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*The 'Balance' of Frailty: A Case Study Analysis of Occupational Therapy Practice*

EVANS, Laura Jane

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Sheffield Hallam University  
Faculty of Health and Wellbeing

**The 'Balance of Frailty': A Case Study Analysis of  
Occupational Therapy Practice**

Laura Jane Evans

A doctoral project report submitted in partial fulfilment of the  
requirements of

Sheffield Hallam University

For the degree of Doctor of Professional Studies

September 2018

# Candidate Declaration

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I hereby declare that:

1. I have not been enrolled for another award of the University, or other academic or professional organisation, whilst undertaking my research degree.
2. None of the material contained in the thesis has been used in any other submission for an academic award.
3. I am aware of and understand the University's policy on plagiarism and certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.
4. The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.
5. The word count of the thesis is 56,697.

Name	<i>Laura Jane Evans</i>
Date	<i>September 2018</i>
Award	<i>Doctor of Professional Studies</i>
Faculty	<i>Health and Wellbeing</i>
Director(s) of Studies	<i>Dr. Russell Ashmore</i>

## Abstract

This research was conducted within a single integrated acute and community healthcare trust to explore the role of Occupational Therapists (OTs) with frail older people across acute, intermediate and primary care settings. A group of local and national stakeholders were interviewed as a preliminary stage of this study.

A constructionist position with an interpretivist epistemological perspective aligned with the utilisation of case study methodology in this qualitative study. An individual Occupational Therapy (OT) case study was purposefully selected in each of the acute, intermediate and secondary care settings, and four members of their multi-disciplinary team were selected by each case study OT to provide additional perspectives on the role of the OT in that specific setting.

The stakeholder and three OT case study interviews were recorded, transcribed and thematically analysed. This analysis informed a cross case analysis of the three OT cases from which a 'balance of frailty' conceptual framework was constructed. OT practice is described across three main themes of 'precarious balance', 'the 'tipping point' and 'restoring the balance'

The long term condition of frailty is a transitional multi-component state which can be missed in the early stages. The study findings indicate that OTs were well placed to identify silent or 'hidden' social and cognitive triggers for an older person who may become frail. Through occupational analysis OTs were able to contribute to the early diagnosis of this condition.

In the acute setting OTs were able to detect silent triggers and provide solutions to prevent future admissions. In-depth assessment and intervention were most appropriate in the home or community environment where assessment of normal habituation, effort levels and risk factors were considered in providing an accurate and client orientated assessment. OTs have an 'occupational lens' across the transitional levels of frailty within acute and community contexts. They can enhance living well in the early stages of frailty and promote ageing well when increased levels of support are required in more advanced levels of frailty.

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*“Life is like riding a bicycle. To keep your balance you must keep moving”*

***Albert Einstein (1879-1955)***

*“Tis a lesson you should heed, try, try, try again*

*If at first you don't succeed, try, try, try again”*

***William Edward Hickson (1803-1870)***

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## Glossary of Terms

Term	Meaning
Acute Care	Intervention provided in a hospital environment due to onset of acute illness
Secondary Care	As above to describe all hospital in-patient environments
Primary Care	Intervention provided within the context of a person's home or community environment
Intermediate Care	Intervention provided for a short period to 'bridge' care between acute and primary care interventions
Integrated Acute and Community Trust	One organisation that includes both acute and community services. Interventions are provided in hospital, home and community environments
Active Recovery	An intermediate care service provided within the trust that provides immediate intervention for people discharged from hospital or prevents admission if possible to acute care
Discharge to Assess	An approach across acute and intermediate care services where the assessment process is started in hospital and continues in the persons' home usually on the same day. Assessments previously carried out in hospital occur in the home environment
Professional Lead Occupational Therapist	Lead Occupational Therapist in the Trust who is ultimately accountable for Occupational Therapy practice delivered across all practice environments
Stakeholders	Group of external and internal 'experts' of older people who become frail selected in the first and preliminary stage of the study
Therapy Services	An integrated Physiotherapy and Occupational Therapy service provided across the secondary care environment
Multi-Disciplinary Team (MDT)	Team members who work with occupational therapists in the delivery of interventions for older people who become frail.

