmes and their effectiveness from the trainers' point of view. White and Gray (2004) aimed to investigate the factors influencing the effectiveness of manual handling education using a focus group approach. McDermott et al (2009) also used a qualitative approach, via semi-structured telephone interviews, to investigate the effectiveness of current practice within manual handling training.

Back care advisors are perceived as experts in manual handling training and were the participant group in White and Gray's (2004) research. The researchers explored back care advisors' perceptions of the factors that influence the effectiveness of training and how training could be improved. Forty-five back care advisors were purposively sampled from a Scottish manual handling forum and participated in seven focus groups. Participants had been employed in their role for between four months and fifteen years, providing the researchers with a range of perspectives. However, the paper does not state in what way or to what extent the back care advisors were involved in patient manual handling, training or advising. This lack of contextual information perhaps limits the transferability of the findings.

The facilitators for the focus groups were also back care advisors and were responsible for encouraging contributions and recording data. However, the authors do not state how facilitators were selected, nor if they had been trained for the task, although they had been given the same instructions by the principal researcher.

Different facilitators were used for the different groups, so the topic areas discussed could have been interpreted differently and with varying degrees of emphasis. The authors acknowledged this as a limitation. However, current perspectives on the use of focus groups in the context of qualitative research suggest that the use of different facilitators may enhance the depth of discussion. Focus groups aim to bring different opinions together exploring a plethora of viewpoints, so they can be a cost and time effective way of gathering participants together to collect data (Nicholls 2009).

The authors suggested that the research could have been better 'controlled' if the focus groups were conducted by the same facilitator. The use of the word 'controlled' may be inappropriate, as the aim of qualitative research is to use an inductive and interpretive approach without 'controlling' the components used in data collection (Ohman 2005). The use of the same facilitator would have enabled any further exploration or clarification of a point previously discussed by another group, which may be missed if different facilitators have not communicated between completing the focus groups.

Furthermore, as the facilitators were also back care advisors, they found it difficult not to contribute to the discussions. Facilitating group discussion is a skilled activity, where the moderator actively encourages group members to interact with each other (Silverman 2013). The facilitator may take an active role in the discussions or choose to assume a more removed position from the group. The dilemma between a back care advisor role versus a facilitator role may also become apparent here (Conneeley 2002). This is not discussed in the paper, but the study may become more transparent if the use of a reflexive diary was used by facilitators to reflect on which roles were assumed.

The focus group data was recorded on written response sheets resulting in some of the detailed discussion being lost and relied on the subjective influence of the facilitator. The data collection may have been more thorough by using audiotaping as a method of data collection as well as the response sheets to increase the accuracy and depth of the data obtained (Nicholls 2009). An expert checker reviewed the coding and themes generated from the data by the principal researcher, thus increasing rigour by cross-checking the principal researcher's interpretation of the data.

White and Gray (2004) concluded that the factors influencing the effectiveness of training can be divided into five broad areas: the experience of the back care advisors themselves; the organisation in which the training is taking place and the culture group; the resources available; the actual training which is being provided; and evidence-based practice. This indicates that training can be more effective if directly related to the culture group and organisation. Further implications are that moving and handling training needs to take into account the experience of the trainees and the settings in which they work. In this way the training will be more relevant and the skills learned will be transferred more easily.

The research carried out by McDermott et al (2009) had a much wider range of participants in a diversity of organisations, including health and social care, and formed part of a larger study funded by the Health and Safety Executive in the UK. One hundred and fifty semi-structured telephone interviews lasting twenty to thirty minutes were conducted. Semi-structured interviews offer a flexible approach allowing the researcher to pursue a series of pre-defined broad questions whilst simultaneously facilitating the exploration of spontaneous issues (Ryan et al 2009). The rigour of the data collection process was enhanced by a pilot interview and subsequent refining of the questions in the interview schedule. The interviews were tape recorded and subsequently transcribed. It is not clear who transcribed the data. This could be important because an individual researcher carrying out transcriptions can immerse themselves in the data and more easily discover similarities and differences (Bird 2005).

Telephone interviews are more cost effective than face-to-face interviews and offer a less threatening environment, for example, they decrease potential self-consciousness on the part of the participant. However, it can also be argued that telephone interviews do not account for non-verbal cues through observation of body language, facial expression and eye contact, which may be seen to enhance the interviewers understanding of what has been said (Ryan et al 2009).

Once imported onto the qualitative software tool, NViro (Version 2.0), the interview transcriptions were analysed by coding and categorisation into emergent themes. There is no clear explanation of this process, which is a common criticism of qualitative research (Braun and Clark 2006). The researchers concluded that the

effectiveness of manual handling training is increased by tailoring it to individual organisation and culture group needs. The transferability of any conclusion could be questionable, since the research covered such a large range of industries and participants.

The findings of the above studies are broadly similar i.e. to recommend that moving and handling training be tailored to the organisation, culture group and relevant setting. My research focuses on the extent to which moving and handling practice is adopted and adapted by the recipients of moving and handling training, so previous research findings are considered in the next section.

2.5 Moving and Handling Training from the Recipients' Point of View

In my study, qualified physiotherapists and occupational therapists comprise the participant group and they are the recipients of moving and handling training. Two research studies (Johnsson et al 2002, Brusco et al 2007) involved physiotherapists and occupational therapists as participants and focused on the implementation of training programmes and the incidence of musculoskeletal injuries. In Sweden specialist physiotherapists and nurses have developed the 'Stockholm Training Concept' for moving and handling training. Johnsson et al (2002) evaluated the training programme, as defined by the Concept, both at the start and immediately following training. In addition, a questionnaire was administered six months later.

The fifty-one participants in the study conducted by Johnsson et al (2002) comprised physiotherapists, occupational therapists, registered nurses and state-enrolled nurses working in community settings. Participant observation involved the performance of a standardised patient transfer procedure (bed to wheelchair). In order to enhance the rigour of the research observations, two independent observers reviewed the procedures on video tape and their notes were checked to ensure parity. To compare the performances of the health care professionals in the three time frames, a video recording should have been carried out at the six-month review. However, due to the time required and expense, this was not feasible.

Since these observations were carried out during the training programme, role plays were used whereby the ‘patient’ was a healthy individual. Also, it would not be ethically sound for a ‘real’ patient to be transferred ninety-eight times. The ‘patient’ in this case would know what to expect and could inadvertently help the participants. This would also have differed from a real scenario, where ‘real’ patients may exhibit unexpected responses or where the standard procedure may need to be adapted. In addition, standardised procedures are difficult to replicate in a ‘real’ setting. Therefore the credibility and transferability of the study can be questioned.

As part of their research Johnsson et al (2002) focused on the participants’ perceptions of their physical exertion and musculoskeletal problems, as well as their opinions of the training programme. The researchers concluded that moving and handling training improved the work technique of participants and improved patient safety and comfort. However, there was no decrease in musculoskeletal problems. In addition, it is not known if the participants adapted or modified the taught techniques to their own workplace. An added benefit of the study was that, in watching their own video recordings, participants were able to learn and to modify their practice.

In Australia, a ‘no lift’ policy for nursing staff was implemented and this was found to reduce musculoskeletal injuries by twenty per cent. It was suggested that similar policies should be implemented for all allied health professionals. Brusco et al (2007) realised that the ‘no lift’ policy may not be appropriate for physiotherapists, occupational therapists and allied health assistants. This is because these health professionals are involved with therapeutic interventions, as well as patient transfer. If the ‘no lift’ rules were strictly applied, therapeutic interventions would have to be replaced by hoists and machines. The researchers’ aim was to devise and evaluate a training programme for physiotherapists and occupational therapists, which would minimise the injury risks in moving and handling practice, whilst simultaneously maximising their ability to carry out therapeutic interventions.

The training programme was developed in consultation with a range of healthcare clinicians and managers across a network of hospitals and other healthcare facilities. After one year the training programme was delivered to 227 health professionals and there were no reports of musculoskeletal injuries during the following six months. It is

difficult to determine if this means there were no injuries or no reports. The long term aim of the programme was to reduce the incidence of work-related musculoskeletal disorders without affecting patient care and therapy. An annual refresher course with a small practical component to apply the current hospital-based package to a community setting was planned. Similarly in the UK, current practice involves an annual manual handling refresher course for all health care professionals. This study appears to separate nursing staff from allied health care professionals. The question arises as to how much nursing involvement there is in therapeutic handling. Also, whether specific manual handling training is required for different professions.

These last two studies have considered the implementation of manual handling training with allied health professionals. They have also acknowledged that manual handling is not just used for patient transfer, but also for therapeutic interventions and as part of a rehabilitation treatment programme.

In considering the development of training programmes, Hall and Bryer (2005) identified various factors that may challenge the effectiveness of a particular programme. For example, recipients of training programmes may be different ages, have different job roles, educational backgrounds, practice experiences and physical and clinical abilities, as well as cognitive ability and learning styles.

This section has provided the rationale for one of my study aims, which is to explore participants' experiences and views regarding moving and handling training and its suitability for practice in a community setting. By its very nature, moving and handling practice in a clinical setting involves patients for the majority of the time. Therefore is it important to consider how patients' perspectives and characteristics are incorporated into moving and handling practice.

2.6 Moving and Handling Practice from the Patients' Point of View

Moving and handling practice is governed by legislation and NHS Trust Policies and conflicts of interest between health care professionals and patients may occur. For example, Mandelstam (2003) investigated a legal case involving two women with learning and physical disabilities being cared for by their parents at home with the

assistance of local authority staff. Conflict arose when the parents refused to have lifting equipment in the home which therefore put the staff at risk of injury when carrying out manual handling. A balance must be struck between the needs and human rights of disabled people and the safety of paid carers (Mandelstam 2003). It is under this type of circumstance that physiotherapists and occupational therapists may have to conduct risk assessments of the situation and integrate both theory and experience into clinical practice. 'Patient handling that is safe and dignified for both patient and handler is a vital skill that requires knowledge and competence' (Pellatt 2005: 1150).

2.6.1 Patients' Perspectives

Literature relating to patient moving and handling is almost entirely viewed from the perspectives of practitioners, yet exploration into the patient experience may also inform education in this field (Smallwood 2006, Cornish and Jones 2007). As stated, the majority of studies appear to concentrate on moving and handling from the health care professional's point of view, together with their safety and to reduce the incidence of back pain. However Griffiths (2011) has examined the patient's perspective on adverse risk during manual handling episodes. He surveyed the available literature in order to retrieve papers, which specifically explored manual handling from the patient's perspective. He established five themes from his narrative review:

- 'Patients need to know about analgesics before movement/ambulation'
- 'Comfort care'
- 'Mastery of and acceptance of mobility aids/equipment'
- 'Psychological adjustment to the fear of falling'
- 'The need for movement to prevent tissue pressure damage'

In summary, all of these themes will affect the ability of the patient to respond to manual handling intervention and the ongoing risk assessment by the healthcare professionals; and should inform the techniques utilised.

Many studies have considered training in safer handling practice only in the context of injury reduction for nurses. However, Wilson (2002) considered the influence of staff education on patients, whereby the safer handling practice encouraged patients to move more independently.

2.6.2 Patient Characteristics

Patients may have characteristics which pose a challenge for moving and handling practice, for example, limited mobility, excess weight, poor cognition and lack of co-operation (Iakovou 2008). This inevitably alters the techniques used. Other issues to consider may be the attachments of catheters, drips and drains, language barriers, footwear and poor hearing or eyesight. Individual patient characteristics also impact on the risks associated with moving and handling practice (Kneafsey et al 2012). Therefore, moving and handling training needs to take these characteristics and associated issues into account, whilst simultaneously implementing taught techniques into clinical practice. This has informed my research study in that patient characteristics are an important consideration when observing therapist and patient interactions.

Current training programmes also need to consider patient characteristics since therapists may be confronted with novel situations in clinical settings. It could be that they have only practiced moving and handling techniques on their peers during training. Cornish and Jones (2007) conclude that training would be more meaningful if undertaken on real patients while on clinical placement. In a survey, 55% of student nurses experienced difficulties with applying taught techniques to dependant patients (Smallwood 2006). An aggravating factor can be the uncontrollable and unpredictable nature of transfers (Knibbe and Friele 1996).

These studies support the rationale for one of my study aims which is to explore therapists' perceptions of complex moving and handling situations, which may be as a result of certain patient characteristics. As highlighted in an earlier section, the identification by student nurses of 'patients too difficult to deal with' was a reason for not being able to apply a taught technique (Swain et al 2003, Smallwood 2006, Kneafsey and Haigh 2007, Cornish and Jones 2007). This reason requires further

exploration into the complexities of patient characteristics and the reasons why the taught techniques were difficult to apply.

2.6.3 Harm to Patients

Therapists typically work with vulnerable people exhibiting a number of conditions. It is essential that healthcare and therapy intervention do not cause inadvertent harm to patients. The Health and Safety Executive (2001) recognises that poor handling techniques may cause a range of injuries to patients, such as bruising, falls and shearing. Poor technique may also lead to fear, pain, loss of dignity during the procedure, skin tears and pressure area damage (Tuohy-Main 1997). Clinical consequences of poor patient handling and moving can significantly impact quality of care, patient safety and comfort (Iakovou 2008). However it is necessary for patients to be moved for either transfer or therapeutic reasons. For example, to help prevent skin conditions, muscular contractions, lung congestion, poor blood circulation and other ailments caused by immobility (Holman 2006).

As discussed in an earlier section, the use of unsafe or controversial manoeuvres is still occurring in practice. In one study, although only 3% of student nurses believed the drag lift to be an acceptable technique, 63% said that they had used it (Swain et al 2003). Seventy of the nursing students wrongly believed the through arm drag lift to be currently recommended, with 84% using it in practice. Incorrect application of a technique could potentially harm the caregiver, as well as the patient. A drag lift, for example, may cause considerable damage or dislocation of a subluxed shoulder joint commonly associated with hemiplegia.

The amount of mobility assistance a patient requires will vary on an individual basis and will probably change over the duration of their treatment and care (Hignett 2003). Hignett (2003) recognises the controversy both nationally and internationally about how patients should be moved and handled. In her systematic review of patient handling activities, Hignett (2003) concluded that there was a lack of research for patient handling when standing and the area should be considered a high priority to address concerns about patient handling in rehabilitation. My study aims to observe and discuss real patient handling in rehabilitation.

2.6.4 Use of Volunteer Patients in Moving and Handling Research

In my research study, I observed therapists moving and handling real patients. As discussed earlier, the involvement of real patients in moving and handling research is limited. However, one study (Allen et al 2002) asked two patients to assist their study group of six female trained nurses. Allen et al (2002) aimed to determine whether transferring equipment designed to assist care staff when moving someone who is able to take some weight through their legs, was likely to affect the risk of back problems in carers. The volunteer patients were screened for stroke and confusion, were able to partially weight bear and were used to being transferred.

The researchers measured compressive disc force during each manoeuvre and analysed the equipment used. They concluded that loading on the spine during transferring tasks with or without equipment was not harmful when an appropriate technique was employed. There was some level of realism using volunteer patients, however there was no consideration of the environmental setting or variability between patients. In addition, the patients may have become habituated to the manoeuvres and 'helped' the participants inadvertently.

This research has informed my study in that the patients are all seen in their own homes in the community and there is no repetition of moving and handling techniques. Therefore there is a higher level of realism because the therapists are putting taught techniques into practice during their usual treatment sessions.

2.7 The Community Setting

Due to a decreased average length of stay in hospital, patients are discharged into the community with ever increasing rehabilitation needs and more complex conditions are now being nursed in the home (Alexander 2008). Therefore, community staff require increasing knowledge of rehabilitation and moving and handling skills. This further necessitates the need for high quality moving and handling education, enabling clinicians to integrate these into a variety of community handling scenarios (Hall and Bryer 2005).

Traditionally, moving and handling education has concentrated on enabling clinicians to reproduce a recognised set of handling techniques (Hall and Bryer 2005). Moving and handling techniques in the community may be compromised by a number of factors, for example, lack of space for equipment or layout of houses (Hall and Bryer 2005). Alexander (2008) agrees that this risk may be multi-factorial due to problems such as space constraints, insufficient staff and non-availability of the equipment. These may seem commonly known issues, but the complexities involved in the adaptation of taught moving and handling techniques requires further exploration, as exemplified in my research study.

It is more widely recognised by UK health professionals that there are specific difficulties associated with moving and handling patients in the home (Hignett 2001, Wanless and Page 2009). For example, Hall and Bryer (2005: 449) recognise that 'the community environment is described as the 'Achilles heel' of patient handling problems, where the challenge of ensuring patient safety is enormous as equipment is often unavailable or unusable in certain environments'. This is because of the lack of space for equipment and awkward layouts of houses and furniture (Holman 2006). Other factors proving problematic in a community setting may also include poor lighting, worn out carpets, pets, clutter, cleanliness and accessibility. Recommended techniques are therefore sometimes difficult and may be impossible to execute (Grisbrooke and Pearce 1999). Knibbe and Friele (1996) recognised that homes were not designed and built with the purpose of caregiving being provided.

Community staff represent a high risk group, often working with chronically ill and elderly patients (Knibbe and Friele 1996). These patients may be bedbound or have decreased mobility and are therefore unable to attend a GP surgery or outpatient clinic for treatment. It is vital that professionals visiting patients in the home can recognise potential risks to their posture and assess each individual task within their surrounding environment (Wanless and Page 2009).

Depending on the patients' needs, there may be only one or two members of staff present during the home visit. Therefore, as discussed earlier in section 2.3, there is already a 'lack of staff', which may compromise the ability of the staff to apply taught and safe techniques (Swain et al 2003, Smallwood 2006, Kneafsey and Haigh 2007, Cornish and Jones 2007, Kneafsey et al 2012).

Community settings are also homes where families live and there may be barriers to the use of hospital equipment and/or adaptations, for example, the introduction of a hoist or a raised toilet seat. According to Alexander (2008) consideration may also need to be given to psycho-social issues within the family, for example, familial relationships and the needs of others living in the home, together with insufficient money or space available.

The sources of literature for this section were mainly reports and education articles, rather than research studies. There appears to be a lack of studies within community settings and my research aims to contribute to this field. The findings discussed above parallel the reasons why nursing students found applying taught principles to moving and handling practice difficult. One of the main challenges identified within the community setting is a lack of equipment or equipment which is not fit for purpose.

2.8 Moving and Handling Equipment

Difficulties may arise when staff members are unable to choose the appropriate equipment, whether the equipment is available and the cost implications of new equipment. A further consideration is whether staff members have received adequate training to use the equipment. Depending on the patients' variable mobility, more than one piece of equipment may also be required. In addition, the actual equipment used during a training session may differ from that found in clinical practice, for example, a different type of hoist may have a clip, rather than loop attachments for the sling.

Concerns have been raised that the use of assistive equipment may minimise the rehabilitation potential of patients compared to using manual handling skills and other traditional techniques (Whipple 2007). Whipple uses three clinical examples to highlight the importance of choosing the appropriate device for the needs of the patient and encouraging the patient to provide as much effort as possible in functional activities. Thus, equipment can be used to help protect the caregiver from injury without limiting rehabilitation potential.

Cornish and Jones (2010) highlight that an excuse often used by staff for manually lifting patients is that patients dislike the equipment. This may be due to poor technique or poor communication with the patient reasoning why a particular piece of equipment was being utilised. There may also be an alternative piece of equipment that the patient may prefer depending on their needs. As discussed earlier in section 2.3, a lack of equipment or availability of the correct type of equipment was cited as one of the reasons for taught techniques not being carried out in clinical practice (Swain et al 2003, Cornish and Jones 2007, Kneafsey et al 2012).