## **Chapter 1: Introduction to the thesis**

### **1.1. Introduction**

In this chapter, I introduce myself and provide an overview of my personal and professional background and experience to explain my interest in the topic of enquiry. The next section provides an overview of the thesis and I then provide a brief explanation of terminology used.

### **1.2 My background and interest in the topic**

My career in occupational therapy (OT) began over 30 years ago working within an acute hospital environment, over this period I have worked across a wide variety of community and hospital specialities and settings. The care and support of older people has always been integral to my practice. The landscape of where, what and how OT is delivered has dramatically developed during this period. The increasing ageing population and resultant demands on health and social care systems have required the OT profession to adapt and review its contribution to the health and well-being of older people.

The underpinning evidence base of how health and social care is provided to the oldest and most frail individuals in our society is critical to develop in the planning and provision of future OT services. The use of the word 'frail' and the 'frailty' concept has become embedded in the language and architecture of healthcare. Frailty units and measurement tools such as the frailty index (Jones, Song, Mitniski and Rockwood, 2005) are an indication of how the concept of frailty is now recognised as a distinct long-term condition (Young, 2015) in relation to the care of older people.

At the beginning of my career, working in an acute hospital environment, it was unusual for people to be admitted in their 90s or to have reached 100 years old. It is now becoming less uncommon for older people to reach this age. My interest is to explore the role of occupational therapists (OTs) with these older people who have become or are considered as frail: where can the role of an OT bring potential benefit?

In my clinical practice I have provided OT interventions with older people in acute and palliative care in both hospital and home based settings. For the last

15 years I have been responsible for the provision and development of OT services to older people. There is an alignment of my career pathway to how services to older people have evolved. As hospital and community services have become more integrated, my responsibility for providing OT services has also evolved from a hospital-based service to combine acute and community pathways of care. The interface between these two environments and the effect on OT practice will be explored in this study. A professional doctorate qualification specifically develops professional practice alongside development of the researcher within their professional work (Scott, Brown, Lunt and Thorne, 2004).

Alongside my professional and practice perspective I also have a personal interest in exploring how the concept of frailty and OT can be considered. I have personal experience of this in my family.



Alma (1912-2016)

Alma, my 'nanny', died three years ago aged 104, and her 'story' is perhaps going to become more typical. Alma lived at home until she was 95 years old. Until this point she had managed at home with daily visits from her son in the early evening and home care support in the morning and afternoon to supervise her getting out of bed, getting dressed and helping with meals.

After a series of falls, physical and cognitive decline and several admissions to hospital, Alma went to live in a care home. At this point she was in a fragile or

'frail' condition, however her physical and functional abilities gradually improved. Her son continued to visit her daily, often taking her out for a change of scene, chatting to her and encouraging her to eat and drink. Alma lived for nine more years in the care home; her son, my father is now 83 years old. My maternal grandmother also lived until age 97.

### **1.3 An overview of the thesis**

This study will explore the practice of three OTs across three different settings in an integrated acute and community trust, with the aim of informing the future practice of OTs with older people who have become frail.

Chapter 2 will describe the current health and social care climate, referring to relevant publications in the care of frail older people and the resultant demands on the health system. The frailty concept, its emergence and tensions around its definition and measurement will be described in the context of older people's health care and OT practice.

Chapter 3 will review the literature of OT with older people who have become frail from a hospital and community context as aligned with the OT case studies in this research study. The literature from both contexts will be critically analysed and compared across home and acute settings to identify any gaps in the current literature.

Chapter 4 will describe the rationale underpinning the research question, the aim and the objectives of the study and then in Chapter 5 the methodological approach taken, including an explanation, justification and critique of using a qualitative case study approach in order to answer the research question. The study design along with ethical considerations will be included in this chapter. The research method will be described in detail in Chapter 6 including selection of the cases, recruitment, data collection and finally the analytical process of the resultant data.

Chapters 7 and 8 will present the study findings. Chapter 7 will outline the stakeholder interviews followed by each of the three OT case studies; each context and emerging factors in their practice will be explored in turn. Chapter 8 describes the results of the cross-case analysis and a constructed conceptual framework of the 'balance of frailty' for OT. Each of the main themes and

subthemes will be presented within this structure using examples from across the OT case studies.

The Discussion in Chapter 9 will reflect on the findings of the three OT case studies and consider the implications for OT practice. Finally Chapter 10 will present the recommendations for practice, education and further research.