The use of patient handling equipment has an additional potential for facilitating the goals of rehabilitation and improving patient outcomes (Rockefeller 2008, Nelson et al 2008). The use of equipment available in a community setting is explored further in my research study. As well as equipment challenges, there are a variety of other factors which may affect moving and handling practice.

2.9 Complexities of Moving and Handling

Many factors influence moving and handling practice, for example, communication, peer pressure, equipment, time, teamwork and environmental issues (Mitchell et al 2005). However, it is the interplay between these factors in a community setting which can make the activity complex and influence how physiotherapists and occupational therapists adapt their moving and handling practice.

Patient handling tasks are performed in diverse clinical settings and there is no one solution likely to be successful across all units (Nelson and Baptiste 2004). Few would argue that one of the highest risk patient handling tasks is a patient transfer (Nelson and Baltiste 2004, Iakovou 2008), for example from a bed to a chair or toilet. Depending on the rehabilitation goals of the patient, it may be this transfer that a physiotherapist or occupational therapist is likely to practice or develop further as the patient's mobility progresses. Patient handling activities do not only include helping patients to move, but also other manual work such as moving beds and equipment or adjusting the patients clothing (Kneafsey et al 2012).

The consideration of context is important in addressing manual handling issues in healthcare because the movement and care of patients is different from the handling of inanimate objects (Kay et al 2014). Patient handling requires a mix of common sense and adaptability to any situation that may arise, and because the load to be moved is unpredictable, every patient handling task is unique (Wanless and Wanless 2011). Unlike an inanimate object, patients need to be communicated with at every stage of the process and their characteristics considered (as discussed in section 2.6.2) to help reduce the unpredictability of the patient handling task.

Hall and Bryer (2005) consistently argue that the skills required to practice effectively in a complex setting such as the community are not produced simply through training, but through education. Training implies being taught a set of instructions, whereas education means thinking around the instructions with problem-solving and adaptability at the core. There are usually no clear cut answers, nothing is black and white, and therefore practitioners need to be skilled at problem solving and adaptation in differing situations, i.e. they need to be able to think on their feet. It is evident that a theory base is required, but the ability to extend that knowledge and adapt to new challenges or circumstances is vital.

It is this adaptation of applying taught knowledge to real life situations, which my research study aims to explore. In addition, I am aiming to ascertain therapists' perceptions of a complex situation and to carry out a detailed discussion in order to establish a better understanding of the variables controlling unique patient handling tasks.

2.10 Conclusion

Initially, the University-based education of moving and handling practice amongst healthcare professionals was considered. Even at this level a significant theory-practice gap had developed with several reasons for this gap being reported by researchers in the literature. Once qualified, healthcare professionals continue their manual handling education by participating in annual refresher courses. However, the theory-practice gap may still persist, particularly in community settings where moving and handling practice becomes more complex. My research study aims to

extend and explore whether similar barriers exist for qualified healthcare staff, how these barriers may differ in a community setting and how moving and handling techniques may need to be modified accordingly.

The literature emphasises the importance of developing, implementing and evaluating tailored training programmes for moving and handling practice. There appears to be limited research which examines how training programmes are adapted by physiotherapists and occupational therapists in particular settings. It is clear that training programmes inform moving and handling practice. However, it is how the information is implemented and adapted, which affects the actual practice. This enables health professionals to carry out patient transfers and therapeutic interventions in the most beneficial ways; thereby minimising injury risk and maximising patient rehabilitation. My study seeks to explore participants' experiences and views with regard to moving and handling training and its suitability for practice in a community setting.

There seems to be a significant part of the puzzle missing within the manual handling research found to date in that the patients' experiences and thoughts have not been fully considered. In essence, it is those at the receiving end of the moving and handling practice that the tailored techniques are for and who should also be considered, whilst ensuring the health and safety of the practitioners. The consideration of the patient during moving and handling practice will be observed and explored further with the participants in my study.

Healthcare professionals are intimately acquainted with the healthcare environment. Exploring their experiences and perceptions may offer new knowledge about the complexities of manual handling in healthcare settings (Kay et al 2014). Exploration of these complexities, including equipment issues and other barriers as discussed above, is essential in understanding the variables controlling the nature of patient handling tasks. This literature review provides a rationale for the purpose of my research, which is to discover how physiotherapists and occupational therapists implement guidance on safe moving and handling practice, and how they are applied in a community setting.

2.11 Chapter Summary

This chapter has provided a review of the pertinent literature associated with my research study. The review has provided a foundation for my research question regarding how qualified health professionals apply their taught knowledge and techniques in moving and handling practice to real life situations, particularly within community settings. The researchers in the literature have established that there are barriers in applying taught techniques to clinical practice. I aim to explore how these barriers may be considered by physiotherapists and occupational therapists in the community setting. The literature review has also informed my methodology.

Chapter 3

Methodology

3.1 Introduction to the Chapter

This chapter presents an overview of the methodology and methods adopted for the study. The study was conducted within Community Health Services in Coventry and implemented a qualitative approach, using ethnography to guide data collection. This involved the collection of interview and observational data. This study explored how physiotherapists and occupational therapists implemented moving and handling techniques and how they were applied in clinical practice.

3.2 Purpose of the Research and Objectives

The purpose of the research was to discover how physiotherapists and occupational therapists implement guidance on safe moving and handling practice, and how they applied this guidance in a community setting.

Four core objectives were established:

1. To explore the current use of manual handling guidance in community settings
2. To explore therapists' perceptions of complex manual handling situations
3. To identify therapists' self-confidence in the application of manual handling guidance, including the use of equipment
4. To explore participants' experiences and views regarding manual handling training and its suitability for practice in a community setting

It is important to acknowledge that there are many healthcare professionals working in a community setting and utilising moving and handling practice. However, only qualified physiotherapists and occupational therapists were recruited in this study. This is because they are often required to move and handle people as part of a therapeutic intervention, as well as in functional transfers of patients. In the researcher's experience, these health professionals may also be called upon to solve problems that other staff have with regard to moving and handling in the community.

3.3 Research Methodology

In order to gain an in-depth understanding of therapists experiences and applications of moving and handling training, a qualitative interpretive methodology was chosen. Qualitative research can be defined as a type of social enquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live (Holloway and Wheeler 2002). In qualitative research, the individual as a whole and in relation to their social setting is described, therefore enabling a more holistic approach (Hicks 2004). As moving and handling takes place within complex and dynamic social environments, the collection of data arises from the nature of these contexts. Thus, the context must be taken into account if a meaningful and comprehensive understanding is to be gained.

An interpretivist stance underpinned the study by using an ethnographic methodology which centres on the way in which human beings make sense of their subjective reality and attach meaning to it (Holloway and Wheeler 2002). Interpretivism is located in a relativist ontology because it assumes that more than one truth exists (Houghton et al 2012), therefore reality differs for everyone. Reality is based upon perceptions that are different for each person and change over time (Joubish et al 2011).

Interpretivism acknowledges a subjectivist epistemology and the researcher needs to be aware of the impact his or her perceptions can have on the research (Houghton et al 2012). In order for the research to be considered trustworthy, it is crucial for a

reflexive account to be held by the researcher (Kingdon 2005). This is discussed further in section 3.6.

Using a paradigm can be beneficial for ensuring philosophical and ontological congruity of the research (Houghton et al 2012). The researcher needs to ensure that the aims, paradigms and methods are also epistemologically and ontologically related. Table 2 illustrates the key assumptions of the interpretivist paradigm.

Table 2: Key Assumptions of the Interpretivist Paradigm (Bunnis and Kelly 2010)

	Interpretivism
Ontology: What is the nature of reality?	Reality is subjective and changing There is no one ultimate truth
Epistemology: What is the nature of knowledge?	Knowledge is subjective There are multiple, diverse interpretations of reality There is no one ultimate way of knowing
Methodology: what is the nature of the approach to research?	Focus on understanding Uses inductive reasoning Meaning is constructed in the researcher-participant interaction in the natural environment Gathers diverse interpretations (e.g. ethnography, grounded theory)
Methods: what techniques can be used to gather this information?	Tends to use qualitative methods to capture various interpretations of a phenomenon (e.g. observation, interviews, use of narrative)

An ethnographic methodology was adopted ensuring congruity within the interpretivist paradigm, which in turn informs the research methods used. The central aim of ethnography is ‘to provide rich, holistic insights into people’s views and actions, as well as the nature of the location they inhabit, through the collection of detailed observations and interviews’ (Reeves et al 2008: 512). This need for developing a deeper understanding implies that qualitative methodologies are most appropriate when conducting research using an interpretivist paradigm (Houghton et al 2012).

The ethnographic method explores behaviour within specific social situations, including behaviour that is shaped and constrained by these situations. In addition, an insight into peoples' understanding and interpretation of their experiences can be explored (Wilson and Chaddha 2010). Ethnography can be applied to small scale research that is carried out in everyday settings, using a variety of methods, such as participant observation and interviews of key informants who are experts in the chosen social setting (Thomson 2011). The aims of this research can therefore be fulfilled through observations of the moving and handling in the natural environment, followed by interviews to provide an insight into the reasoning behind the techniques used.

It is argued that ethnography is a useful methodology in home research because it captures a holistic understanding of the social and cultural world of health professionals (Thomson 2011). This enables an 'insiders perspective' on healthcare practice (Yang and Fox 1999). Table 3 summarises some of the common characteristics of an ethnographic methodology according to Lambert et al (2011).

Table 3: Common Characteristics of an Ethnography (Lambert et al 2011)

Common Characteristics of an Ethnography
• Exploring: it is about discovery • It relies on collecting data in the natural environment • Value is placed on context: it cannot study people independently of their environments • It observes what people do • Intimate relationship between researcher and researched • Uses a variety of different methods: multi-modes of data collection • Works with unstructured data • No variables purposefully manipulated • Being reflexive; conscious thought; researcher as a prime instrument of data collection

The majority of authors agree that ethnography involves the researcher acting as the research instrument, gathering information about people first-hand in their natural

environment (Pope 2005, Roberts 2009, Oliffe 2005, Lambert et al 2011). The researchers' influence on the processes of gathering and analysing data is acknowledged in ethnography (Oliffe 2005), whereby health researchers aim to produce knowledge to improve practice (Holloway and Wheeler 2002).

Ethnography typically utilises a range of data collection approaches, including participant observation, interviews and analysis of relevant documents (Joubish et al 2011, Thomson 2011). These strategies are essential in helping the researcher to gain a better understanding of the culture being studied (Cruz and Higginbottom 2013).

Participant observations are commonly used in qualitative research (Flick 2014), whereby the researcher observes the events, processes and behaviour in a natural setting (Holloway and Wheeler 2002). In addition, interviews were thought to be a vital component to the research process to confirm the researchers' interpretation of the behaviour observed (Roberts 2009). The interviews were an important aspect in this study because they allowed the researcher to confirm, explore and discuss the observations.

Qualitative research in healthcare is becoming more widely recognised and helps to answer the 'how' and 'why' questions (Neergaard et al 2009). This means that aspects of staff and patients' thoughts and experiences can be explored in order to expand the range of data gathered. One of the principal aspects in the purpose of this study was the observation of moving and handling in the community setting, so it was important that observations were carried out in this location to answer the 'how' questions. Semi structured interviews were also completed in order to ascertain the reasoning and thoughts of the participants. Thus, a thick description following the observation was obtained so the researcher could ask the 'why' questions.

3.4 Research Design

3.4.1 Sampling

In this study, a purposeful sampling approach was adopted in order to select members of the community who would be the most likely to provide the best

information in relation to the research question (Silverman 2013). Purposive sampling involves selecting participants based on their roles, knowledge, insights and ability to discuss their experiences (Hammersley and Atkinson 2007), therefore seeking to maximise the depth and richness of the data to address each question (DiCocco-Bloom and Crabtree 2006). Following an ethnographic approach to collect data from a particular cultural group and in order to explore the research question in depth, this was the best method of sampling to use.

The study included staff who were qualified National Health Service physiotherapists and occupational therapists at 'agenda for change' band five, six or seven and who had worked within a community setting with adults for more than one year. This length of time ensured that the participants had received moving and handling training and suitable community experience.

Sample size is a much debated topic in qualitative research. Baker and Edwards (2012) acknowledge this in a discussion paper with contributions from expert voices. Consideration should be given to the scope of the study, nature of the topic, quality of data and study design (Morse 2000). In ethnography, sampling is concerned with the selection of key participants to give insight into the phenomena under study (Lambert et al 2011). Talking about the sample in terms of people and numbers dismisses the context and environmental setting.

For this study, six participants were recruited as the aim was to achieve depth rather than breadth (Hammersley and Atkinson 2007). There are a number of ethnographic research reports which agree that a key feature of ethnographic research is that it investigates a small number of cases (Yang and Fox 1999, Reeves et al 2008, Cruz and Higginbottom 2013). In order for the findings to be transferrable to other similar settings, a provision of detailed information regarding the study design and implementation has been made explicit. Transferability refers to 'the degree to which qualitative findings inform and facilitate insights within contexts other than that in which the research was conducted' (Carpenter and Suto 2008: 149).

It has been argued that the detail and effort involved in qualitative enquiry allows researchers to 'gain insight into particular events as well as a range of perspectives that may not have come to light without that scrutiny' (Vine 2009). In order for depth to be achieved, 'it is much more important for the research to be intensive, and thus

persuasive at the conceptual level, rather than to be extensive with intent to be convincing, at least in part, through enumeration' (Crouch and McKenzie 2006: 494).

3.4.2 Participant recruitment

Gaining access to a setting can be very time consuming and depends on the type of setting, the researcher's relationship to it and the gatekeepers, as well as ethical issues (Thomson 2011). A novice researcher may find access to a medical setting difficult (Pope 2005); however, in this study, I was part of a physiotherapy team, therefore access to potential participants was already in place.

Advertising to find potential participants took the form of emails and posters. Posters were designed and displayed in community workplaces (appendix 2) and emails were sent to Heads of Departments asking them to cascade the information to staff (appendix 3). All community therapy services in Coventry for adults with physical rehabilitation needs were contacted regarding the study. Initial information included an outline of the study and contact details of the researcher. Potential participants contacted the researcher to find out more about the study and to ask any questions. A participant information sheet was provided at this stage detailing the data collection methods, the period of time over which participation was required and ethical considerations (appendix 4). The researcher awaited further contact from potential participants and, if they wished to take part, a consent form was given for them to sign (appendix 5). The signed consent forms were then collected by the researcher prior to the observations.

Three physiotherapists and three occupational therapists volunteered to take part and were recruited across three community services, including community physiotherapy, community neurological rehabilitation, fast response and intermediate care. All the participants were female and worked at an 'agenda for change' band 6 or 7 level.

3.5 Data Collection

The qualitative research methodology involved two data collection methods: participant observations and semi-structured interviews. Ethnographic studies typically gather participant observations and interviews (Yang and Fox 1999, Lambert et al 2011, Cruz and Higginbottom 2013). Through using these methods ethnographers can immerse themselves in settings, enabling a thick description and rich data to be collected (Reeves et al 2008).

3.5.1 Participant observations

Participant observations can provide insight and explore the interaction between the therapist and patient, capture the context in which the interaction takes place and informs the researcher about the influence of the physical environment on the interaction (Mulhall 2003). The influence of the physical environment was an integral component in the study purpose and it was important to gather information about how it influences moving and handling practice. As discussed in the literature review, previous studies investigating moving and handling techniques have been in a controlled environment with a 'simulated' patient (Johnsson et al 2002). Therefore, this approach contextualises the moving and handling practice in a home environment.

A number of ethnographic sources use Gold's classic typology of research roles (Pope 2005, Carpenter and Suto 2008, Lambert et al 2011) to describe the researchers' role and degree of participation when carrying out fieldwork. The typology characterises participation on a continuum from 'complete participant' to 'complete observer' as illustrated in figure 1.

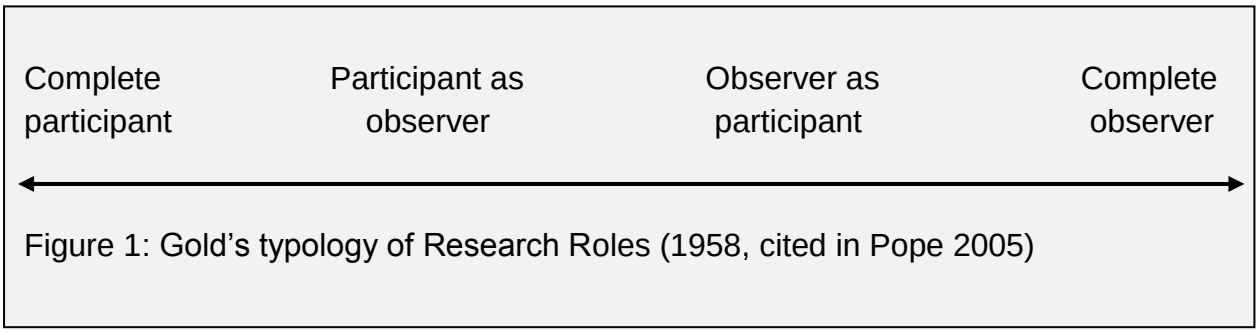

Figure 1: Gold's typology of Research Roles (1958, cited in Pope 2005)

On the continuum of Gold's typology, my role as researcher in this study could be described as being between the 'complete observer' and 'observer as participant'. According to Carpenter and Suto (2008: 91), this role is defined as a 'marginal participant'. In this study, it was not possible for the researcher to adopt the role of a 'complete observer' when in the community setting, because a certain level of social interaction was necessary. This is because the participants were observed in a person's home. On the other hand, I also needed to limit the level of participation between myself and the patient, so that moving and handling practice could be fully observed. 'Observation is a way for a researcher to document everyday practices of participants and to better understand their experiences' (Savin-Baden and Major 2013:392).

The observations took place in the community setting of the patients' home, nursing home or residential care. Patients, who are the recipients of moving and handling techniques, were understandably present during the observation sessions. The participants gave the patients an information sheet (appendix 6) and a patient consent form (appendix 7) during a previous home visit. At least one week was allowed for the patient to consider their consent. On signing the consent form, the patient gave permission for the researcher to be present. The patient was assured that the researcher would be observing the participant and no identifiable information about them would be recorded. A mutually agreed appointment was then made via telephone between patient, participant and researcher. If the patient had requested the withdrawal of the researcher at any point during the treatment session, this would have occurred and an alternative participant observation arranged. However, this was not the case for any of the observations.

The patient consent form was signed before the observations, but verbal consent was also obtained upon entering the home or room in a care home. The patient was also reminded that the researcher would be present to observe the therapist and that notes would be taken during this time. The patient was asked if they had any further questions. As a 'marginal participant' the researcher found a place to sit or stand in the room which did not impede the therapeutic intervention. Occasionally the therapy involved movement into alternative spaces, for example, a corridor or during a kitchen or bathroom assessment. In these cases the researcher followed at a short distance.

Observation is valuable because it generates information about the influence of the physical environment (Mulhall 2003). However, this aspect can be neglected if researchers focus on people's behaviour without being concerned about the setting and obtaining a holistic view. The setting in which the moving and handling took place is a crucial part of this study, therefore considerable thought was given to the structure of the field notes in order to ensure the setting was fully described.

Fieldnotes consist of the descriptions of the processes taking place, contexts and aims to capture activities fully, although they are inevitably selective in a purposeful manner to shape the enquiry (Thomson 2011). Wolfinger (2002) suggests that fieldnotes are a vital part of ethnographic research, and describes two strategies for writing fieldnotes; the salience hierarchy and comprehensive note-taking. When a researcher sits down to write notes using the former strategy, they may note the most interesting or telling part of the observation that they remember. The alternative latter strategy involves describing everything that happened during a particular period of time, which was the most suitable for this study.

In this study, the fieldnotes consisted of two components. The first was a framework with five contributory factors: patient, participant, task, environment and other factors (appendix 8). In observing participant and patient interactions I used these as prompts to ensure that all aspects of the observation had been taken into consideration. These five factors were chosen because they are accounted for when carrying out risk assessments prior to any moving and handling practice (MHOR 1992). Elements of this framework could be completed before or after the observation, freeing up the time to complete the second component. This was a time sheet for notes to be written in chronological order as the observation was underway (appendix 9). As the observation progressed, the researcher noted the time and wrote down as much detail as possible about what was happening. A combination of both components provided a holistic approach and ensured that the events and their context were recorded as accurately as possible.

A total of eight observations were carried out because two of the participants saw two patients in one care home visit. Due to the nature of therapeutic intervention, there are occasions when two therapy staff are required to carry out treatment. This meant that in five of the observations there was an assistant practitioner or a second

physiotherapist present, as well as the participant. The additional staff were given a participant form to read and also signed a consent form, since they were present during the observation. However, only the original participants were interviewed. The table below summarises the number of observations for each participant and additional staff members present.

Table 4: Summary of Observational Data Collection

Participant	1	2	3	4	5	6
Number of observations	2	1	1	1	2	1
Additional staff present	1	0	0	1	1	0
Location	Housing with care	House	Flat	Maisonette	Residential home	House

Due to the ethnographic approach, the community settings in which the observations took place were not deliberately chosen, but reflect the nature of the locations in which therapists carry out moving and handling practice. The observations lasted between 30 minutes and 80 minutes, which largely depended on the treatment received, exercise tolerance of the patient and holistic discussions held.

Following each observation, the researcher transcribed the field notes in preparation for analysis and also reflected on the research process and the data obtained. Reflexivity is a central part of ethnography (Pope 2005), which is focused on making explicit and transparent the influence of the researcher, methodology and data collection methods on the process of the research and the research findings (Cruz and Higginbottom 2013). This reflexive process is discussed further in section 3.6. Pertinent issues that were seen or heard were noted in the field notes and became the starting points for the in-depth interviews (Roberts 2009). Therefore it was possible for the observations to be clarified and explored further.

3.5.2 Interviews

Interviews are widely used as a data collection tool in qualitative research (Ryan et al 2009). Semi-structured, in-depth interviews are frequently used by health professionals (Whiting 2008). Doody and Noonan (2013) suggest advantages and disadvantages of interviews in their paper summarised in Table 5.

Table 5: Advantages and Disadvantages of Interviews as a Method of Collecting Data (Doody and Noonan 2013)

Advantages	Disadvantages
• Help participants to describe what is important to them • Useful in gathering quotes and stories • Enable more complex questions to be asked • Researcher can probe the participants responses and seek further clarification • Help the participants give detailed responses • Explore the participants reasons for acting in a certain way or their interpretation of events	• May seem intrusive to the participant • Time-consuming • May be susceptible to bias: ○ Participants desire to please the researcher ○ Giving an official point of view rather than a personal point of view ○ Desire to create a good impression

Ryan et al (2009: 313) suggests that 'interviews are a flexible and useful method of data collection and are especially appropriate for collecting information regarding participants' experiences, beliefs and behaviours'. Interviews offer access to research participants' ideas, thoughts, and memories in their own words and provide an excellent way of discovering the subjective meanings and interpretations that people give to their experiences (Oliffe 2005).

Semi-structured interviews offer a flexible approach allowing the researcher to pursue a series of pre-defined broad questions whilst simultaneously facilitating the exploration of spontaneous issues (Ryan et al 2009). In this study, semi-structured interviews were carried out with individual participants in order to explore their

thoughts and experiences in depth. The interviews took place shortly after each observation, so that the moving and handling practice in each situation was clearly remembered. This is important because subsequent visits, especially with the same patient could cloud the participant's memory. It was best for the researcher to conduct the interviews whilst the memory of the observation visit was still fresh in their minds.

The interviews took place in a meeting room at the participants' place of work, which was booked prior to the interview to minimise disruption whilst the interview was in progress. Thomson (2011) highlighted that ethnographic interviewing differs from other forms of qualitative interviewing, because it focuses on the meanings of the observed actions and events. The researcher - practitioner relationship had also already been established during the previous observation. Interviews were thought to be a vital component of the research process to confirm the researchers' interpretation of the behaviour observed (Roberts 2009).

Individual face to face interviews seek to foster learning about individual experiences and perspective on a given set of issues (DiCocco-Bloom and Crabtree 2006). In this study, one-to-one, face-to-face interviews were conducted, rather than telephone interviews, because the researcher needed to observe the participants' body language and facial expressions. 'The art of qualitative interviewing is complex, creative and active, and is central to the role of researcher as research instrument' (Carpenter and Suto 2008: 84). This means that the researcher, as a person, has a pivotal role in the data collection, enabling the interview to progress from the participant's point of view, whilst providing a focus towards the research objectives. This is particularly important in a semi-structured interview.

Six interviews were completed, each between forty five minutes and an hour in length. This was sufficient time for the topics in the interview schedule to be discussed. Non-verbal communication cues were noted at the same time. Semi-structured interviews are generally organised around a set of predetermined open-ended questions. As the dialogue between the researcher and participant develops, questions can then be asked to further clarify or explore a point made by the participant (DiCocco-Bloom and Crabtree 2006).

Once the initial interview schedule had been developed, consisting of broad semi-structured questions, a pilot interview took place with a colleague who met the inclusion criteria. This enabled me to identify any questions which were ambiguous or insufficiently open to elicit an in-depth response. It also made sure that the questions made sense and whether any further explanation was required, so that the questions themselves could be refined. Another advantage of the pilot interview was to trial the use of the dictaphone (DiCocco-Bloom and Crabtree 2006). Following the pilot interview a number of the questions were made more open-ended in order to allow the participants to respond more widely and in more depth.

In the pilot interview the schedule was initially designed in two main sections. The first section covered questions about the recent observations. The questions included details about the moving and handling techniques used and the home environment. This allowed me an opportunity to follow-up the observation and to clarify any actions witnessed. For example, I could ask why a particular technique was used over another or if any techniques were adapted because of the home environment. This was important to ensure parity of thought between researcher and participant and may have reduced researcher influence.

The second section of the pilot interview comprised the main body of the interview commencing with ‘setting the scene’ questions. These enabled the researcher to establish a rapport with the participant and included straight-forward questions, such as their job role, for how long they have worked in the community and what kind of patients they see. Subsequently, the questions evolved into those which would enrich the data and explore the purpose and the core objectives. They included questions about moving and handling in general, the community setting and training received. Appendix 10 details the interview schedule.

Feedback from the pilot interview indicated that it would be beneficial to begin with the ‘setting the scene’ questions in order to put the participant at ease and to familiarise them with the presence of the dictaphone. It is best to start with questions that the participant can answer easily, then move on to more difficult topics (Doody and Noonan 2013).The first questions were broad, open-ended and non-threatening to help decrease the initial apprehension (DiCocco-Bloom and Crabtree 2006). The remaining questions, including those pertinent to the observations, were directed by

the researcher but led by the participant. This meant that the interviews could focus towards the research objectives whilst still allowing the participant freedom to express their thoughts.

As I became more experienced at interviewing, the interview schedules and techniques evolved, for example, in providing greater opportunity for expression of thought and in re-visiting the participant's answers. This allowed the participants to expand on their thoughts and experiences without interrupting their initial train of thought. Consequently the researcher was able to amass a greater quality of raw data. As the interviews progressed, clarification and requests for more information were sought as required. Prompts were used where appropriate to encourage elaboration or further explanation (Whiting 2008).

Prior to the beginning of the interview the researcher explained the audiotaping procedure to the participant. The researcher stated that the dictaphone could be switched off at any time during the interview should the participant require more time to gather their thoughts or to think of suitable scenarios as examples of moving and handling situations. This decision was taken because, during the pilot interview, the colleague felt pressured to speak at times while the audiotape was running.

Although the researcher is experienced in clinical interviews and has obtained skills such as non-verbal communication, active listening and the ability to take notes during an interview process, it has been acknowledged that research interviews are a different entity (Nicholls 2009). This is because the researcher is exploring the thoughts and experiences of the participants, as part of the qualitative approach using open-ended questions. In a clinical interview the questions are generally more factual and guided by the practitioner's specific agenda. Therefore, in addition to the interview techniques above, the researcher learned to encourage the participants to give as full answers as possible by using non-verbal prompts and active listening skills, such as eye contact and nodding (Doody and Noonan 2013).

There was an opportunity at the end of the interviews for the participants to add any further comments or ask any of their own questions. Furthermore, the researcher gave the participants the option of reporting any 'after-thoughts' or 'reflections' that they had after the interview. For example, if they thought about the interview on their way home and thought of something that they wished to add.

In addition, at the end of each interview the researcher sought feedback from the participants about how the interview was conducted. Time was taken by the researcher post-interview to reflect on the proceedings which involved writing down any further discussion notes, thoughts for the next interview and how the interview was conducted overall. These reflections were an important aspect in contributing to a reflexive approach.

3.6 Reflexivity

Reflexivity is an important dimension of ethnography and qualitative research (Hammersley and Atkinson 2007) and ethnography relies on the researcher to act as the research instrument (Pope 2005). In order to ensure trustworthiness of the research findings, the researcher must be able to illustrate their steps in data collection and analysis processes. This demonstrates that the findings are not based on personal opinion, but on a rigorous analytical process (Roberts 2009). A number of authors suggest that reflexivity should be incorporated in all stages of the research process (Whitling 2008, Cruz and Higginbottom 2013), including the formulation of the purpose and aims of the research study and methodologies chosen.

Reflexivity entails becoming more self-aware about the potential biases that, as the researcher, they may bring to the research study. The use of a reflective diary of the interviewer's experience and observations during the data collection process helps to enhance rigour (Ryan et al 2009). I kept a reflective diary, mostly in a notebook, which was kept at hand during all stages of the research process. Appendix 11 cites examples of the excerpts taken. The notebook was also utilised in the observations and interviews, so any ideas or influences could be noted. The feedback from the interviews was also recorded in the notebook. At times, retrospective thoughts were also included. As Thomson (2011: 15) suggested: 'Ethnographic researchers try to become aware of how their values, previous experiences and personal interests shape the research, not with an emphasis on psychological introspection, but rather to be alive to the way the study evolves, and how they negotiate their position within it'.

3.7 Role of the researcher

In healthcare ethnographies, the researcher is often a member of the profession that they are observing, and have the advantage of an 'insider's' familiarity of the setting (Thomson 2011). As a physiotherapist working within a rehabilitation team, I knew of the participants prior to the research. I was also familiar with the community setting in which the observations took place. Therefore I had prior knowledge and understanding, an established rapport and provided an unthreatening environment for the observations and interviews. This could be seen as a potential limitation to the study, where the researcher could influence the outcome of the data collection. However, due to the familiarity, the researcher was able to explore the participants' thoughts and experiences more deeply; thereby providing a richer body of evidence. The relationship between the ethnographer and participants is crucial to the quality of the data (Thomson 2011).

McNair et al (2008) highlighted some of the benefits and pitfalls of the experiences of clinicians who assume the role of qualitative researcher as summarised in Table 6.

Table 6: Benefits and Pitfalls of Clinicians as Qualitative Researchers (McNair et al 2008)

Benefits
• Selecting a research question that is clinically relevant • Choice of clinical research setting and access to the clinical field • Addition of tacit clinical knowledge to the analysis • Clinicians interviewing other clinicians are insider researchers in that they share at least some understanding of the clinical environment and may share core values • Enhance qualitative health research by being able to provide a depth of understanding to the meanings practitioners bring to the healthcare environment
Pitfalls
• Whether an insider is the most appropriate person to research their own community or domain • Ethical considerations regarding the risk of coercion of participants • Potential for the blurring of role boundaries between researcher and participant

In order to provide a distinction between the researcher role and practitioner role, the researcher wore plain clothes instead of a uniform for both observations and interviews. This enabled the participants to define the researcher role. As a further advantage the researcher was introduced as such, instead of as a physiotherapist, in the patients' homes. The patients' therefore did not expect the researcher to participate in any treatment, so the researcher remained a 'marginal participant'. In a paper by Lambert et al (2011), the researcher dressed in ordinary clothes to avoid being identified as a nurse. In addition, she did not engage in any nursing duties. It was important to create some space between the role of researcher and nurse. The use of a reflexive account, as discussed above, was also used to overcome the pitfalls.

3.8 Ethical Considerations

In this study, all participants were asked to give informed consent. The information given prior to the request for consent detailed the purpose of the research, the time required by the participant, the data collection methods (observation and interview), data confidentiality, anonymity, any benefits and harms and an outline of data analysis and dissemination. It is important for potential participants to be given full explanations as to the nature of the research and the format the data collection will take (Ryan et al 2009). Furthermore, there was time for the participants to ask questions before the research began. It was made clear that they could participate without any coercion and that they could withdraw at any stage up to two weeks after their data was collected. Should a participant have chosen to withdraw, all their data would have been destroyed and there would have been no repercussions related to their position. In the event no participants withdrew from the research, so no further action was required. The data collected will be destroyed when the dissertation has been assessed.

Since the patients were inevitably present in order to observe the participant, it was essential informed consent was sought from them prior to being observed. The patients' names were only recorded on the patient consent forms. No other identifiable information was recorded such as their hospital number or home

address. Some information was recorded regarding the reason for therapy intervention during the observations. Any additional staff present during the observations were also asked to read the participant form and to sign a consent form.

All the data collected is kept securely to maintain confidentiality and the participants have been given a participant information number to ensure anonymity. Paperwork is kept in a locked filing cabinet in the researcher's office. The office can be accessed only by using a specific swipe card. Computer data is stored on a personal laptop, which is password-protected. When not in use the laptop is kept securely in a locked drawer either in the researcher's office or at the researcher's place of residence.

This research has been approved by Coventry University Research Ethics Committee, Integrated Research Application System (IRAS), Research Ethics Committee and the Research and Development Team for Coventry and Warwickshire Partnership Trust (appendix 12).

3.9 Strategies used to enhance rigour of the research

Rigour embodies the idea of 'trustworthiness' and the strategies used are based on a number of concepts. Trustworthiness in qualitative research means methodological soundness and adequacy (Holloway and Wheeler 2002). It is essential that researchers utilising qualitative methodology exercise and demonstrate a rigorous approach (Cruz and Higginbottom 2013).

The interpretivist paradigm acknowledges its subjectivity and the researcher needs to be aware of the impact his or her perceptions can have (Houghton et al 2012). This recognises that the researcher's beliefs and values affect research, therefore reflexivity is essential (DiCocco-Bloom and Crabtree 2006). Reflexivity is the ongoing process of self-awareness adopted by researchers demonstrating the trustworthiness of their findings (Kingdon 2005). Increasing reflexivity of research can increase the credibility and trustworthiness of qualitative data (Smith 2006).

Credibility is concerned with the likelihood that the researcher's report is accurate given the phenomenon studied and the way the research was conducted (Clarke

2009). In a credible account, the researcher should clearly articulate how they arrived at their findings, including how the data was produced and analysed. For this study, an audit trail from data collection, interpretation through to analysis was used.

Observers have a great degree of freedom regarding what they choose to observe, how they filter that information, and how it is analysed (Mulhall 2003). The researcher made decisions about the design and implementation of the participant observations and interviews. In order to keep a clear record of the decisions made and to provide an audit trail, the researcher kept a reflective diary to show the links between the data collection and analysis. Thus, the themes developed are dependable. If the findings of a study are to be dependable, they should be consistent and accurate. This means that readers will be able to evaluate the adequacy of the analysis through following the decision-making processes of the researcher (Holloway and Wheeler 2002).

Methodological triangulation is a technique designed to compare and contrast different types of methods to help provide a more comprehensive insight into the phenomenon under study (Reeves et al 2008). This technique is important as what people say about their behaviour can contrast with what they actually do. In this study, methodological triangulation was used between the participant observations and semi-structured interviews to provide augmentation of the scope, depth and consistency of the data collected. During analysis, any inconsistencies between the observations and interviews became apparent and were therefore considered to ensure that the research is credible; that is to say, whether it is genuine and reliable (Carpenter and Suto 2008).

It has already been stated that the role of the researcher can be described as that of ‘a research instrument’ (Pope 2005: 1180) and will play a pivotal role in the data collection process and analysis. Pope (2005) has also shown that the roles and relationships established in this study are a central part of the qualitative approach and that reflexivity can help a researcher to think critically about the nature of the themes developed. It is important that the themes developed are confirmed by the data collected and are not the result of personal influence (Öhman 2005). ‘However, personal bias is acknowledged as an inevitable feature of our humanity and one that

is vital if we are to explore the feelings, meanings and the personal context of our participants lived experiences' (Nicholls 2009: 590).

Throughout the research process, using the interpretivist paradigm, the researcher has ensured congruity between the ontology, epistemology and methodology. The consistency and transparency will ensure the quality and rigour necessary for conducting healthcare research (Houghton et al 2012).

3.10 Data Analysis

Qualitative data analysis ideally occurs concurrently with data collection (Ryan et al 2009, Thorne 2000), so that investigators can generate an emerging understanding about research questions, which in turn informs both the sampling and further questions being asked (DiCicco-Bloom and Crabtree 2006). Therefore, in qualitative research the analytical process begins during data collection as the data already gathered are analysed and shape the ongoing data collection (Pope et al 2000). Such continuous analysis is almost inevitable in qualitative research because the researcher is 'in the field' collecting the data and it is impossible not to start thinking about what is being heard and seen (Pope et al 2000).

One of the core principles underpinning qualitative data analysis is that the analysis is commonly regarded as an ongoing and iterative process, as opposed to a once-and-for-all activity occurring only after data collection ceases in the study (Clarke 2009). In order to generate findings that transform raw data into new knowledge, a qualitative researcher must engage in active and demanding analytic processes throughout all phases of the research (Thorne 2000).

Thematic analysis is a method for identifying and analysing patterns within the data, which seeks to find emerging themes. The analysis may not necessarily be used for building a theory, for example in interpretive phenomenological analysis, but can be used to develop themes on which to base any conclusions (Braun and Clarke 2006). Generating themes from data is a common feature of qualitative methods and a widely used analytical method (Smith and Firth 2011), that depends on constant

comparative analysis processes to develop ways of understanding human phenomena within the context in which they are experienced (Thorne 2000).

Patterns, themes and categories do not emerge on their own. They are driven by what the inquirer wants to know and how the inquirer interprets what the data are telling her or him according to subscribed theoretical frameworks, subjective perspectives, ontological and epistemological positions and intuitive field understandings. The process is highly reflexive (Srivastava and Hopwood 2009).

3.10.1 Rigour in Data Analysis

In order to enhance the rigour of the data analysis, a reflexive account was kept, documenting the process of coding and categorising the data into themes. This is because the creation of themes inevitably involves subjective choices and interpretation (Seers 2012). At the same time this incorporates the researcher's positionality and a reflexive approach. Researcher subjectivity inevitably impacts upon how research unfolds and how it is interpreted (Bott 2010). A thematic analysis approach was completed, using Braun and Clarkes (2006) suggested phases, and this proved to be valuable in providing guidelines at my novice stage of qualitative analysis.

3.10.2 Researcher Influence

Researchers can influence the analytic process in a number of ways including the theoretical lens the researcher used to approach the phenomenon, the strategies the researcher used to collect data, and the understandings that the researcher has about what might count as relevant or important data in answering the question (Thorne 2000). Their professional background and past experiences could make some data more important to them as well as linking it to the research question.