#### **1.4 Use of terminology**

During the course of this study I changed the terminology used to describe the population who are the study focus. The term 'frail elderly' was used initially, reflecting the language used commonly in clinical practice and this appears in some of the study documents. Over the course of the study, I became aware of the linguistic sensitivities around the term elderly and the academic viewpoint that the stereotypical use of 'elderly' as an age descriptor is no longer acceptable and is deemed pejorative and reductionist. To this end, I adopted the term 'older people who have become frail' and this is reflected throughout the thesis.



## **Chapter 2: Policy and Theoretical Context to the Study**

### **2.1 Introduction**

This chapter describes the contextually significant factors in which this study is situated. People are living longer and enjoy having healthier lives. This has brought a demographic shift within population health (Bloom and Shannon, 2014). This chapter reviews this demographic context and current health and social care policy related to older people who may become frail. The definition of 'frailty' has been a challenge for researchers and clinicians to agree upon a common approach (Rockwood et al., 2005). The history, current definition and limitations of the frailty concept are explored in this chapter. The concept of frailty is then reviewed in the context of current Occupational Therapy (OT) practice.

### **2.2 Political, Sociological and Demographic Context**

*"A healthy life and right to health do not start or end at a specific age" (Global strategy and action plan on ageing and health, World Health Organisation, 2017)*

Someone today aged 65 years can expect to live to 85 years. This has been described as a 'social revolution' (Centre for Ageing Better, 2018) which can offer opportunities for individuals, the economy and society. The increase in life expectancy in people over the age of 65 years in the United Kingdom (UK) is forecasted to reach over 65 million by 2051 which constitutes 21% of the total UK population (Young, 2015). A phased demographic transition was outlined by Bloom and Shannon (2014) in which a combination of fertility rates, low mortality rates and an increase in life expectancy has led to the proportion of older people increasing particularly in developed countries. Incidences of non-communicable diseases have also reduced. With the global impact of this demographic shift, Bloom and Shannon (2014) predicted that the number of people over 60 years would overtake children (0-14 years), with the main population growth being in developed countries. They predict that by 2100 only 13% of the world population will live in today's 'rich countries'.

As many more people live longer, lives can be healthy, happy and independent well into old age (Kings Fund, 2014). The definition and categorisation of 'older

age' is relevant in consideration of the incidence of an older person potentially becoming frail (Young, 2015). Collard, Boter, Schoevers and Oude Voshaar (2012) conducted a systematic review of 21 cohort studies across age ranges from over 65 years to over 85 years, examining the rates of frailty. The prevalence of frailty rose steadily with increasing age. However, at any given age the condition of frailty affected only a minority of people. Older age cannot in itself predict frailty (Young, 2015).

The demographic shift towards an older population has prompted a range of policy and research responses. Acknowledging this demographic transition, the World Health Organisation (WHO) published "A global strategy and action plan for ageing and health" (WHO, 2017). This publication viewed ageing as a valuable but challenging process for society. The identified objectives within the strategy included the development of age-friendly environments, aligning health systems to the needs of older people and establishing a sustainable and equitable system for long term care.

The NHS Long Term Plan (2019) also reflects the ambition for people to age well. Ageing well is important in the context of health services, because the potential demand on health services will increase as older people are likely to develop more than one long-term condition that needs management. The NHS Long Term Plan (2019) refers to the condition of frailty and the level of support that may be required to respond to it. This includes a multi-disciplinary approach, rapid response teams and a more proactive, empowering approach to personalised care if required.

Charlesworth, Roberts, Varrow and Roberts (2017) detail the current and likely costs related to the provision of care for older people. The UK currently spends over £140 billion a year on the public provision of health and over £20 billion a year on social care, with an identified gap in the provision of social care for people over 65 years who need help with normal activities of daily living. The widest gap of social care provision is for older people in the lowest income bracket (Charlesworth et al., 2017).