3.10.3 Phases of Data Analysis

The process requires a skilful interpretation and handling of the data, and relies on a systematic and rigorous method (Srivastava and Hopwood 2009). An adapted version of Braun and Clarke's (2006) thematic analysis process was used. As the researcher is a novice, the phases these authors suggest were used to help structure the analysis using a systematic process. Recording of emerging codes and thoughts therefore contributed to the rigour of the analysis process. Braun and Clarke's (2006) approach to thematic analysis is important to novice researchers, in providing a structure to the development of core data analysis skills which can be further developed over time.

Table 7: Phases of Thematic Analysis (Braun and Clarke 2006)

Phase	Description of the process
1. Familiarising yourself with the data	Transcribing data, reading and re-reading the data, noting down initial ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts and the entire data set, generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating the analysis back to the research question and literature, producing a scholarly report of the analysis.

Phase 1: Familiarising yourself with the data

This phase involved the transcription of the data and reading it through a number of times in order to become familiar with the interviews and observations before initial coding began. Transcription is a key phase in data collection (Bird 2005) and is more than just writing up the interviews verbatim. Representation of audible and visible data into written form is an interpretive process which involves making judgements and is therefore the first step in analysing data (Bailey 2008).

Transcribing the interviews myself was a very lengthy process but vital to become immersed and familiarised with the data. Although it is important to become familiar with the data, it is also important to take a step back so that the big picture can still be considered without forming immediate conclusions or looking for themes too early. Transcribing is an interpretive act rather than simply a technical procedure, and the close observation that transcribing entails can lead to noticing unanticipated phenomena (Bailey 2008). Bird (2005) has written about her experiences and reflections of transcription and how she has grown as a qualitative researcher. Having read this article, I now realise that I am not simply creating a verbatim report, but that the process is far more holistic, providing a crucial element in the interpretive analysis.

Reflective note 1

A receptionist at work offered to transcribe my interviews, acknowledging the lengthy process. On reflection I decided that it would be best for me to transcribe them myself, so that I could become familiar with the data. This meant that I could re-live the interview, listening to the participant's vocal tones and remembering their body language and facial expressions. This also helped me to become immersed into the interview, thus gathering initial ideas. In addition, I did not think it would be ethically appropriate for her to transcribe the interview.

Box 1: Reflective note 1

Professional transcribers often have difficulties capturing the spoken word in text form because of sentence structure, use of quotations, omissions and mistaking words or phrases for others (DiCicco-Bloom and Crabtree 2006). This may have been less of an issue as I transcribed the interviews and the observations, therefore I

had the potential to remember what the participant was trying to say and allowed any non-verbal and verbal responses to be understood. Transcription of each interview took place as soon as possible after the observations and participant interviews whilst these were still fresh in my mind. According to Roberts (2009) data collected in the field notes should be analysed and compared with the transcripts from interviews to identify similarities and differences. This combined analysis allows for the development of common themes and meanings, so that the context of the observational field notes is amalgamated with the interview transcripts.

Once transcribed, I listened through the audiotapes again to check the accuracy of transcription and was also able to 'relive' the interview. Listening to the original recorded data brings it alive through appreciating the way that things have been said as well as what has been said (Bailey 2008). Context, tone and sarcasm become lost if the transcribed words and phrases fail to reflect the way in which they were originally said (Bird 2005). This familiarity with data and attention to what is actually present, rather then what is expected, can facilitate realisations or ideas which emerge during analysis (Bailey 2008).

Computer software can aid the process of data analysis, particularly where there are large amounts of data (Ryan et al 2009). Although there are many qualitative data analysis computer programs available, these are essentially aids to sorting and organising sets of qualitative data, and none are capable of the intellectual and conceptualising processes required to transform data onto meaningful findings (Thorne 2000). Using software to help with the more laborious side of analysis, that is managing large amounts of data, which has many potential benefits, but some caution is advisable (Pope et al 2000). As I am a novice qualitative researcher and there were six participants, I decided that it would be more beneficial for me to sort and code the data myself, in order to achieve an in-depth understanding and full immersion, so the context of the data was not lost.

Phase 2: Generating initial codes

In the right hand column of each transcript, I wrote down short codes or keywords which seemed pertinent and also underlined these sentences. The pertinent words

were those which I thought would inform a deeper understanding of the participants' thoughts and experiences. At this stage I decided to code according to the information gathered without looking at the research purpose and objectives. If I had done this, the codes may have been too deductive and constrained for a qualitative analysis. My coding was therefore inductive and opened up greater possibilities before categorisation into themes. Qualitative data are usually reduced or condensed by a system of coding (Ryan et al 2009). Subsequent analysis then entails the development of categories and themes from the data.

Reflective note 2

During the interview coding process, I had to take care in the choice of codes for specific key words or phrases. This is because it was tempting to use similar codes for similar words, thus identifying similarities, which, in reality, were not there. Although the same word may have been used by different participants, the word may have had a different meaning when put into context of the particular sentence or discussion point.

Therefore, I learned to look more closely at the context of the key word or phrase, taking into account the holistic nature of the interview and the actual meanings portrayed by the participants.

Box 2: Reflective note 2

Phase 3: Searching for themes

This phase involved the coding and categorisation of data to form sub-themes, which will in turn drive the formation of themes (Aronson 1994). I started to transfer similar codes from the transcripts onto large pieces of paper to begin the process of sorting them into relevant sections. At times I referred back to the original transcript to check the context of the codes as explained in my reflective note above.

At this point I also used different colours for different codes to help with categorisation. This enabled me to manage the large amount of data more effectively. Furthermore, I decided to listen to the interviews again, because I did not want to lose the context of the data associated with each code. Whilst listening to the interviews, I created mind-maps on an A2 page for each participant, also

incorporating the observation notes. I then colour coded the mind-maps, so I could compare them with the initial written codes, which I had already found. This enhanced the rigour of my analytical approach.

Reflective note 3

My dining room walls have turned into a paper mosaic of codes and colours. I feel like I am a detective with all the evidence in front of me and I am now sitting staring at it, trying to make sense of it all.

Box 3: Reflective note 3

Use of the coloured codes in both the written form and mind-maps, helped me to compare and contrast the observations and interviews of each participant. It was easier to see any similarities or differences by looking for the same or different colour codes for each participant.

Ethnographic analysis uses an iterative process in which cultural ideas that arise during active involvement 'in the field' are transformed, translated, or represented in a written document. It involves sifting and sorting through pieces of data to detect and interpret thematic categorisations, search for inconsistencies and contradictions, and generate conclusions about what is happening and why (Thorne 2000). The role of iteration within the inductive approach is essential, because the process of revisiting data will enable new connections or disconnections to be found so that the themes can be refined and a greater understanding of the themes will be developed (Srivastava and Hopwood 2009).

After I had completed the colour coding, I had a much greater in-depth understanding of the data and could then categorise the codes into potential sub-themes. Even if a code did not appear to fit into a potential sub-theme, I still kept the data to one side until the themes had been reviewed.

Phase 4: Reviewing themes

The sub-themes I identified were checked with the raw data. This enabled me to prevent losing the context of the codes within the transcripts and observation notes. On checking the raw data, I moved the codes to an alternative sub-theme if

appropriate. I was able to group the subthemes into four overall themes through an iterative process of checking and re-checking my themes with the raw data. Within this review any inconsistencies or contradictions found within the data could be built on and may develop new themes. In addition, any corroborative evidence could be identified and used to confirm the developmental concepts. This process of inductive reasoning enabled me to understand and to explore the thematic findings.

Reflective note 4

I took care not to name the themes too early, as I wanted to review all the sub-themes thoroughly beforehand, in order to keep an open mind and to maintain my interpretive thought processes.

Box 4: Reflective note 4

Phase 5: Defining and naming themes

Rather than simply identifying codes and categorising them, I was careful to maintain their context and actual meaning. As I reflected on the codes, I made sure that the actual coded data captured the perceptions and experiences of the participants as expressed during the interviews. It was at this stage that I referred the themes to my original research question and objectives.

Themes are identified by bringing together components or fragments of ideas or experiences revealed in the data, which are often meaningless when viewed alone (Aronson 1994). During this stage, the themes were revisited to check the data had been represented appropriately and if any of the themes were similar or opposing. The sub-themes were organised into final groups in order to generate the final themes.

Phase 6: Producing the report

Extract examples from the raw data were identified to illustrate the key themes which are presented in the next chapter.

The main themes are:

- Environmental Impact
- Equipment Provision and Funding
- Patient Choice and Family Influence
- Training, Experience and Therapeutic Handling

3.11 Chapter Summary

This chapter explains the purpose of the research and the methods used to gather data in order to answer the research question. The interpretivist theoretical stance underpins the methodology throughout, ensuring a more trustworthy study. The data collection methods including observations and interviews have been discussed in detail. Consideration has been given to the ethical issues and role of the researcher. Strategies used to enhance rigour have also been discussed including reflexivity, which is a central component in an ethnographic study.

Chapter 4

Findings

4.1 Introduction to the Chapter

This chapter presents the main themes identified during the data analysis process. A total of six interviews and eight observations were completed. Thematic analysis consisted of coding and categorisation into sub-themes and these formed the main themes. The themes are illustrated with extracts from the interview transcripts and observation notes. The interview transcripts are represented in italics where ‘P1’ indicates participant 1 and the observational data is represented in boxes where ‘P1 V1’ indicates participant 1, visit 1.

The term ‘therapist’ is used throughout this chapter and represents physiotherapists and occupational therapists only, as these professions were the participant group. There are other ‘therapists’ in the healthcare setting, such as speech and language therapists, but when required these disciplines will be referred to in full.

4.2 Introduction of Main Themes

As the raw data were analysed using a thematic analysis, a variety of sub-themes were established. The sub-themes were then amalgamated to form four main themes: Environmental impact, Equipment Provision and Funding, Patient Choice and Family Influence, and Training, Experience and Therapeutic Handling. The following table summarises how the sub-themes underpin each main theme.

Table 8: Summary of the Main themes and Sub-themes

	Main Theme	Sub-themes
1	Environmental Impact	• Environmental Challenges and Impacts on Manual Handling and Therapy Intervention • Environmental Benefits and Impacts on Manual Handling and Therapy Intervention • Risk Assessment and Safety
2	Equipment Provision and Funding	• Equipment Provision • Cost Implication and Funding
3	Patient Choice and Family Influence	• Patient Choice • Family Influence
4	Training, Experience and Therapeutic Handling	• Training Experience and Expectations • Functionality of different roles, expectations and perceptions • Therapeutic Handling

4.3 Theme 1: Environmental Impact

In a community setting, the environment in which a therapist works varies considerably. Every patient's home is different and presents unique environmental challenges and benefits. A patient's home could range from a house or bungalow to a caravan or high rise flat. Alternatively, they may live in a residential home, housing with care or sheltered accommodation. Due to the fact that the person receiving care is housebound, the moving and handling or therapy intervention must take place in their home. The participants highlighted how the environment presented challenges and benefits and how these impacted on manual handling and therapy intervention.

4.3.1 Environmental Challenges and Impacts on Manual Handling and Therapy Intervention

All the participants expressed how environmental challenges impacted on their ability to carry out moving and handling in a community setting. Challenges included a lack of space, poor lighting, loose carpets or pets. These in turn made manoeuvres difficult, for example, hoisting. It is important that these challenges are acknowledged first to set a context for the impact that they had on moving and handling techniques.

> *P1: "There's clutter, carpets are a nightmare - it's difficult to hoist on the thick carpet and you can't move the rotunda on the carpet as well… You have to be aware of the environment and think about patient safety… Even lighting can be an issue, I was in a house yesterday and it was really dark even with the lights on"*

Poor lighting was identified as an issue if the therapist or the patient could not see properly during manual handling. For example, when completing a step round transfer, the patient needed to see where to put their hands in order to sit down safely and minimise risk of falls or injury. The next quote highlights another potential hazard of poor lighting:

> *P2: "She had a cat that used to lie and wait halfway down the stairs and it was a similar colour to the carpet. The light did not work in the hallway, so the cat was hard to see… A bit of a trip hazard"*

A lack of space in the environment limited the choice of manual handling manoeuvres. For example, a participant needed to adapt to a back-step technique to stand a patient up. This was instead of a sidestep technique, because they could not get into a position next to the patient, as the chair was next to the wall. The lack of space also determined what equipment was used, that is, what actually fitted into the room where it was required.

> *P5: "With one patient who insisted on returning home, we were not sure if we were going to get all the equipment in the front room, which is the only room he could access. We drew a scale model of all the equipment to check it was actually going to fit in"*

Observational data also detailed environmental challenges, including loose rugs, space constraints, wires and loud televisions.

P1 V1: Carpets were loose over the threshold between the kitchen and lounge areas. The participant reported that she had tripped over the carpet herself. Wires which were required to charge the patients chair were observed across a section on the floor. The therapist requested that the television was turned off as it was very noisy. P3: Cluttered environment. Television on, but on mute, house smelt of cigarette smoke. P4: Lack of space in bedroom. It is a small room anyway and now has a double bed and hospital bed in together. Wife stated 'there's no space, I'm living out of bags in here'.

The previous observation captured the complaints of the patient's wife regarding the lack of space in their bedroom due to the hospital bed being in a small room. This highlighted that the environmental challenges faced do not only affect the therapist or other professionals involved, but family members as well.

A further challenge when working in a patient's home could arise as a result of household pets, which could not only cause a trip hazard, but could also be frightening and distracting. Participants tried to address this by asking patients to keep the pet in a different room.

> *P3: "I went to see a lady who has a really vicious Alsatian, so she has to lock him in the room upstairs. I really don't want to go upstairs, as I don't feel safe"*

> *P5: "Most the time it's the physical environment which is the problem, narrow doorways, narrow hallways, rugs and coffee tables… And you're trying to use*

a rotunda… First of all you have to try to get it into the room, and then in runs the Yorkshire terrier who is under your feet when you're trying to move everything"

The environmental impact of moving and handling practice in a community setting is subsumed by the unpredictability of patients' homes and living conditions.

P6: "The community can be a very unpredictable environment. You have to think on your feet. You have to make decisions instantaneously"

P4: "In the community it's a bit of a no man's land, there's no consistency…you could really just walk in to anything"

The participants explained how the environmental challenges had implications for not only which manual handling techniques were used, but also which therapy goals could be established. It was also identified that therapy may not progress as quickly where there are significant environmental challenges or could limit how achievable the goals are. There was a level of frustration for some of the participants that a different outcome could have been achieved, if the environment was more amenable.

P3: "Sometimes the patients' identify what they want to achieve, but physically their environment just doesn't allow us to go down that route and address the goals they really want to achieve. It can be quite difficult"

P1: "It was a bit frustrating, as you know there was a piece of kit that was available that could help her, but it didn't fit in the house"

The participants identified that the environmental challenges also influenced what equipment could be used both for manual handling and therapy intervention. Again, there was a level of frustration in knowing that another piece of equipment, which may be more suitable for the patient was available, but because of the layout of a property, this was not feasible.

P1: "Yes you know another piece of equipment that may benefit them, but the logistics of the house means you couldn't get it through from the lounge to the bedroom. One lady ended up being hoisted because she couldn't turn in her environment"

The manual handling or therapy intervention accounted for patients' abilities or disabilities. For example, it could have been more appropriate to carry out a manoeuvre on a harder floor than a carpet. The outcome and progress of the goals

for the patient described in the quote below may have been very different if there had not been a patch of lino in the kitchen area to practice standing on.

> *P1: "His carpet is very thick and when he stands up he's got the visuospatial neglect and he feels like he's on a boat. To him it's very distorting and scary. Luckily there's a small triangle of lino in the kitchen where we can practice his standing"*

The observation notes reinforced the participants' interview responses of the environmental challenges faced:

P3: Participant had to move coffee table out of the way to make some space for treatment. P3: Participant adapted transfers due to space constraints. Patient had to do step-round transfers in the bathroom with a rail, as no space to turn with rollator.

Some goals could not be set initially due to the environmental challenges. In one case, the participant mentioned that they could not even do an assessment until the environment was made more suitable:

> *P3: "there was one lady who lived in a flat and she hoards things. She also has five cats. It's very unhygienic because of the excrement on the floor, so it's not safe for myself, let alone the patient"*

In summary, the environmental challenges faced by the participants impacted on both manual handling and therapy interventions, including the most appropriate techniques and any adaptations required.

4.3.2 Environmental Benefits and Impacts on Manual Handling and Therapy Intervention

Although the environment posed some challenges, the participants also discussed some of the benefits of working in a community setting. The smaller cluttered environments, described in the previous section, represented one end of the housing spectrum. Some people live in larger houses which are adapted for their needs. In these environments manual handling and therapy interventions are easier, as there is more space to move around. In some cases reported, the environment had been

adapted due to a long-term condition or a safety requirement before the patient returned home from hospital.

> *P2: "The environment makes a huge difference. This lady's house has been fully adapted. There is enough space to work in and it gives her the best chance really. It's a shame when somebody comes out of hospital and they can't do a lot because of the environment"*

P2: Fully adapted downstairs living – new front door where bay window used to be, so it's wider to allow electric wheelchair access to property. Downstairs bathroom with en-suite adapted wet room. Hospital bed. Widened doorways downstairs, laminate floor, minimal clutter. Enabling access in and out of the property if there was a fire.

Goals could be kept functional, as they were being practised in patients' homes instead of an artificial setting. The goals were focused on improving activities of daily living or mobility in the patients' own home.

> *P5: "You have to adapt their goals depending on their home environment"*

Participants stated the importance of setting achievable goals in the patient's home. In a hospital environment, it could be possible to set a goal to walk 10 metres with a frame. However, when the treatment is carried out in a patient's home, the 10 metre walk may have to go around a coffee table and through a doorway. It is therefore more appropriate to set a functional goal, such as being able to get from the chair in the lounge to the stairlift chair in the hallway.

> *P1: "You have to be a bit more realistic because when you are walking with someone, it's not a straight run, you have corners and doors."*

> *P2: "we focused goals around what the patient wants to be able to do in their own home. They may be able to walk 10m in a nice flat spacious environment, but being able to get from their living room to the kitchen can be quite a challenge… It is overcoming the obstacles at home"*

The therapists had to work with what is available in the patients' home and with what equipment could fit in. Patients who found it difficult to retain information benefitted from task repetition as part of a therapy session in their own environment. They were also likely to make greater progress as the activity reinforced a particular and familiar pattern. If the task was practised in a different setting, the patient might not be able to repeat it in their own home.

P2: "I think if we did have a gym or hospital environment, we would have done things a lot differently… But because of his condition he actually needs to practice in his own environment"

Observing the participant completing a kitchen task with the patient, in the patient's kitchen, was a very realistic picture of how the therapy was being kept functional.

P1,V2: Practicing kitchen tasks in patients own kitchen – found an orange to practice reaching tasks. Therapist states 'you have to improvise'.

P2: Kitchen assessment making breakfast in patient's kitchen. Patient appeared more able to focus on the task in a familiar environment, without worrying where different implements were kept.

The benefits of manual handling and therapy intervention in a more spacious and lighter environment were also noted in the field notes taken during the observations.

P1, V2: Large windows, light room. Enough space to practice mobility around lounge area and along wide corridor with therapist and therapy assistant either side.

P1, V1: The patient lives in housing with care, ground floor flat with minimal furniture. There was enough space for treatment to be carried out.

Manual handling and therapy intervention in a community setting was essential in enabling patients to practice functional tasks in their own home. However, this required a level of problem solving which involved adapting a technique or treatment according to the environmental situation. In a purpose-built therapy gym, there are standard pieces of equipment which can be used easily. However, in a patient's home, the equipment is not available, so therapists have to be innovative and improvise accordingly.