The acknowledgement and sense of urgency about the shortfall in funding was also outlined to commissioners by the NHS Confederation (2012). It highlighted that the increasing demand for health and social for people over 65 years

would only be resolved if resource challenges were addressed. The Five Year Forward View (NHS England, 2014) outlined the NHS ambition to improve the diagnosis of dementia and support for people and their carers. It estimated that 700,000 people in England have dementia, many undiagnosed, and that one in three people over 65 will develop dementia before they die. Frailty is strongly associated with cognitive impairment and clinically diagnosed dementia among people aged 76 years and older (Kumala, Nykanere, Manty and Hartikainen 2014). The combination of the outlined demographic growth and a frailty diagnosis in older people is a vital consideration in the future design and resourcing of health and social care services.

Health and social care policy increasingly addresses the potential ways in which high quality care and support can be provided to older people and their carers. The National Service Framework (NSF) for Older People (Department of Health, 2001) set out quality standards for the care of older people. More recently, the Kings Fund (2014, 2015) published guidance documents with integrated care of older people central to their recommendations. The Better Care Fund (Department of Health, 2017) is a programme spanning both the NHS and Local Government to join up health and social care funding and services in line with the NHS Five year Forward View (NHS England, 2014). This publication acknowledged the service pressures that exist to support frail older people and presented a vision to have a more integrated approach to health and social care, with investment in primary care prevention. Both publications advocated a proactive approach for frail older people. This aims to support them to live at home for longer and be less reliant on health services.

10 components of care for older people were described in 'Making our health and care systems fit for an ageing population' (The King's Fund, 2014). This plan details a shift towards prevention and proactive care at all stages, from an older person being fit and well, through potential levels of frailty and to the end of their life. The plan also describes the way in which services will need to change to respond to this shift. Health organisations need to focus on system-wide planning, with future models of care delivered across organisational boundaries. Hospitals of the future will be different with a greater proportion of care delivered beyond hospital walls (The King's Fund, 2015).

Collaborative, person-centred care is recognised within the Five Year Forward View (NHS England, 2014), the Sustainability and Transformation Plans (NHS England, 2016) and the NHS Long Term Plan (2019). The global strategy for active ageing (WHO, 2017) describes the ambition for people to live healthier lives, reduce the risk of poor health and delay the onset and progression of disease. The Centre for Ageing Better Strategy (2018) identifies the importance of staying in good quality work for longer, living in accessible and adaptable homes and living in communities where social relationships and connectivity are facilitated. OT has a key role to play in this agenda. The intentions of active ageing are fully aligned with the theoretical and philosophical stance of OT. The Royal College of Occupational Therapy (RCOT) set out that OTs should be proactive within primary care and be commissioned to work with older people as they begin to become frail (RCOT, 2017).

### **2.3 The Emerging Concept of 'Frailty'**

It is important to accurately identify frailty in older people in order to ensure that they receive safe and compassionate care (NHS England, 2014). A proactive approach to the recognition of the condition in older people, by a range of healthcare professionals, may prevent a crisis and avoid admission to acute care (Young, 2015). NHS England also identify the importance of integrated care pathways for older people in order to case find, prevent future harm and effect smoother transitions between care providers. (NHS England, 2014).

How the concept of frailty is defined and perceived is still a “work in progress” (Kuchel, 2018, p1451). However, the conceptual and diagnostic frameworks that have developed around frailty have developed significantly in the last twenty years. This developmental process has been marked by a lack of consistent conceptualisation, with some identifying a lack of clarity (Wyrko, 2015) to assess ‘frailty’ in ‘front door’ or elective surgical settings and a “swiss army knife” approach to choice of screening tools in clinical trials (Kuchel, 2018, p1451). However, work in this space demonstrates a positive improvement. While early concepts of frailty think about it as a physical condition, more recent work has conceptualised it as a multi-dimensional and dynamic state, involving physical and psychological factors. The indicators to measure frailty have similarly developed to reflect this shift.

There are two widely recognised models of frailty (Gordon, Masud and Gladman, 2013). These are the Fried et al. (2001) 'phenotype' model and Rockwood and Mitnitski (2007) 'accumulation of deficits' model. The phenotype model of frailty measures:

1. Shrinking and unintentional weight loss
2. Weakness, measured by grip strength
3. Poor endurance and energy, self-reported
4. Slowness, measured by walking speed
5. Low physical activity, self-reported

These factors are identified as indicators to an underlying physiological state of multi-system dysregulation (Gordon et al., 2013). If three or more of these factors are present, frailty is suggested as a 'clinical syndrome' which predicts the incidence of falls, deteriorating mobility, reduction in independence in activities of daily living, hospitalisation and ultimately death. Intermediate frailty status, as indicated by one or two of the criteria, predicts an intermediate risk of becoming frail over the following three to four years. The concepts of disability, comorbidity and frailty are linked, however a lack of independence due to disability was stated as not having an automatic link to frailty (Fried et al., 2001).

Rockwood et al. (2005) developed the deficit model to bring greater precision to the diagnosis of frailty. They developed a clinical measure of fitness and frailty in older people which collected information on 92 deficit variables, the greater number predicting the presence and level of frailty. Subsequent measurement refined this number of variables, creating the clinical frailty scale (Rockwood and Mitnitski, 2007). Crucially, this scale recognises a range within the frailty condition from very fit to terminally ill people. This range then aligns with diagnostic levels of mildly frail, moderately frail and severely frail (The Kings Fund, 2014). To provide better practice-based application of the measure, Downes and Stewart (2010) further refined this scale to develop the 'frailsafe' tool. This asks three screening questions about reduced mobility, the presence of confusion and whether the person resides in a care home.

Developments in the measurement and diagnosis of frailty have gone hand in hand with a broader conceptualisation of frailty as a dynamic multi-dimensional state, rather than simply a physical condition. Bergman et al. (2007) explored frailty as an emerging clinical and research concept finding several issues and controversies. The distinction between frailty and ageing were potentially unclear. Deficits such as functional limitations, morbidity, psychological status and cognitive ability were found to be potentially better predictors of autonomy, institutionalisation and mortality than chronological age alone. Some characteristics of frailty could develop that were separate from ageing albeit they were likely to progress with an ageing process. Bergman et al. (2007) described how multi-system damage could lead to a collection of symptoms or 'frailty syndrome'. This syndrome can generate a downward spiral and, in itself, be used as a criterion for diagnosis which in turn offers the opportunity to intervene and alter the course.

Bergman et al. (2007) suggest that components of frailty such as cognition and mood may indicate a specific disease trajectory that could differ from a trajectory that begins with physical components. Although this appears to present an alternative indicative framework for frailty, there are potential links between Fried et al.'s (2001) focus on functional measurement and the cognitive and psychological changes described by Bergman et al. (2007). Taken together, they extend the conceptualisation of frailty to be a multi-dimensional condition with interrelated physical and cognitive dimensions.

The multi-dimensional element of frailty is linked to its dynamic characteristics. It involves frequent transitions between levels or states (Gill, Gahbauer, Allore and Han, 2006), though more commonly involving deterioration rather than transitions from frail to non-frail. After a large scale prospective study of 754 over 70 year olds in community living, Gill et al. (2004) concluded that there were opportunities to carry out future studies to explore preventative interventions using the criteria suggested by Fried et al. (2001). Lang, Michel, and Zekry (2009) suggest that a 'pre-frail' state exists where frailty may be prevented by strategies such as an adequate diet, exercise, prevention of infection and anticipation of stressful events. Lang et al. (2009) referred to this 'pre-frail' stage as potentially 'clinically silent' with the person able to recover

from external stressors. The more advanced stages of frailty were associated with an inability to recover completely from adverse events or stressors.

As frailty has been increasingly conceptualised as dynamic, the transitions between states of frailty have gained increasing clinical attention. There are several potential transitional levels of frailty experienced by an older person between non-frail, pre-frail, frailty and death (Gill et al., 2006). These transitions in themselves need appropriate care, because transitional states are associated with disorientation and chaos. Transitional developmental theory (Van Gennep, 1960) developed by Bridges (1986), suggests that the points of transition themselves are likely to be of clinical and personal consequence to an older person. As a result, the dynamic and transitional nature of frailty (Lang et al., 2009) and how these transitions are experienced by an older person is potentially an important consideration for this study. For an older person, becoming more or less frail may involve multiple transitions across the environments of hospital and home.

Young (2015) identifies how clinically important transitions are as part of frailty. Frailty occurs in relation to the ageing process, where multiple body systems gradually lose their in-built reserves. Frailty often presents as a crisis, for example a fall or a minor illness. Young (2015) referred to these crisis events as stressors that can lead to a sudden loss of independence requiring an urgent response from health and social services. Transitions are also likely to involve events which are likely to require an immediate health response.