P2: "We wanted to get some function back into her left upper limb… We have to put the pile of books and box on the coffee table to get to the right height required for her exercises"

P2: "If you want somebody sitting in a particular position to do something, that's when you have to 'make do and mend' at home. There's definitely a lot of thinking on your feet and going around problem-solving"

To summarise, the benefits of manual handling and therapy intervention in the community setting were that, occasionally, there was enough space and the home had been fully adapted for the patient's needs. In addition, it was more realistic to practice transfers and therapy goals in the home.

4.3.3 Risk Assessment and Safety

Participants identified occasions when they consciously or unconsciously assessed risk in specific situations. Both patient and therapist safety was potentially an issue because of the inherent limitations of the community setting, such as lack of space or poor lighting.

> *P1: I guess you get quite used to being in these environments and you're just constantly adapting and risk assessing"*
>
> *P3: "sometimes the environment, it really does limit you and you just have to react to the situation sometimes, so that could cause injury"*

Sometimes the limitations of the community setting put the participants at risk of injury. Patient safety and 'not knowing what else to do' were the main reasons the participants gave for putting themselves in compromising positions.

> *P2: "You know sometimes you have to bend over and you put your back at risk and you shouldn't, but what else do you do…"*
>
> *P3: "When you're trying to assist somebody getting up from a chair in a really narrow space, I feel sometimes I'm not in the best position that I would like to be. I would like to bend my knees and get as close as possible for safety reasons. Sometimes your back maybe bent, but I feel the patient safety comes first. so you just sort of have to put yourself in the position"*

P3: Observed back bending especially with wheelchair footplates and overreaching due to lack of space.

4.4 Theme 2: Equipment Provision and Funding

A substantial component of manual handling is the use of equipment to make tasks that require transfers easier or safer for the patient and staff member. There is a wide variety of moving and handling equipment from hoists, standing hoists and rotundas to slide sheets, banana boards and handling belts. Participants reported the importance of identifying the best equipment for different situations, including recommendations for the most appropriate equipment for individual patient needs.

4.4.1 Equipment Provision

Participants discussed the benefits and challenges of equipment provision. If they were visiting the patient for the first time, and the equipment was in situ, then any intervention required could commence immediately.

> *P1: "The therapist from the ward ordered it in… So the equipment was already in and hospital beds were in. So in terms of equipment he was well set up… Which meant that it was there ready for me to use"*

> *P5: "The equipment was already there when she returned home, but it may have already been there from before her hospital admission"*

In a number of the cases discussed by the participants, therapy interventions were affected or postponed if the equipment was not in situ, unavailable, or was the incorrect size or unsuitable for the patient.

> *P1: "Sometimes the equipment isn't there or it's completely the wrong size"*

The participants identified that they experienced another equipment issue when there was a delay between the order and delivery time. Waiting lists for minor adaptations, such as grab rails, may be six weeks long. This could postpone treatment and result in a slower progression of independence for the patient.

> *P3: "I find it really difficult when you're trying to do the treatment and want a piece of equipment like a grab rail, but then it takes weeks for it to be put in. By that time the patient may have deteriorated or you've lost that small window when they could have actually progressed"*

> *P6: "Sometimes you may be on the waiting list for the equipment. There is only so much to go round or the type of equipment that you ordered is not available and you don't know when it will be delivered"*

Therapists also reviewed the equipment as patients' transfer or mobility status changed when a different piece of equipment was required, for example, progression from a rollator frame to a stick.

> *P1: "Sometimes they're not ready for a bit of equipment, so we improve them through therapy and then order more equipment when required to help progress their transfers"*

The equipment could be suitable for one environment but this needed to be reviewed if the patient's environment changed, for example, in housing with care the patient used a four wheeled walker to mobilise. However, on returning home, the doorways were too narrow and furniture was in the way, so a narrow rollator was ordered instead.

> *P6: "The equipment they are using may be suitable when in housing with care, but when they return home, it may be a different story entirely"*

4.4.2 Cost Implication and Funding

The funding availability and healthcare boundaries were also reported to affect what equipment was available to the participants. The actual equipment provided could be a cheaper option, which one participant identified as being detrimental to a patient.

> *P1: "I'm a bit frustrated in the community that the Oxford standing hoists are still being used… I don't like them because of the way they pull on stroke patients hemi-arms which could cause a lot of shoulder pain. We wouldn't recommend using them unless we have assessed it. But sometimes it's the cheapest one which is chosen"*

In addition to the provision of appropriate equipment, there were cost and funding implications for providing a suitable environment for manual handling or therapy intervention to take place. Some patients and their families chose to pay for different flooring, for example, to make manoeuvring and activities easier, but not everyone could afford to do this.

P1: "There was another patient who stripped the old carpet and put laminate down for the hoist… So they changed their flooring which is good but a lot of people just can't afford it"

One of the participants discussed a complex case of a man who lived in a caravan. Due to his decreased mobility and the lack of space, he required a ceiling track hoist. The caravan could not support the weight of this equipment, so a specialised structure was required and funding had to be sourced, as he could not afford it himself.

P1: "There was a man who lived in a caravan. His discharge was delayed for a long time, as they have to work out how to get a hospital bed into his caravan. He also needed a ceiling hoist, but the caravan could not take the structure, so they had to get the metal structure built, so the hoist could be used. It all took a very long time, as it had to be funded because they didn't have the savings"

The participants' acknowledged that the criteria used to decide 'who gets what' appear to differ greatly between patients.

P2: "There do seem to be some discrepancies in how much equipment and adaptations people will get… I don't know why… Some criteria of who gets what equipment does not seem to be equal"

P4: "Sometimes the house is set up for them when they are discharged, but sometimes it isn't… It depends"

Equipment provision, with the associated cost and funding implications, therefore had a significant impact on the ability of participants to carry out manual handling and effective therapy in a community setting. It was not just the provision of actual pieces of equipment that could be a difficulty, but also the requirement that therapists' deemed some items to be more suitable for patients and the ability of therapists to problem solve was an additional consideration.

4.5 Theme 3: Patient Choice and Family Influence

If the referral involves a straightforward case, then just the patient, family members and therapist will be involved. However, with a more complex case, especially if it encompasses facilitating relocation and therapy intervention, then a large number of

people could be involved. For example, this type of situation may include the patient, their family and friends, carers, nurses, physiotherapists, occupational therapists, GP's, dieticians, speech and language therapists and social workers.

The participants noted that when visiting a patient in a community setting, it is not a case of just carrying out the treatment and leaving. Relationships with patients were inevitably established, particularly if several visits are made. The outcome of the intervention was improved when a better rapport with the patient was achieved.

> *P3: "I find that when you go into somebody's home, they can talk to you for a long time and might offer you a drink or something… There is a level of politeness that you need to respect. You sometimes have to talk to them for longer especially when they live on their own. Whereas in hospital people are buzzing in and out all the time"*

In one observation the time spent building a rapport and establishing goals with the patient was lengthy and the holistic approach required in a community setting took longer. This is because there was more to contend with in the 'real' world as opposed to a hospital setting, for example, the presence of other family, pets and the distractions of daily living.

P1, V1: Lengthy discussions were held about patient goals and any issues in the home environment. This is not as simple as 'do a treatment and go'.

4.5.1 Patient Choice

The participants commented that manual handling and therapy intervention were sometimes compromised by choices or decisions made by the patient. Alternative methods were used which involved adaptations of the taught technique or therapy intervention.

> *P1: "Sometimes you want to do more treatment, but the patient might be too anxious and you have to take lots of things into account. Therapeutically, I would like to do it in different ways, but he won't let me"*
>
> *P4: "You have to respect the patient's decisions"*

Some patients chose not to accept the advice given, for example, not moving a loose rug out of the hallway to reduce risk of falls. The participant gave advice but it was the patient's decision to abide by it or not.

> *P6: "Some people don't take advice (with regard to making the environment safe) as their house is their house"*
>
> *P3: "It's up to the personal choice (patient) because you can only make suggestions, but obviously in hospital it is more standardised"*

Family members also influenced patients' decisions. If the patient's main carer was their partner, they may have their own way of managing. Complex issues arose when the safety of staff was compromised. For example, if the patient refused a manual handling technique and expected a staff member to carry out a controversial or unsafe manoeuvre.

> *P3: "Her difficulty with getting in and out of bed… Her husband was her main carer… The manoeuvre was not safe, but they declined a hospital bed and were aware of the risks associated"*

A number of the participants respected the fact that people have different opinions and adopt different standards in their lives. They acknowledged that they tried not to impose their own thoughts or opinions in somebody else's house.

> *P6: "I think as a community therapist you have to appreciate that everybody has their own standards of living… Not impose your own thoughts or ideas"*

Participants also acknowledged that other people may live in the property and what was beneficial to the patient may not always suit another family member.

P5: Requested to review transfers in housing with care for the wife. Husband in hospital who normally cares for wife and does most activities of daily living. He is blind so the therapist cannot move furniture in the house.

P3: The family went against the advice of therapy staff and purchased a stair lift without consideration of how the patient transfers most easily. The patient could only transfer to the right and the stairlift required a transfer to the left.

P4: Consideration was given to equipment provision, as it may not be beneficial to another member of the family with visual deficits and learning disabilities. He would be confused and there may be safety issues with new equipment in the way.

Furthermore, the participants recognised that ‘clutter’ could be seen as an environmental risk, but represented a patient’s valued possessions.

> *P2: “It also intrudes on other family space. You have to be respectful of each other"*
>
> *P4: “One man’s clutter is another man’s treasure”*

In addition to patient choice, some patients varied on a daily basis in their health, thoughts and feelings. These patient characteristics impacted on the therapist’s approach and technique, which they were required to adapt on subsequent visits.

> *P5: "She's very variable with her condition anyway, you may have to move her differently depending on how she's feeling that day"*

4.5.2 Family Influence

The participants all work for adult care services, providing services for people from eighteen years and upwards. They could have their own family at home or live with other people. These family and friends contributed to the complexity of the situation when working in a community setting. One participant noted that it was more difficult to complete a moving and handling manoeuvre or therapy intervention when children were present, because they frequently caused a distraction.

> *P3: "I've been to a house with a lot of children around, so it's very difficult and their parents don't ask them to leave the room… It's very difficult to keep these external factors in control when you're trying to provide treatment"*

Distractions were also noted during the observations and included a carer arriving twice to give medication and a relative coming in with the food shopping. This also impacted on time constraints.

P1, V1: During the visit the therapy was distracted three times: twice by a carer preparing and giving medication and once by a relative delivering food shopping.

During one observation, a patient’s friend arrived and the patient was looking forward to seeing his friend and wanted to finish the treatment quickly. It was important for therapists to book a specific time for treatment and to try to reduce as many distractions as possible. One of the situations was difficult to observe as the patient’s

wife kept talking to the researcher during the therapy session as it was being observed. This was distracting for all concerned.

P4: Patient's friend arrives during visit, so goes and talks with wife. Patient keen to speak with friend.

Occasionally, family members were interested in the therapy and wanted to help. However, they could actually hinder the situation, for example, by shouting instructions causing the patient to become confused.

> *P2: "It was very difficult for him to concentrate because his family members were shouting instructions, and that was sometimes really difficult because we just have so many distractions…..because of his condition, he could only concentrate on one voice at a time"*

On other occasions, relatives were beneficial in assisting the therapist to reach the goals of the patient, for example, in carrying out daily exercises with the patient as instructed.

> *P2: "I think it does depend on how much the family is able to take on moving and handling techniques, which will impact on how far that person is going to get"*
>
> *P3: "I find that they (patient's relatives) can be really helpful and they can really hinder this situation also. You often find the family can either learn and listen to you or they continue to carry out incorrect techniques and not listen to you. Family can be invaluable really in carrying out effective treatment on a daily basis. They can assist patients on a regular basis in a way that you're not able to, because you're not there all the time"*

One participant noted that in hospital there are protected visitor times, therefore providing undisturbed treatment time. In the community, the family may be there and intervene by asking questions.

> *P4: "In hospital you may have those protected visitor times, but in the community they are on your back and you need to be able to think on your feet"*

It is clear that patients' and their families have to be considered by therapists in a holistic sense when carrying out manual handling and therapy interventions in a community setting, and that the human aspects of daily living impact on the unpredictable nature of therapy visits.

4.6 Theme 4: Training, Experience and Therapeutic Handling

The mandatory Clinical Moving and Handling Training provided to Healthcare Professionals has been described in the introduction chapter. The previous themes have suggested that there is a need for skills or techniques to be adapted to a particular setting. This theme explores the participants' experience of the training received, the perception of different healthcare roles and therapeutic handling.

4.6.1 Training Experience and Expectations

The table below highlights the key points that this sub-theme addresses.

Key Points
• Too basic • Not relevant to a community setting • Unrealistic with regard to environmental and patient characteristics • Experience of the trainer is important • Different professionals and knowledge levels may be a benefit or a hindrance • Confidence in using equipment and ordering hoists • Equipment issues

Table 9: Summary of the key points with regard to the experience of manual handling training

The participants thought that the mandatory moving and handling training was 'too basic' for therapists and not specific enough for the demands of the community setting. This implied that they already knew the majority of the content of the training, for example, the anatomy of the spine and a sit-to-stand technique. Participants described these techniques as the 'bread and butter' of a therapist's education and something that they did without thinking about on a daily basis.

> *P6: "I do not think that the moving and handling training that we receive is supportive of the experiences that we have to deal with in the community"*
>
> *P3: "I think it's a very grey area, I don't even feel like they even attempt to address it in manual handling training. We don't get any specific training or*

advice… Just to have some advice on how to manage in the community would be useful"

P6: "Considering we have the referrals from the district nurses with regard to moving and handling, because the nurses don't know what to do, proves that we are expected to be experts in this matter, and as such may require more specialist training… The standard moving and handling training is far too basic"

Therapists were perceived to be moving and handling experts. However, a lack of confidence was identified, especially with the use of hoists. Although the training included how to use a hoist, the participants reported a lack of confidence in ordering hoists or specialist slings.

P6: "I don't think the training covers different hoists and hoist slings for me to feel confident… Considering we're meant to be experts and be able to order specialist slings"

P6: "It's too basic as hoists are just talked through and you practice once… In the community you are expected to know all about the different types of slings and hoists, which ones are available… Specialist slings, like for amputees… It's never covered in the training"

The participants reported that the moving and handling course involved a variety of staff members with different levels of knowledge and understanding. The participants felt that, as therapists, they supported others on the course and that they were contributing to the training, even though they were course delegates.

P6: "You may also have specific questions related to therapy, which the carers don't give two hoots about. It's the end of the day and everyone wants to go home"

P2: "We felt like we were supporting other people on the course, as opposed to learning ourselves… as carers were there….(with regard to the training) I think the carers gained a lot from having us there…"

The suggestion of profession-specific training was made, so that moving and handling training could be more specialised in terms of the equipment used and the environmental setting, dependant on the recipients healthcare role.

P3: "Maybe it would be better if it was more profession-specific. Then you could go into more detail"

P5: "We are aware of the anatomy and how to analyse the movement, and would think about how to do something differently, whereas the carer would just follow a set of instructions"

P1: "But we do think quite differently (as therapists) to how we move and handle people and how we approach people than the carers do for example"

However, one of the participants expressed the idea that multi-professional training could have benefits from the point of view of sharing good practice.

P4: "I don't know whether putting carers on individual courses will be the answer, as I think it's good practice to see what other healthcare professionals are doing"

The experience and background discipline of the trainers influenced the moving and handling training. The participants reported that the training would have been more effective if the trainer had come from a healthcare background with an experience of the community setting. This would have meant that they were better able to answer specific queries. The trainers themselves may not have sufficient experience to explain how to use the equipment in a range of scenarios.

P2: "The trainer helped me talk through the problem (moving and handling issue with the patient), but they didn't come up with anything better. I think one of the trainers was a nurse by background and the other was a moving and handling trainer who moved on to people handling… Not a healthcare background. I think we could do better moving and handling courses ourselves"

P2: "I don't think the trainers themselves had enough experience"

Furthermore, the participants acknowledged that the trainers often recognise therapists as being different from other healthcare professionals who also carry out moving and handling as part of their professional role.

P4: "She ended up using me as her ally… Asking me how the scenario went… I thought it was inappropriate at times seeming as I was a course member"

P3: "I found it quite conflicting because she would say, as I was a physio, that I might do something different. But this is how she has to train sit to stand with the patient. It's too basic because I knew everything that they were showing"

Two participants highlighted the negative aspects of role-playing the patient. The difficulty of mimicking patient characteristics, for example, poor cognition or a hemiplegic stroke, was not considered.

> *P5: "In the training, you practice with each other as the pretend patient…it is a bit unrealistic. Also it gives you a false idea of the way somebody moves if they have a disability"*

> *P6: "The trainer actually did do a scenario last year and they split us into groups and we had to come in and there was a dummy that had fallen on the floor in the bathroom...We had to work out what to do and hoist them back onto the bed… It was a dummy, so it wasn't very realistic"*

In contrast, there were also positive aspects of being the patient. Participants experienced what it was like to be the patient themselves. For example, when using a hoist, the participants could empathise with patients who are fearful of hoists. Sometimes this point was overlooked during the training.

> *P6: "I think a lot of people don't know what it's like to be hoisted… I do not think the patient is considered enough in the training"*

> *P5: "Moving and handling with challenging behaviour isn't covered… Somebody that is extremely fearful of being transferred"*

One of the participants discussed the involvement of real patients in training.

> *P5: "Maybe bringing in real patients… It may be quite easy to say that somebody has to pretend that they can't move them very well, but when you have a patient presenting with high tone it is a completely different matter" "I think it would be difficult with ethics and stuff, but there are people that sign up to things like the expert patient program who may be willing to come in" "It would also help the carers in knowing how to move somebody with high tone and how to support the arm or leg, because it's not taught in training"*

Moving and handling training is often carried out in a training facility with space for all the equipment and a large room to demonstrate the tasks. Although it is important for tasks to be demonstrated efficiently, a training facility is an artificial environment. The trainers acknowledged that the tasks may need to be adapted depending on the practice environment; although possible adaptations were only sometimes given.

> *P2: "you do it (the training) in a setup environment with all the equipment available and space"*

P3: "We had all the space in the gym when doing the training… If you are in the home environment, you would not have all that space. You also have carpet which is really difficult"

Participants identified that occasionally there were issues with the equipment during training, so recipients could not practice how the equipment is actually utilised.

P6: "When I did my training last year, the standing hoist hadn't been PAC (electrical) tested, so we couldn't use it"

P4: "The hoist's battery was not charged so we couldn't use it"

The provision of training was sometimes haphazard and largely dependent on the availability of training dates. Two of the participants' responses indicated that they had not attended refresher courses on an annual basis, despite the fact that it was mandatory.

P1: A little while ago, actually probably about four years ago, gosh that is a long time. It's meant to be done annually and I try to get to the latest courses, but there have been issues with the changeover of the trust" "I also work part-time so it is difficult to find the best date and time for me"

P2: "About two years ago, but apparently the recent training was not very informative"

This sub-theme focused on the participants' experiences of moving and handling training. The use of equipment and taught techniques were not necessarily specific to the community setting. In addition, the background and experience of the trainers had an impact on the content and level of the training received.

4.6.2 Functionality of Different Roles, Expectations and Perceptions

The difference in roles between healthcare professionals regarding moving and handling practice became evident when the participants reported that physiotherapists and occupational therapists received many referrals regarding moving and handling issues.