For this reason, clinical practice needs to be alert to the multi-dimensional element of frailty in order to provide both pre-emptive and responsive treatment. In 2013, a consensus document between physicians was published who agreed their definition of frailty as:

*“A medical syndrome with multiple causes and contributors that is characterised by diminished strengths, endurance and reduced physiologic function that increases an individual’s vulnerability for developing increasing dependency or death”* (Morley et al., 2013).

Like this definition, interventions in relation to frailty have often responded to the predominant physical deficits associated with the state. However, a less



medicalised view of the frailty concept appears to be developing, with recognition that frailty requires a multi-component or whole-system approach (Gordon et al., 2013) determined by provision of primary care, community nursing, local authority and public health services (Oliver, 2017). The British Geriatrics Society (2014) “Fit for Frailty” recognises that frailty varies in severity. It suggests interventions such as exercise to improve strength and balance and nutritional interventions to address deficits. They also identify that older people at risk of frailty require a comprehensive geriatric and holistic assessment, leading to an individualised plan for themselves and their support network. Holistic support is described by Oliver (2017) who details the ethos of this approach:

*“Much of what we do is about delivering different service models, it isn’t about hard numerical outcomes, it’s about prioritising treatment, recognising limits of intervention, supporting families and delivering good care toward the end of life”* (Oliver, 2017, p2-3)

#### **2.4 Occupational Therapy and Frailty**

This section explores the relevance and application of the concept of frailty to the Occupational Therapy (OT) role with older people. The OT role is currently defined by the Royal College of Occupational Therapists (RCOT) as:

*“Providing practical support to empower people, to facilitate recovery and overcome barriers preventing them from doing the activities (or occupations) that matter to them. This support increases people’s independence and satisfaction in all aspects of life.”*

*““Occupation” as a term refers to practical and purposeful activities that allow people to live independently and have a sense of identity. This could be essential day to day tasks such as self-care, work or leisure” (RCOT, 2019)*

The importance of older people participating in ‘occupations’ is reflected in the concept of ‘active ageing’ adopted from the World Health Organization (WHO, 2002). This highlights the process of optimising opportunities for health, participation and security to enhance quality of life as people age. The



trajectory of frailty as a dynamic and long-term condition (Young, 2015) may prevent an older person from achieving their desired occupations. The OT approach to these challenges encompasses a philosophy of 'health promotion' and empowerment to enable the achievement of activities that are important to the individual. The "What Matters to You" campaign promotes an approach of 'what matters to you' rather than 'what is the matter' (NHS England, 2019). This approach has high resonance with the personalised approach advocated by the role of OTs in social prescribing (RCOT, 2019). A primary prevention approach to frailty as a long-term condition should be central to any offer from an integrated health and social care service, with a focus to reverse or slow the progression of this long term condition (The King's Fund, 2014, Young 2015).

The facilitation and promotion of the achievement of meaningful 'occupations' is core to the profession of Occupational Therapy (Reilly, 1962, Baum and Law, 1997, Fisher and Keilhofner, 1995). Occupation and the act of 'doing' is itself an 'intervention' which improves the health of the mind and body (Wilcock, 2001). Cassel (2002) suggests that the elements of successful ageing are a combination of social and productive activities with biomedical and pharmaceutical interventions that enhanced both physical and mental health functioning. The National Service Framework for older people (Department of Health, 2001) recognises that older people are not a homogenous group and identifies that older people transition between healthy older age and frailty. This period of transition is potentially a period of importance for OT. In this context the role of an OT is to promote the continued health and wellbeing optimal for an older person in their specific context (McIntyre and Atwal, 2005).

Wilcock (2005) suggests that individualised occupational engagement is a right and specific occupations or activities should meet the older persons' unique wants and needs as part of an active ageing process. The 'Do-Live-Well' framework also suggests that the specificity of the activity experienced for the individual is vital for health promotion (Moll et al., 2015). Daily activities offer an occupational perspective that is missing from other health promotion frameworks.

To achieve maximum occupational potential and opportunities, inclusive legislation and policies that do not discriminate against older people are

required (Wilcock, 2005). OTs at a clinical and strategic level, are positioned to promote healthy occupations for older people who become frail. This cohort is arguably the most vulnerable to becoming occupationally deprived.