P5: "We get a lot of referrals regarding moving and handling from carers and district nurses… considering we have the same training…"

P6: "We are now receiving multiple referrals for moving and handling assessment. We are having to prioritise and contact the referral back if it is purely a moving and handling issue, as we have all had the same training"

The participants expressed concerns that some carers carry out unsafe techniques, or ones which have not been taught. Participants described how they had witnessed carers carrying out poor techniques which they needed to correct and/or report.

P2: "Most of the time when I've observed carers, I quite often see techniques that aren't up-to-date or safe, I mean people still pulling somebody under the arm. I think they seem to move people in a very standard way… So they need quite a lot of guidance, they have very basic moving and handling training"

P5: "We have to give the carers instructions to follow. Sometimes we are there when the carers are moving somebody and we stop them doing something that they shouldn't be doing… We then have to correct them"

P1: "Perhaps carers need to be more educated on how to move and handle… I don't know who trains the carers… They still do these weird and wonderful manoeuvres and put themselves at risk and it frustrates me. The amount of times you tell them and they just don't listen. Then a new carer comes and it's a vicious cycle"

If a therapy treatment was successful and the patient's mobility status progressed, then the carers would be asked to change their current manual handling techniques, in order to enhance the patient's rehabilitation. However, this was not always an easy transition and dependant on their understanding of the situation.

P2: "The carers aren't walking with him yet, it's a difficult one - handing over to the carers because quite often the carers aren't consistent and they don't have the same level of understanding and training"

P3: "It depends on the carers really. Sometimes they're really helpful and listen to what you say and take on board what you say"

One participant noted a difference in instruction between a professional carer and a therapist, whilst carrying out a sit-to-stand technique with a patient. The carer asked the patient to 'pull up', which appeared to be an easier option for the patient. However, the participant needed to encourage a normal movement pattern, so asked the patient to 'push up' with their hands on the arms of a chair instead.

P5: Pulling up on rotunda to stand. Tried to practice pushing up from chair instead – facilitating a 'normal movement' Carers have been telling her to pull up.

Depending on the training of the carer or the time available to complete a certain activity, a participant noted that some carers tended to assist the patient rather than promoting their independence.

> *P5: "It depends on the carers, there are a lot of carers out there that 'do for' rather than 'assist' a task"*

The participants recognised that there are occasions when relatives or carers are required to carry out moving and handling techniques without the therapist being present. They suggested that whilst demonstrating the techniques to the best of their ability, the participants did not have any official training on how to teach these techniques.

> *P1: We are currently working out some protocol on how to teach relatives certain manoeuvres*
>
> *P2: "People seem to have the expectation that therapists can train people to protect themselves in a moving and handling sense… Maybe there should be some clarification on what we are expected to hand over or mentor others with moving and handling questions"*
>
> *P3: "I give them a demonstration of what I want them to do… I ask them to do it and would observe how they did it. If I'm not happy with it, then I will probably not ask them do it until I was happy"*

P4: Booked next visit so daughter could be present so therapists could teach her the technique of how to transfer her dad.

On the last observation, the therapist was visiting the patient due to a moving and handling referral for a transfer assessment.

P6: Referred for transfer assessment by nurses and carers.
P6: Therapists ordered rotunda but requested it was not used until they had practiced with it to check if it was suitable.

4.6.3 Therapeutic Handling

The participants reported a 'grey area' between manual handling and therapeutic handling, acknowledging that the technique used could be 'a bit of both'.

P3: "Moving and handling could be linked to anything, even moving a box… But therapeutic handling is encouraging a person to move in a more normal and efficient way… Other people wouldn't have that expertise really"

P1: "Therapeutic handling… You're trying to take what the patient problems are and trying to use your handling skills to facilitate them in certain ways, so that they are then achieving normal movement or trying to re-educate patterns of movement"

P4: "When you're therapeutically handling a patient, you are clinically reasoning why you are doing it, what you are achieving by it and what the patient's limitations are"

Some of the participants noted that a lot of moving and handling was just 'common sense', but on reflection, they acknowledged that this 'common sense' had been developed through experience, training and knowledge of therapeutic handling.

P2: "I know I just said some of its common sense, but I don't know if it is common sense. Its therapists common sense… A combination of all your skills, understanding the patient and the condition combined. It's a really big risk assessment… and you do it in your head. Previous experiences that you've had and the environment will probably be a factor also… You learn from times when it hasn't worked so well or it wasn't so safe and you learn from it… So I guess it's not common sense really is it"

P3: "You're trying to maximise normal movements and function, as long as they are safe, then generally we just go from the training that we have had and through instinct really"

P5: "I don't really know when I've learnt it and I can't remember if it was taught at university, but it comes through practice and experience (therapeutic reasoning)"

Participants described a greater risk of injury in therapeutic handling as it 'pushed the boundaries' of manual handling; developing techniques in a therapeutic manner. Thus, progressing the rehabilitation of patients more effectively. This use of functional movement for both practical and therapeutic purposes is central to the therapy role and differentiates therapists from other disciplines.

P4: "You do have therapeutic situations when you push the boundary of moving and handling"

P4: "We are putting our necks on the line half the time rehabilitating patients, and pushed the boundaries… You're not doing things that are written down in a book… There's no support for that"

P1: "There's a lot more risk to it (with regard to therapeutic handling). We're trying to get somebody from the bed to the chair, for example if they are using the Turner then we might be practising stepping, which you are not ready to do with the carers yet because it's not safe yet, we're taking the biggest risk"

Moving and handling equipment in the home was not only used for transfers, but was also used by therapists for treatment. The participants practiced transfers in a specific way or carried out exercises with the patient, whilst using a piece of moving and handling equipment in a therapeutic manner.

P1: "We used the Turner, I guess in a therapeutic way rather than a manual handling way. Due to being in the community we used it in a different way. We didn't need to transfer. We needed to practice standing and do therapy from it, as it made him feel safe… So using a bit of equipment to suit therapists is quite handy"

P2: "I have used the perching stool or shower chair to practice sitting balance, as it is better than on the edge of the squishy bed, you have to adapt a bit"

Observational data noted the use of manual handling equipment being used for therapeutic practice. One participant brought some therapeutic equipment with her to the patient's home for treatment.

P1,V1: Practicing reaching and standing at the rotunda for support and for confidence of the patient. Moving and handling belt also used for support.
P1,V2: Use of therapy specific equipment. Had to plug in balance board.

4.7 Chapter Summary

This chapter has provided a description and interpretation of the findings within each of the main themes. These themes have been illustrated with extracts from the interview transcripts and observation notes. A discussion of the main themes will follow in the next chapter.

Chapter 5

Discussion

5.1 Introduction to the Chapter

The main themes identified in the findings are discussed in this chapter with reference to relevant research and literature.

Table 10: Summary of the Main Themes

	Main Theme	Theme Description
1	Environmental Impact	Environmental challenges and benefits of working in a community setting were acknowledged by participants. The impact of these on manual handling and therapeutic intervention were notable.
2	Equipment Provision and Funding	Equipment provision and funding constraints were often influential factors when carrying out manual handling.
3	Patient Choice and Family Influence	The patient's choice and family influence were important considerations when providing manual handling in a community setting. At times, it was both challenging and beneficial to work with families effectively.
4	Training, Experience and Therapeutic Handling	Experience of the current training was found to be too basic and not always relevant to the community setting. Different healthcare roles in training and practice were influential, which also depended on the expectations and perceptions of the individuals. Participants identified the differences between therapeutic handling and manual handling.

5.2 Theme 1: Environmental Impact

All the participants highlighted how different aspects of the environment had a significant impact on the way manual handling or therapy interventions were carried out. These included both challenges and benefits. The observations also captured the different environments in which community therapist's work. Community environments presented a high degree of variability as every home differed, therefore the manual handling manoeuvre implemented had to account for this. An additional challenge was in adapting the concepts of safe patient handling and movement to the community setting (Nelson et al 2008).

The participants acknowledged the challenges that the environment posed in a community setting. This is in concurrence with other U.K. studies in which health care professionals identified specific difficulties associated with moving and handling patients in the home (Hignett 2001, Wanless and Page 2009). Moving and handling techniques in a community setting were compromised by a number of factors, for example lack of space, worn out carpets, poor lighting, pets, clutter, cleanliness and accessibility. Similar factors were reported by Hall and Bryer (2005) and Grisbrooke and Pearce (1999).

'Lack of space' has been identified in earlier studies as a barrier to implementing taught manual handling techniques (Jootun and MacInnes 2005, Smallwood 2006, Kneafsey and Haigh 2007, Kneafsey et al 2012). However, previous studies have not explored the context in which taught techniques are implemented nor did they explore how participants coped with the lack of space. That is to say, whether the taught technique was adapted safely or simply applied despite being unsafe in that context. By using interview and observation data collection methods in this qualitative study, it was possible to explore the impact of context, including how taught techniques were adapted, for example, the adaptation from a side-step to a back-step technique discussed by one participant. A lack of space may be impossible to change, therefore the taught technique must be adapted in order for it to be performed as safely as possible. It is this context that can inform training initiatives and development of appropriate lifting techniques and equipment further. The context may also provide ideas for trainers who may have no healthcare or community experience. This point is discussed in more detail in relation to theme 4.

Although the environment could be a challenge, it was also acknowledged by participants that some environments were spacious and adequate for safe manual handling. Many of these houses were already adapted for the purposes of care in the community. In general, however, homes were not designed and built with the purpose of caregiving being provided (Knibbe and Friele 1996). There is evidence that well-designed adaptations have beneficial and preventative effects on both physical and mental health; that these benefits are long-term and that they extend beyond the disabled person to enhance the health of other family members (Heywood 2004). Furthermore, home modifications are increasingly acknowledged as ways of removing barriers to function and increasing independence (Tanner et al 2008).

Much previous research has focused on the experiences of nursing staff (Pellatt 2005, Kneafsey and Haigh 2009, Carta et al 2010). In this study the participant group was physiotherapists and occupational therapists. By the nature of their job roles, therapists carry out therapy intervention in addition to moving and handling. Furthermore, the therapy intervention may use elements of moving and handling, especially when practising transfer techniques, which can be affected by the environment. The participants discussed how the environment impacted on therapy intervention and the goals which could be established. Treatment goals needed to be realistic and achievable within available resources (CSP 2014) and, in the community context, sometimes had to be reconsidered. A grey area between moving and handling and therapeutic intervention was evident and is discussed in section 5.5.

The participants identified a degree of frustration when goal setting was limited by the environment and when the treatment could not progress as quickly as it might have done in a different setting. It was found that several tasks needed to be practised in a different room with more available space. Conversely, the participants also stated that the home environment could be beneficial for therapy intervention where specific and familiar patterns were reinforced by activities in the patients' own homes and that this aided greater progression in rehabilitation. The importance of setting functional goals in a community setting by taking into account environmental factors and the layout of houses was discussed. Taking these external factors, which therapists' felt that they had little control over, into account was important to the

success of a goal-setting programme. This was one of the difficulties with goal setting identified by Playford et al (2000).

Participants agreed with other authors who identified that patients may not be able to generalise tasks learned in a clinical therapy room to their home environment (Nelson et al 2008). In addition, goal-setting in the hospital environment does not transfer easily to the community (Playford et al 2000). Participants noted that rehabilitation was more realistic when practising transfers and therapy goals in the home. The therapists had to be innovative and improvise accordingly when equipment was not available or unsuitable for a patients' home.

It is vital that professionals visiting patients in the home are able to recognise potential risks to their posture and assess individual tasks in their surrounding environment (Wanless and Page 2009)**.** According to the participants in the current study, patient safety and 'not knowing what else to do' were the main reasons for positions or situations that compromised their safety. Earlier authors agreed that patient handling tasks are performed in diverse clinical settings and there is no one solution likely to be successful across all situations (Nelson and Baptiste 2004). These findings can be extrapolated to the varied community settings in which the participants in the current study found themselves. The possible alternative techniques for patient handling tasks and the possible solutions for reducing the risk of injury to staff have not been fully considered in previous research and these areas require further investigation and consolidation.

5.3 Theme 2: Equipment Provision and Funding

The use of equipment can promote rehabilitation and facilitate functional recovery for people with a wide variety of acute and chronic conditions (Rockefeller 2008). The utilisation of equipment may improve safety for patients and healthcare providers. However, due to the awkward layout of peoples' homes, some larger equipment, for example, a standing hoist or rotunda, may be difficult to operate (Holman 2006).

In the present study, participants discussed the importance of identifying the best equipment for different situations, including recommendations for the most

appropriate equipment for individual patient needs. However, depending on the environment, funding and availability, this was not always feasible. In addition, the perspective of some family members needed to be considered. In one situation, a patient's wife commented on the lack of space in their house due to the hospital bed being put in the same small room as their double bed.

Participants stated that delays in provision of equipment had an impact on manual handling and therapy intervention. For example, if the equipment required was not already in situ post hospital discharge, the patient sometimes had to be nursed in bed before a rotunda or hoist was delivered. Manual handling transfers could not take place while staff and patient safety were compromised. Whilst waiting for the provision of equipment, there were often concerns regarding the moving and handling techniques, which could be utilised safely, and therefore the quality and timescale of the patient rehabilitation. The implementation of manual handling skills in the community has never been easy, but with increasing demands on community staff, it is essential that sufficient resources are provided to meet the requirements for staff and patient safety (Alexander 2008). Furthermore, one study found that a comprehensive package of adaptations and assistive technology was likely to be cost effective, as there would be a reduction in the need for formal care services (Lansley et al 2004).

One of the participants noted that a certain piece of equipment was suitable in a hospital setting but not at home because of a narrow doorway. This caused a delay in therapy while new equipment was sourced. In a number of earlier studies, a lack of equipment was given as a reason for not being able to implement safe moving and handling techniques (Swain et al 2003, Kneafsey and Haigh 2007, Cornish and Jones 2007, Kneafsey et al 2012). This highlights the importance of equipment availability and quicker access to equipment in order to implement safer manual handling.

Research supports the provision of a minimum set of patient handling equipment for any clinical environment where patient handling occurs on a regular basis (Hignett 2003). Hignett (2003) suggests that appropriate equipment provision is essential and should include hoists, standaids, sliding sheets, lateral transfer boards, walking belts, and height adjustable beds and baths. However, in contrast to a hospital

setting, patients' homes may or may not have the equipment available; and if it is not available, it cannot be easily or quickly sourced from another ward or therapy room.

Since therapists were the participant group in the current study, the interviews included discussions about patient progress in rehabilitation and the consequent need for different manual handling equipment being required at different times. Professional clinical judgement, along with evidence-based knowledge, should be used to match patient characteristics, needs, and goals with the appropriate equipment (Rockefeller 2008). The participants' comments reinforced the findings of an earlier study in which therapists expressed concerns about the effect of the equipment on the quality of the movement (Ruszala and Musa 2005). Another paper summarises the effects of using manual handling equipment to facilitate therapeutic activity (Darragh et al 2013) suggesting that equipment was primarily used when addressing functional mobility and neuro-musculoskeletal functions, as well as for passive transfers, lifts, or repositioning. To appropriately integrate equipment, therapists accounted for patients' physical, behavioural, and cognitive-perceptual characteristics, the environment, limitations and potential uses of equipment, and the therapeutic potential and safety improvements resulting from equipment use. This is summarised in Figure 2.

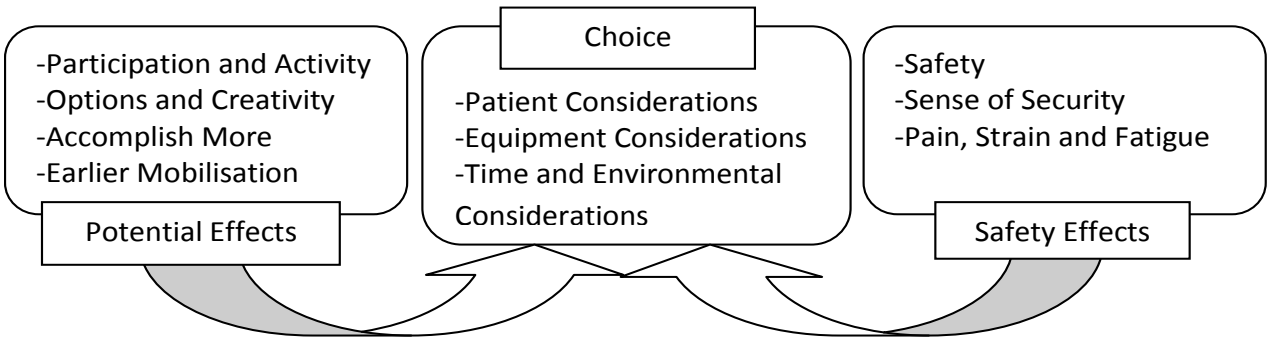

Figure 2: Effects of safe patient-handling equipment: Thematic model (Darragh et al 2013)

The participants in the current study reported that they used clinical reasoning when selecting the most appropriate equipment. They stated that specific equipment was needed to ensure that the therapeutic needs of the patient were being met and that the safety and health of the caregiver was protected (Waters and Rockefeller 2010).

The complex nature of clinical reasoning and decision-making in these settings is discussed further in section 5.5.

5.4 Theme 3: Patient Choice and Family Influence

A recurrent theme in participants' accounts related to patient choice and building rapport and respect within the home setting. It was here that the preconceptions and expectations of both the patient and therapist varied depending on the treatment setting. The contrast between treatment in a hospital setting and treatment in an individual's own home was clearly evident. For example, in a hospital, unwritten ground rules existed which appeared to be understood by both patients and therapists. Patients in hospital expected treatment from a therapist and the perception of participating was fuelled by a desire to return home more independently. In a patient's own home there were often more distractions and less clear ground rules. For example, visiting friends and family were sometimes present or patients had other commitments. For this reason, therapists needed to work differently to establish the 'ground rules'. Therapists' expectations that patients would complete exercises independently without the presence of the therapist were not always realised. Furthermore, although patients were willing to accept the use of equipment in hospital, they would sometimes decide that this was unacceptable in their own home. Families did not always want adaptations made to their homes, or sometimes there was insufficient money or space available (Alexander 2008).

It appeared that patient choice and patient involvement played a larger part in the community setting as treatment occurred in 'their territory'. It has previously been acknowledged that 'home' is much more than a physical environment (Tanner et al 2008). It is particularly relevant in a community setting for the patient to be able to make decisions in their own context that are relevant to their unique set of circumstances and lifestyle choices. This is where the shift from the traditional biomedical approach of healthcare professionals as experts who 'instruct' patients what to do develops into one of empowering patients to self-manage their condition with appropriate consultation with, and support from, healthcare professionals. This shift is reflected in the comment that 'while professionals are experts about diseases,

patients are experts about their own lives' (Bodenheimer 2002: 2470). Participants acknowledged that they needed to be more respectful in patients' homes and that more time was required, not just for treatment, but also for building a rapport and establishing patient-centred goals. Patient-centred practice has been associated with improved health status, for example, less discomfort, less concern and better mental health. It has also been associated with an increased efficiency of care, for example, fewer diagnostic tests and referrals (Stewart et al 2000).

As previous authors have noted (for example; Tanner 2008), patients who are fully involved in the assessment process, understand the procedure, and are confident about the equipment, are more likely to cooperate in manual handling techniques. In contrast, patients who have had poor experiences with moving and handling equipment from unskilled staff are more likely to be anxious and uncooperative (Pellatt 2005).

One aspect of patient care noted by the participants was the influence that family members could have on patient choice and patient response to the manual handling or therapy intervention. Visiting patients in their own homes necessitated a holistic approach whereby familial relationships and the needs of others living in the same home required consideration (Alexander 2008). Through observation and interview, the study being reported enabled the impact of familial relationships to be better understood, for example, seeing the role that the patient had within their family group. The role of the patient requiring therapy intervention may have changed from care-giver to care-receiver and this could cause psychosocial issues within the family (Alexander 2008). Serious illness or injury brings with it an inevitable distortion of family dynamics, which will be unique to each individual family (Bamm and Rosenbaum 2008).

Most of the previous literature on family-centred care is drawn from the field of paediatric health. The recent shift to a family-centred approach in the care of the adult population was 'probably initiated by the recognition of the significance of treating the patient in the context of the family and the general perception of the family as the basic social unit' (Bamm and Rosenbaum 2008: 1618). In contrast to a hospital or acute setting, where the biomedical model remains well established,

community care is more aligned to the biopsychosocial model which promotes a more holistic approach (Borrell-Carrio et al 2004).

Another point the participants reported, which has limited discussion in previous research, is that in many circumstances the family members themselves carried out manual handling with the patient. In healthcare, the family represents one of the most valuable sources of support to the patient (Bamm and Rosenbaum 2008). They frequently perform transfers in their role as main carer for the patient. This meant that it is essential that family members are provided with the best information and means to prevent injuries when caring for people in their own home (Nelson et al 2008). Unlike a healthcare professional who visits every so often, it is the family members who cope with the situation on a daily basis. A breakdown in care may arise when professionals focus on the functional limitations of the patient in isolation to their experience within a social or family dynamic (Tanner et al 2008).

Previous survey research involving student nurses has found that sometimes the moving and handling techniques that are taught are not implemented as the patients' needs are perceived to be too complex to manage (Swain et al 2003, Smallwood 2006, Kneafsey and Haigh 2007, Cornish and Jones 2007). This was not evident in the present study. This may be because the participants were qualified therapists with considerable experience in assessing the needs of complex patients. However, the varied patient characteristics that therapists managed on a day-to-day basis posed challenges in choosing and implementing manual handling techniques. The potentially transient nature of patients' mobility and cognitive status were illustrative of complex manual handling scenarios (Kay et al 2014). All variables, including fluctuations in function, must be taken onto consideration when determining the safest manual handling method (Nelson et al 2008).

5.5 Theme 4: Training, Experience and Therapeutic Handling

Despite strong evidence of the importance of manual handling training and reduction of musculoskeletal injury, the most commonly used strategy used in teaching manual handling is to demonstrate prescriptive techniques to healthcare workers, which has been shown to be ineffective (Wanless and Wanless 2011). One author suggests

that traditional approaches to training do not equip healthcare workers with the ability to problem solve and adapt techniques for a range of situations (Pellatt 2005). The present study supports these findings as participants reported a number of issues associated with the manual handling training that they had received. Overall, the training was reviewed to be too basic and not relevant to the community setting.

Participants acknowledged that skills learned in the classroom were often difficult, and sometimes impossible, to transfer to novel situations, such as those found in patients' homes. The key skills required were those that facilitated adaptability and safe application. In a training scenario, it is almost impossible to mimic peoples' houses as everyone's home environment is different, both from a physical point of view, including layout of rooms, and from a human point of view, including other family members. However, participants suggested that if more examples were given in training, recipients would have more ideas and gain more confidence in adapting taught techniques. Consideration needs to be given, though, to the conflict between providing complex scenarios and training time constraints.

In training, attention to the physical environment and contextual factors, such as other family members, were often overlooked. Participants reported that they put themselves into unsafe handling positions, because of 'not knowing what else to do'. Despite having the knowledge of taught techniques, they lacked the awareness of being able to adapt the techniques safely. Therefore, it would be helpful if alternative solutions could be provided in training programmes. The practice and techniques promoted in training bear little resemblance to those undertaken in community settings. This necessitates the need for high quality moving and handling education that not only teaches a set of guiding principles to follow, but also enables clinicians to integrate these into a variety of community handling scenarios (Hall and Bryer 2005). Training that provides principles of safe handling and problem solving rather than rigid rules might encourage a more flexible yet safe approach to addressing patient needs. Training therefore needs to be relevant, transferrable and underpinned by theory (Pellatt 2005).

The participants in this study witnessed poor compliance with manual handling techniques carried out by healthcare staff. Previous research undertaken with student nurses also found evidence of poor compliance when students found it

difficult to practice the patient handling techniques that they had been taught (Swain et al 2003, Jootun and MacInnes 2005). Kneafsey and Haigh (2007) concluded that safe patient handling techniques taught in university education programmes would only be effective if students were taught in clinical settings which took safe patient handling seriously and where a culture of safety pervaded the whole organisation. Therefore, if healthcare workers have more relevant and comprehensive training, their compliance and problem solving ability could be enhanced. This could provide staff with the information to more effectively guide their manual handling decisions (Hignett and Crumpton 2007).

The background and experience of the trainers who develop and deliver manual handling workshops were considered to be important by the participants. They reported that the training could have been more effective if the trainer had come from a healthcare background with an experience of the community setting. White and Gray (2004) also reported the advantage of trainer experience in addressing specific queries, promoting adaptability and problem-solving and suggested that this could be easily achieved. In addition, the participants identified that, in some cases, they were more experienced than the trainers and the trainers looked to the participants to assist in the training. Other implications noted were that the training needed to take into account the experience of the trainees and the settings in which they worked, both of which are mixed in the current provision. Therefore the current training was not as relevant as it could be and the techniques taught were not as easily transferred. However, logistics, time and cost are factors which need to be considered. Conversely, the cost of musculoskeletal injuries and sick leave could outweigh the increased cost of an expanded or improved training approach.

McDermott et al (2009) concluded that the effectiveness of manual handling training is increased by tailoring it to the needs of the individual organisation and professional group. However, a culture group could be ‘health care professionals’ or individual disciplines, for example, ‘physiotherapists’ or ‘nurses’, and consideration needs to be given to the specificity and relevance of the training. Participants suggested that profession-specific training could follow the core manual handling training sessions, whilst incorporating specialised components. This would enable the training to be more specialised in terms of the equipment used and the environmental setting. Therapists are expected to assess patients and prescribe equipment, in addition to

carrying out manual handling techniques and therapy intervention. However, this level of knowledge and understanding is above and beyond that provided by the core training. One rationale for requiring occupational therapists and physiotherapists to complete more comprehensive manual handling training has been that they are better able to instruct care workers (Massy-Westropp and Rose 2004). Despite all healthcare professionals receiving the same mandatory manual handling training, participants reported that therapists received many referrals that focus specifically on moving and handling issues.

It is important that healthcare professionals visiting patients in the home devise a suitable manual handling care plan and conduct a risk assessment with each individual in terms of desired tasks and the environment (Wanless and Page 2009). Patients may be hindered from reaching their full potential if there is a lack of consistency in the manual handling care plan (Wilson 2002) and ineffective communication can have serious implications for patient outcomes (Nelson et al 2008). Multidisciplinary healthcare works best in a setting with close collaboration between professions to ensure safe and effective patient care (Jeffs 2013).

Clearly, different patients have different care plans requiring different manual handling techniques. Participants recognised that best practice for one patient may not be appropriate for another and it is clinical expertise which enables practitioners to make these discriminations (Sparkes 2000). As therapists, the participants had the clinical expertise and greater understanding of patient transfer and mobility status required to make adaptations to care plans. Mitchell and Unsworth (2005: 222) identified that occupational therapists with more expertise excelled at creating an ‘internally derived structure, where the home visit appeared to be a conversation with the patient and with the context’.

Clinical reasoning is a process by which therapists use their professional judgement and knowledge, together with the context of the patients’ situation, in order to think about and to make decisions about the best course of action for a particular patient, including rehabilitation goals and health management strategies (Higgs and Jones 2000). The complex nature of clinical reasoning involving selection and application of skills or strategies and propositional knowledge is discussed by Edwards et al (2004). These skills or strategies range from making a diagnosis, management

issues and ethical decision making. The therapists in their study used these ‘skills or strategies in an interplay that was governed by particular patients’ needs and their contexts’ (Edwards et al 2004:329).

The participants reported a ‘grey area’ between manual handling and therapeutic handling, since therapists often carried out both these functions simultaneously. Tracey (1997b) highlighted, nearly two decades ago, that the ‘grey area’ between therapeutic handling and a safe transfer needed to be more clearly defined and discussed particularly in terms of how these therapeutic functions might best be taught.

The participants defined therapeutic handling differently to manual handling, by discussing the former in terms of using clinical reasoning and their knowledge of movement to facilitate and encourage the patient to move in a more functional and efficient way. This is very similar to the Chartered Society of Physiotherapy’s definition (2014: 18) of treatment handling; adding ‘guiding, facilitating, manipulating, stretching or providing resistance’ to the original definition of manual handling; ‘transporting or supporting a load (including lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force’ (MHOR 1992). Thus any treatment where force is applied through any part of the therapist’s body to or from any part of the patient constitutes manual handling. Any manual handling involved in a physiotherapy treatment programme may be defined as treatment handling (CSP 2014).

Some of the participants initially suggested that some of the manual handling was ‘common sense’ but, on reflection, decided that their knowledge of manual handling had in reality been developed through experience and training. The clinical reasoning used to select a particular technique over another was evident. It is this reasoning and the use of functional movement that was central to the therapy role and differentiated therapists from other professionals. ‘Balancing the potential benefits to patients arising from physiotherapy interventions involving manual handling with the potential risks to themselves, the patient and colleagues, as well as family and other unqualified workers, is central to physiotherapy practice’ (CSP 2014: 5).

Sparkes (2000) highlights the potential for conflict between safe patient handling practice and therapeutic interventions to promote independence. As part of the therapy role, therapists are required to trial different transfer techniques in order to assess and progress the rehabilitation of patients. Participants described a greater risk of injury to themselves when carrying out therapeutic handling as it pushed the boundaries of manual handling. Therapeutic tasks have targeted goals such as facilitating patient function and independence. The tasks present a greater risk for caregivers to sustain work-related musculoskeletal disorders than typical patient handling tasks, because the caregivers are exposed to higher mechanical loads on the spinal tissues for longer periods of time (Waters and Rockefeller 2010). When treatment programmes are devised that involve manual handling, therapists must assess that part of their work which is potentially hazardous and reduce the risks so far as is reasonably practicable (CSP 2014).

A standing-pivot transfer was observed with two of the participants using a Bobath technique. The Bobath Concept is a problem solving approach to the assessment and treatment of individuals with disturbances of tone, movement and function (IBITA 1995). The use of the stand-pivot transfer technique to move patients from one seated position to another is common in rehabilitation (Rockefeller 2008). Sparkes (2000) acknowledged that particular transfers which have been 'condemned' by the Royal College of Nursing are still being used by neurological physiotherapists as a method of rehabilitation. Sparkes (2000) suggested that evidence supporting this technique in neurological rehabilitation is lacking. The treatment technique differs between physiotherapists depending on what training has been received and which theories they espouse (Sparkes 2000). In a further paper, Tyson et al (2009) completed a study amongst 74 hospital-based stroke physiotherapists from 33 hospitals to identify which interventions used to treat postural control and mobility were considered part of the Bobath Concept. They found it was not possible to define a 'typical package' of treatment for postural control and mobility that represented the Bobath Concept and that there was some uncertainty and contrast with the British and international teachers of the Concept. Further research to explore the use of safe therapeutic handling techniques would therefore be beneficial due to the risk of musculoskeletal disorders in therapists and the apparent discrepancies between the techniques being currently used.

5.6 Chapter summary

This chapter has discussed the four main themes identified in the findings with reference to relevant literature. The challenges and benefits of the environment, the use and provision of equipment, the influences of patient choice and their families, and the training experiences of the therapists, together with manual handling techniques and therapeutic intervention have been considered. Incorporated within these themes and informing the discussion were the findings from the participant interviews and observations within the community setting. The next chapter consolidates the discussion into conclusions, limitations and recommendations for further research.

Chapter 6

Conclusion

6.1 Restatement of the Study Purpose and Objectives

The purpose of the research was to discover how physiotherapists and occupational therapists implemented guidance on safe manual handling practice, and how they were applied in a community setting. A reminder of the four objectives is listed below:

1. To explore the current use of manual handling guidance in community settings
2. To explore therapists' perceptions of complex manual handling situations
3. To identify therapists' self-confidence in the application of manual handling guidance, including the use of equipment
4. To explore participants' experiences and views regarding manual handling training and its suitability for practice in a community setting

6.2 Implications for Practice

Participant observation was used to explore the current use of manual handling guidance in community settings. This was advantageous as it gave a realistic insight into the interaction between the participant and patient. The impact of the environment on manual handling and therapy intervention provided both challenges and benefits. Challenges associated with working in a home setting included a lack of space in which to complete manoeuvres and the frustrations of having to work with limited resources. Conversely, benefits included the ability to assess whether the patient was able to complete a transfer in their own environment and to enable functional and meaningful goals to be set.

The effects of patient choice and family influence on manual handling implementation were also explored. A level of respect when working in someone's

home without forming judgemental views of their living circumstances was identified as essential. The therapists found that they had to work with the resources available and to consider the lifestyle of the patients.

This research highlighted that manual handling could be a complex task in the community setting and required a holistic approach. The challenges faced when implementing taught manual handling techniques have been addressed in other studies, but this research located these challenges in the context of community care. Manual handling and treatment decisions were made with regard to multifactorial issues whereby the therapists had to be innovative, flexible and adept at problem solving in order to manage the unpredictability and different characteristics of the community setting. This is in contrast to the more sterile and controlled hospital environment.

Therapists' perceptions of complex manual handling situations were explored mainly in the semi-structured interviews. The interviews followed the observations enabling any points from the observations to be clarified and to explore any complex issues further. All of the participants described examples of complex therapist-patient interactions that they had encountered. There was an assumption from the literature review that the complexities of the environmental challenges and equipment issues would be discussed, as these have been highlighted in previous research. However, this research study also found complexities associated with the human impact regarding patient choices, patient characteristics and the involvement of family members which were far greater than expected and offered a new perspective.

All of these factors had to be considered in clinical decision-making. Manual handling practice and therapy intervention clearly required a more holistic thought process in the community setting. Furthermore, the importance of a family-centred approach became evident as this study found that it was not only healthcare professionals who carry out manual handling with the patient, but that the family members may also complete transfers. The involvement and support of these family members is therefore crucial for the welfare and effective treatment of the patient and it is the therapists' role to work with them to achieve the patient-centred goals. Working with the support of the family has the potential to reduce a breakdown of care and therefore subsequent referrals. However, it was reported by the participants that the

family members can be a help or a hindrance depending on the individual circumstance. Seeing family members as a hindrance suggests the need for more a family-centred approach to practice which would promote more effective manual handling and rehabilitation. Practitioners would benefit from specific education about the use of a family-centred model in community care practice.

This research illustrated the unique clinical reasoning skills which enable therapists to manage complex situations and work effectively in the community. These skills were established through a range of experiences, education and support. Clinical reasoning also involved selecting appropriate equipment to meet the therapeutic needs of the patient as well as ensuring safe manual handling transfers.

The third objective established at the beginning of the study was to identify therapists' self-confidence in the application of manual handling guidance, including the use of equipment. However, it became clear during the study that my initial assumptions were not well-founded and that the therapists did not lack self-confidence when using the taught techniques. It was evident from the observations and interviews that the participants perceived that the manual handling training received was limited in that it typically focused on offering single solutions to particular manual handling situations. This had little relevance to the complex situations experienced by the participants, in which alternative techniques frequently needed to be selected and combined in order to meet unique patient needs and to complete safe patient transfers. The participants found these points difficult to articulate because they lacked the knowledge of identifying and choosing alternative solutions in a range of situations. Therapist and patient safety and 'not knowing what else to do' were the main reasons for compromising positions or techniques. This suggests that relevant education exploring alternative techniques, which could be used in different situations, is required.

Semi-structured interviews were utilised to explore participants' experiences and views regarding manual handling training and its suitability for practice in a community setting. The participants highlighted the issues and limitations associated with the mandatory manual handling training which was found to be too basic and not always relevant to the community setting. This is further reflected in the terminology used. The Oxford English Dictionary defines training as 'the act or

process of teaching a particular skill or type of behaviour through regular practice and instruction'. As acknowledged in the findings of this study, manual handling is a complex activity in the community setting and therefore the training of 'a particular skill' is not appropriate as there are many more aspects to be considered.

In the field of manual handling, it would therefore be more appropriate to provide education instead of training to healthcare professionals. Education is 'a learning process that deals with unknown outcomes, and circumstances which require a complex synthesis of knowledge, skills and experience to solve problems' (Gibbs et al 2004:5). Education considers principles and values, in contrast to 'ticking off standards and criteria'.

Previous studies have measured the effectiveness of training programmes against the incidence of musculoskeletal injury (for example; Brusco et al 2007) or have measured how competent participants are in acquiring a particular skill (Ruzala and Musa 2005, Hignett and Crumpton 2007). Although these studies have contributed to the evidence base there has been no corresponding decline in the incidence of handling-related injuries in the healthcare setting (White and Gray 2004). The current findings derived through a qualitative approach highlight the holistic and complex nature of manual handling practice and previous research gives little consideration to these facets.

It is therefore recommended that a shift of focus from the continued delivery of training programmes to establishing a more comprehensive education approach is required. This argument is strengthened by the findings as participants emphasised the effects of the manual handling trainers' experience and background on the training provided. The trainer was employed to teach a particular skill or transfer, but participants suggested that more knowledge and understanding of the complex cases that characterise their daily practice are required. This type of educational approach could be incorporated into group supervision, competencies for continuing professional development or in-service training. This would integrate complex manual handling into practice more efficiently rather than being viewed simply as 'mandatory training'.

Manual handling training is compulsory for all members of staff who are required to transfer patients as part of their job role. It is attended by a range of professionals at

a variety of different levels and competencies. This suggests that the training is not specific to different disciplinary roles, is standardised to meet a range of requirements and is therefore, not relevant to the different clinical settings or patient groups. An underlying issue may be that professional guidelines on patient handling are often produced before research evidence is available to support them and it would be preferable if research evidence was published first and then used to develop the guidelines (Hignett 2003). Furthermore, the MHOR (1992) do not distinguish between the professions and there are no specific rules for therapists, nurses or carers. The findings from the current study suggest that there are differences between these professions regarding the use of manual handling.

Therapists differ from other professions as they facilitate recovery by establishing goals with an aim to increase function and independence over time. As both physiotherapists and occupational therapists largely use a 'hands-on' approach, manual handling techniques become integrated with therapy interventions. Furthermore, the findings identified that therapists assess for and order specialist manual handling equipment. This study suggests that it would be beneficial for further specialist education to be provided in these cases.

Two of the participants suggested it would be beneficial if real patients attended the training. Providing authentic learning opportunities would facilitate healthcare professionals to work more efficiently with patients and to promote a client-centred approach to manual handling. It would also facilitate the understanding of natural body movements when working with people with different conditions, in contrast to practicing a movement with another member of staff. Therefore, this would not only provide more relevant and realistic education, but also encourage healthcare staff to be more responsive to the patients' unique experience (Stewart et al 2000). Patients who are involved with the 'Expert Patient Programme' (Tattersall 2002) may be likely candidates to be involved with such educational initiatives.

6.3 Strengths and Limitations of the Study

The ethnographic approach enabled an in-depth understanding of manual handling knowledge and practice in a community setting by examining context-specific issues,

which were not easily uncovered by other methodologies. The small scale of this research enabled in-depth data to be captured (Hammersley and Atkinson 2007). In order for the findings to be transferrable to other similar settings, a provision of detailed information regarding the study design and implementation has been made explicit. Transferability refers to 'the degree to which qualitative findings inform and facilitate insights within contexts other than that in which the research was conducted' (Carpenter and Suto 2008: 149).

Moving and handling activities are undertaken by a number of healthcare professions. The study sample was limited to physiotherapists and occupational therapists. Throughout the findings and discussion a 'grey area' between the use of manual handling and therapeutic handling approaches was evident. Therapy practice is underpinned by goal setting and rehabilitation and these are integrated with manual handling practice. It would be difficult to separate manual handling from therapeutic handling to explore them as different entities.

Since ethnography focuses mainly on observations and interviews incorporating participants' actions, thoughts and feelings, these can be misinterpreted or misrepresented by the researcher's own professional philosophy (Savin-Baden and Major 2013). The researcher's professional role and experience could be viewed as a potential limitation to the study. However, the researcher's positionality, personal interests and clinical experience have been made explicit through the research process and a reflexive diary was kept. Full exploration of the meaning of the data required a knowledge and appreciation of the context of the participants' professional practice, which my experience as a clinician enabled me to bring to the study.

In designing this study I was aware that potential conflicts between my role as a therapist working in a community setting and my role as researcher could arise that might have affected the quality of the study (McNair et al 2008). These issues of role conflict may undermine the voluntary nature of the participants' involvement or influence their behaviour and perceptions during the data collection. In order to minimise the influence of my presence during the participant observations, I acted as 'marginal participant'. It was not possible to adopt the role of 'complete observer' when in a patients home, because a certain level of social interaction was

necessary. In addition, I wore plain clothes instead of a uniform when carrying out both the observations and interviews in order to distinguish my researcher role.

In contrast, the participants' knowledge of my therapist role was beneficial as it meant that they were aware of my understanding of the clinical environment and adhered to similar core values. This enhances the research by being able to provide a depth of understanding to the meanings therapists bring to the healthcare environment (McNair et al 2008).

6.4 Recommendations for Training, Practice and Further Research

It has been recognised, both in this research and previous research (Hall and Bryer 2005), that ensuring safe manual handling is difficult to achieve. This is because of the plethora of variables and potential solutions to the manual handling issues faced by healthcare professionals in a community setting. Although every setting is different, an expansion of mandatory training to an education programme should encourage a problem solving approach to enable a repertoire of potential solutions to be drawn upon in novel situations.

Considerable survey research has focused on aspects of moving and handling practice, (Swain et al 2003, Smallwood 2006, Cornish and Jones 2007, Kneafsey and Haigh 2007) but the barriers to effective manual handling and issues related to the ways in which these techniques are taught and methods employed are rarely discussed. However, there is a dearth of literature exploring the experiences of practitioners and patients. In addition, the context of the manual handling practice and whether techniques were adapted safely has not been fully explored nor whether the practice was unsafe, thus putting staff and patient at risk of injury. There is a strong potential to influence training courses with the knowledge of this context, thereby enabling a problem solving approach and further education programmes to be more relevant. Further research involving the implementation of manual handling techniques in different clinical settings and how these are influenced by training or education should be considered. Subsequent research should then explore the development of education programmes and their effects on the application and adaptation of manual handling techniques and injury rates.

It is clear that establishing an education programme will incur costs. However, this investment has the potential to be outweighed by the implementation of safer handling strategies and approaches; and a reduction in the incidence of musculoskeletal injuries to staff. There is also the knock-on effect of a reduction in sick leave and the costs associated with staff cover.

Inevitably there are cost and time constraints with mandatory training courses requiring staff to spend time away from clinical practice. One recommendation could be to develop an e-learning package, which covers the theoretical aspects of moving and handling practice. This would release more contact time for face-to-face education in problem solving approaches, case studies and potential solutions to complex scenarios.

As acknowledged previously by Griffiths (2011), few studies have examined the patient's perspective on adverse risk during manual handling activities. In this research the impact of patient choice and family influence was greater than expected. Therefore further research on manual handling practice from the patients' point of view is recommended. Qualitative research would gather in-depth data regarding the patients' perspectives and experiences. 'Patient empowerment' and involvement in a client-centred approach should also be explored.

The involvement of the patients and their families with regard to manual handling and therapy interventions in the community setting was highlighted as a significant factor by the participants. The use of a family-centred approach would therefore be beneficial to create a better understanding of the techniques used and to increase the use of safer techniques when healthcare staff are not present. This should be incorporated into the education received or discussed in peer group supervision. In addition, further qualitative research to explore the family members' perceptions and involvement of safe manual handling practice or their confidence to carry out manual handling techniques would be beneficial.

Manual handling knowledge and understanding should be enhanced further if healthcare staff were provided with an authentic learning opportunity whereby patients attend part of the programme. This would be more relevant and realistic for healthcare staff. It would also encourage communication skills when gaining consent for and explaining a transfer to a patient.

Due to the findings in this research that the therapists are the professionals who assess for and order specialised manual handling equipment, it is recommended that they attend a more specialised training course taught by an experienced trainer with a therapy background. This course would be more relevant and should progress into further detail regarding the ordering and measuring for equipment and give time to discuss complex scenarios. It could also include elements for educating other healthcare workers, carers and family members if required. There is the potential for this to be implemented 'in-house' for different specialist teams as part of an in-service training programme.

Therapists carry out therapeutic handling, which participants in this study reported as 'pushing the boundaries' of manual handling, which could lead to a higher risk of injury. Therefore there is a requirement for further research into the implications of safe therapeutic handling.

6.5 Key Points

A summary of key points that the findings from this research established is presented in the box below.

Key Points
• Manual handling practice is a complex task in a community setting. • A change in focus from manual handling training to a holistic education programme has been recommended. • Education to explore alternative manual handling techniques which could be used in different settings would be beneficial. • Using a family-centred approach may enable more efficient manual handling practice in a community setting. • Specialist equipment training for therapists who assess and order equipment has been recommended. • Further research exploring safe therapeutic handling is required.

Box 5: Summary of Key Points

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Appendix 1: Electronic Search Strategy

An example of the initial electronic search strategy for the research proposal is illustrated below.

MEDLINE, CINAHL, AMED and PsycINFO databases were searched. The research topic was segregated into three broad sections, comprising ‘therapists’, ‘the community setting’ and ‘moving and handling’. Truncations (shown as *) were used to broaden the search. The articles sourced were limited between 1992 and 2012 and were amalgamated within each broad section. The search was refined by considering all three sections together, resulting in twenty-three articles. These were then scrutinised for relevance and quality. Reference lists were also inspected for further articles. The table below shows the search results.

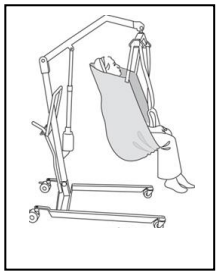
Search ID	**Search Terms**	**Results**
S1	Physiotherap*	36913
S2	Occupational Therap*	64171
S3	Allied Health Professional*	6820
S4	S1 OR S2 OR S3	104167
S5	Community	540534
S6	Home	256377
S7	House	52087
S8	S5 OR S6 OR S7	796389
S9	Patient Handling	7481
S10	Moving and Handling	623
S11	Manual Handling	1999
S12	S9 OR S10 OR S11	9577
S13	S4 AND S8 AND S12	23

Appendix 2: Advertisement Poster

Are you a Physiotherapist or Occupational Therapist?

Have you worked in a community setting for more than six months?

Become part of an exciting research project to explore how current moving and handling practice is applied in a community setting. Participation involves one observation lasting approximately 40 minutes and a one-to-one interview afterwards lasting approximately one hour.



I am a qualified physiotherapist undertaking a Masters in Research degree at Coventry University.

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Appendix 3: Email to Heads of Department

Dear Clinical Leads,

My name is Hannah Wade and I am currently undertaking a Masters Degree in Research at Coventry University. I work within the Health and Life Sciences Faculty as a Moving and Handling Instructor. I am also a qualified physiotherapist with extensive community experience.

The project title for my degree is:
How do Physiotherapists and Occupational Therapists use recommended Moving and Handling Practice in a Community Setting?

I would like to recruit both Physiotherapists and Occupational Therapists who have been working in the community for a minimum of six months to take part in this study.

Please find attached a poster inviting staff to participate.
I would be grateful if you could forward this to your staff via e-mail and display a few copies within your workplace.

If you have any queries please do not hesitate to contact me,

Thank you for your support,

Hannah Wade

Appendix 4: Participant Information Sheet (page 1 of 2)

Coventry and Warwickshire NHS Partnership Trust

Participant Information Sheet

Short research title: Moving and Handling Practice in a Community Setting

I would like to invite you to take part in this research study. Before you decide please read through this information sheet to understand why this research is being done and what it would involve for you. Talk to others about it if you wish. There are contact details at the end of this sheet if you have any further queries.

What's the purpose of the research?
To explore the current use and adaptations of recommended moving and handling practice in community settings. This research is being undertaken as part of a Masters in Research Degree at Coventry University.

Why have I been approached?
To find out how moving and handling strategies are employed in community settings, it is necessary to involve qualified physiotherapists and occupational therapists who currently work in community settings.

Do I have to take part?
No. Participation in this study is entirely voluntary. If you decide to take part, you will be asked to sign a consent form.

What data will be collected?
Observation of treatment sessions and follow-up interviews.

How will data be collected?
I will ask you to identify a treatment session which I can observe. This can be with any patient in the community where moving and handling practice is involved. Following this session we will arrange a suitable meeting place and time for an interview lasting approximately one hour. The interview will be audiotaped for accuracy during the analysis. Notes may be taken during the observation for research purposes.

What are the possible benefits of taking part?
It is hoped that information gained from this study will be used to inform future training in moving and handling. At a personal level, being involved in this study will also provide opportunities for you to reflect on and to enhance awareness of your own practice. You will receive a summary report of the overall findings.

Participant Information Sheet (page 2 of 2)

What if I changed my mind about taking part in the study?
You may withdraw at any stage of the research. If you withdraw all your data will be destroyed and will not be used in the study. You can contact me by e-mail and provide me with your participant information number. If you decide that you no longer wish to participate, there will be no consequences and you do not need to give a reason.

Will my participation in this study be kept confidential?
If you decide to take part you will be given a participant information number. Only the principal investigator will have access to participants' names and numbers. This information will be kept in a secure and locked drawer. Only your participant information number will be used on any computer database and the computer will be password protected. The data collected will be securely stored for a period of three years after the study is completed and then destroyed.
If poor practice or negligence is witnessed during the study by the researcher, confidentiality may be breached. This will be discussed with yourself first and then may need to be passed on to your clinical lead.

What will happen to the results of the research?
The results will be analysed, discussed and presented as part of my Masters in Research degree. If the study is of a sufficiently high quality, it may also be submitted for publication in a peer-reviewed academic journal or presented at Coventry University. The research degree is being funded by Coventry University.

What if there is a problem?

Who has reviewed the study?
The research has been approved by Coventry University Research Ethics.
All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by Coventry and Warwickshire Research Ethics Committee.

Contact for further information:

Some materials have been removed from this thesis due to Third Party Copyright. Pages where material has been removed are clearly marked in the electronic version. The unabridged version of the thesis can be viewed at the Lanchester Library, Coventry University

Appendix 5: Participant Consent Form

Coventry and Warwickshire NHS Partnership Trust

PARTICIPANT CONSENT FORM

Short research title: Moving and Handling Practice in a Community Setting

Name of Principal Investigator: Hannah Wade

Please initial all boxes

1. I confirm that I have read and understand the participant information sheet dated 08.10.12 (version 3) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐

3. I understand that the interview will be audiotaped and notes may be taken during the observation. I understand that anonymous notes/quotes can be used as part of the research project. ☐

4. I understand that all the information I provide will be treated in confidence and I give permission for the researcher to use any information I give for research purposes. ☐

5. I agree to take part in the above study. ☐

Name of Participant	Date	Signature
Name of Person taking consent.	Date	Signature

Consent form date of issue: **[DATE]**
Consent form version number: **Version 3 08.10.12**

Appendix 6: Patient Information Sheet (page 1 of 2)

Coventry and Warwickshire NHS Partnership Trust

Patient Information Sheet

Short research title: Moving and Handling Practice in a Community Setting

I would like to invite you to take part in this research study. Before you decide please read through this information sheet to understand why this research is being done and what it would involve for you. Talk to others about it if you wish. There are contact details at the end of this sheet if you have any further queries.

What's the purpose of the research?
To see how physiotherapists and occupational therapists may help patients move in their own homes. This research is being undertaken as part of a Masters in Research Degree at Coventry University.

Why have I been approached?
In order to watch the physiotherapist or occupational therapist in a 'real life' setting, I am approaching patient volunteers.

Do I have to take part?
No. Participation in this study is entirely voluntary. If you decide to take part, you will be asked to sign a consent form. You treatment will not be affected in any way.

What data will be collected?
Notes will be taken by the researcher whilst observing your treatment session.

How will data be collected?
Your physiotherapist or occupational therapist will have already asked you if you are interested to participate in the research. I will ask your physiotherapist or occupational therapist to identify a treatment session which I can observe which will have been mutually agreed between yourselves. Notes will be taken during the observation for research purposes. The researcher will be focusing on the physiotherapist or occupational therapist. You will not be asked to do anything differently by the researcher. The researcher is present simply to observe your normal treatment session.

What are the possible benefits of taking part?
It is hoped that information gained from this study will be used to inform future training in moving and handling.

What if I changed my mind about taking part in the study?
You may withdraw at any stage of the research. If you withdraw all your data will be destroyed and will not be used in the study. You can contact me by e-mail and provide me with your patient information number. If you decide that you no longer wish to participate, there will be no consequences and you do not need to give a reason.

Patient Information Sheet (page 2 of 2)

Will my participation in this study be kept confidential?
Yes. If you decide to take part you will be given a patient information number. Only the principal investigator will have access to participants' names and numbers. This information will be kept in a secure and locked drawer. Only your patient information number will be used on any computer database and the computer will be password protected. The data collected will be securely stored for a period of three years after the study is completed and then destroyed.

What will happen to the results of the research?
The results will be analysed, discussed and presented as part of my Masters in Research degree. If the study is of a sufficiently high quality, it may also be submitted for publication in a peer-reviewed academic journal or presented at Coventry University. The research degree is being funded by Coventry University.

What if there is a problem?

Who has reviewed the study?
The research has been approved by Coventry University Research Ethics.
All research in the NHS is looked at by independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by Coventry and Warwickshire Research Ethics Committee.

Contact for further information:

Appendix 7: Patient Consent Form

Coventry and Warwickshire NHS Partnership Trust

PATIENT CONSENT FORM

Short research title: Moving and Handling Practice in a Community Setting

Name of Principal Investigator: Hannah Wade

Please initial all boxes

6. I confirm that I have read and understand the patient information sheet dated 12.09.12 (version 1) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐

7. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐

8. I understand that notes may be taken during the observation. I understand that anonymous notes can be used as part of the research project. ☐

9. I understand that all the information I provide will be treated in confidence and I give permission for the researcher to use any information I give for research purposes. ☐

10. I agree to take part in the above study. ☐

Name of Patient	Date	Signature
Name of Person taking consent.	Date	Signature

Consent form date of issue: **[DATE]**
Consent form version number: **version 1 12.09.12**

Appendix 8: Fieldnotes Component One: Framework

Patient: Condition/size/what they can do for themselves/	
Participant:	
Treatment/Task: What techniques Time taken	
Environment: House/bungalow/flat/nursing home Flooring/light/noise/space available	
Other factors: Family/ Friends Pets	
Comments: Timings Anything adapted	

Appendix 9: Fieldnotes Component Two: Timesheet

Time	Comments/Observations

Appendix 10: Interview Schedule (page 1 of 2)

Questions for interview/areas to be covered

The first part of the interview will be about the visit which will have just taken place. Questions will be asked according to the individual visit. The topics below will be covered as appropriate:

- The moving and handling skills used during the visit and why?
- How they felt their moving and handling was?
- Anything they may do differently or what went well?
- If they feel they had to adapt their moving and handling during the visit or since they have been treating the patient?
- The patient's condition – and how that may affect moving and handling?
- The patient's home/ environment – and how that may affect moving and handling?

These topics may be expanded on further where appropriate.

.....

The second part of the interview will contain open questions based on the questions below. The researcher may ask for more explanation where required.

How long have you been qualified?

How long have you worked in the community for/at what level/speciality?

Tell me about the types of patients you see?

What moving and handling practice do you regularly do?

Are there any difficulties when moving and handling in a community setting? Expand/experiences/what learnt/practice change...

Do you feel you have to adapt the recommended moving and handling in the community?

Interview Schedule (page 2 of 2)

Expand/how/issues/2 therapists/conditions

Do you feel there is a difference between therapeutic handling and moving and handling?
Why/experience

Have you ever experienced a complex moving and handling situation?
If so what was it etc

Are there any areas in moving and handling which you feel low in confidence with or find challenging?
Why/expand

Do you feel the training currently received is suitable for a community setting?
Expand/why/what would be better/when last did training – how often are the updates/are they useful

Any questions

Appendix 11: Reflective Excerpts (page 1 of 2)

Examples taken from Reflexive Diary:

‘Even in formulating the research question and methodology, I have already discovered how much a researcher can influence the study, because one inevitably draws from their own thoughts and experiences’.

‘Although I am experienced in clinical interviews and have obtained skills such as non-verbal communication, active listening and the ability to take notes during an interview process, it has been acknowledged that research interviews are a different entity. In a clinical interview direct questioning can be used to find information, whereas a research interview involves broad areas of questioning. Therefore the interview process which I am used to, had to be modified and reflected upon. This may be one of the researcher/practitioner dilemmas’.

‘Putting the theory of qualitative analysis into practice has proved to be challenging as most methods in the literature do not provide any guidelines, for example, how to actually carry out the analysis and the knowledge of when this has been completed. On reflection, it could be that qualitative data analysis is never truly completed, because revisiting raw data may subsequently yield further ideas’.

‘A colleague offered to transcribe my interview. However, I decided on reflection that it would be best for me to transcribe it myself, so that I could become familiar with the data. This meant that I could re-visit the interview situation, listening to the participant’s vocal tones and remembering her body language and facial expressions. This also helped me to become immersed into the interview, thus gathering initial ideas. Ethically, I did not think it would be appropriate for anyone else to transcribe the interview either’.

Reflective Excerpts (page 2 of 2)

‘It was important that I did not slip into the ‘quantitative area’ of just seeing codes and categorising them without looking deeper into the actual meaning of them. As I reflected on the codes, I made sure that I was capturing the perceptions and experiences of the participants as expressed by them during the interviews’.

‘As well as practicing a new type of interview, a research/practitioner dilemma became apparent during the interview itself. As a practicing physiotherapist, I interviewed other physiotherapists and occupational therapists. During the interview I did not wear my uniform in order to distinguish myself as a researcher. On reflection, I realised that the participant knew I was a practitioner but it was important to think about how this may or may not have influenced the interview. Another dilemma is that the participant may not have wanted to disclose anything about the use of an unsafe technique. The participant may also have been concerned about giving me the ‘right’ answers. I was concerned about not asking leading questions, knowing when to prompt, gathering enough information and trying to put the participant at ease. On reflection, I didn’t know what themes would emerge from the data so the majority of my concerns were negated’.

‘When setting the objectives I had not considered the influential extent of the participant group being therapists. Although this study was primarily to explore moving and handling, the use of therapeutic handling and intervention was also acknowledged and incorporated into the discussion. I realised that therapists are never only completing manual handling practice, but that this practice is underpinned with clinical reasoning and using a problem solving approach’.

Appendix 12: Ethical Approval Letter (page 1 of 3)

Ethical Approval Letter (page 2 of 3)

Ethical Approval Letter (page 3 of 3)