Occupational therapy has been identified as beneficial both in primary care (RCOT, 2015) and in residential care (NICE, 2008).

The environment of an older person is important to enable healthy ageing by allowing the older person to be as active as possible. The International Classification of Functioning (ICF) framework is recognized as a model of health and disability relevant to OTs as it considers the ways in which the occupational performance of individuals may be compromised by contextual factors which can be personal or environmental (WHO, 2001). Law et al. (1997) developed the person, environment and occupation model (PEO) which considers how each is shaped by interactions between component domains. The environmental domains can be physical, cultural, institutional, social and socio-economic.

The 'Enable-Age' project considered the importance of frail older people continuing to live in a home environment (Fange and Dahlin-Ivanoff, 2009). Living at home was recognised as being familiar and a place of safety. This made it conducive to activity participation with even the 'oldest' people having the motivation to keep well and avoid decline. The home could be an enabler of an active lifestyle for older people who become frail (Brookfield et al., 2015). The home environment may need to be adapted to the needs of the older person. Steps, available space and the form and location of fittings were found to facilitate or be a barrier to active living in the home. The role of OT to support the most 'frail' people was described in a recent report 'Living Not Existing' from the Royal College of Occupational Therapists (RCOT, 2017). This report identifies that OTs can prevent or delay the need for care and help older people remain in their communities.

Age-friendly environments for older people were also one of the global strategic objectives (WHO, 2017). The objective identifies that a suitable environment can support and maintain an intrinsic capacity across a life-course, enabling maximum functional ability as long as possible. This global strategy encompassed not only the home environment but also access to suitable

transport, housing and social facilities in the community. OTs can advise older people, health and social care organisations, commissioners and designers to achieve this maximum potential for the frailest people in society. However, this ambition is potentially best achieved through a strategic multidisciplinary approach (WHO, 2017).

Older people believe that maintaining a social network with a range of relationships aligns with better health and improved longevity (Young and Glasgow, 1998 and House, Landis and Umberson, 1988). The Care Act guidance for OTs on wellbeing and prevention aligns with and promotes the role of OTs to take every opportunity to 'make every contact count' (RCOT, 2014). Primary Care organised in local population 'neighbourhoods' are an opportunity for OTs to be social prescribers working with link workers for the most complex people living at home (Donnelly, Brenchley, Crawford and Letts, 2013 and RCOT, 2019).

A personalised approach, in which an older person is at the centre of integrated health, social and voluntary services, demands a shift to preventative and proactive care (Kings Fund, 2014). OTs increasingly work across multi-disciplinary teams (MDT) where they can contribute their unique knowledge and skills of 'occupation' for health. Turner (2011) was mindful that integration may lead to a medically led dependency. However the link between successful, active ageing and activity or occupation is a potential conduit to the OT profession demonstrating and articulating its value (Turner and Alsop, 2015).

OTs work in a range of settings across acute and community contexts with older people who may be living with a level of frailty. In the community they have a role to play in the prevention and management of falls (RCOT, 2015). This ranges from the identification of people at risk, the assessment of performance and function and support to improve health and wellbeing including encouraging physical activity to complement home and environmental modification, and skills development to prevent future falls (NICE, 2008 and Pighills, Torgerson, Sheldon, Drummond and Bland. 2011). They also currently work in 'crisis management' and admission avoidance within multi-disciplinary teams (MDT) to prevent admission to acute care from a community setting (NHSE, 2016a) or at the 'front door' of A&E departments (RCOT, 2016). In the

acute sector, the role has a particular focus on facilitation of discharge which is a complex situation requiring negotiation between OTs and other health professionals, the older person, their caregivers and support services. The guidance document 'Embracing risk – Enabling choice', published by the RCOT in 2018 recognises the complexities in this situation and the challenges of balancing personal autonomy for the older person with professional knowledge and experience.

The National Service Framework for older people (2001) identified the broad group of frail older people whom Young (2015) saw as a spectrum ranging from an older person living independently at home to those requiring end-of-life care. Within the context of palliative care, the role of an Occupational Therapist philosophically remains the same as that in other circumstances. That is, to enable as many occupational activities as possible, providing choice and strategies to achieve what is important to them for quality of life (Keesing and Rosenwax, 2011).

## **2.5 Defining the concept of frailty for this study**

Clinical practice around frailty has potentially been slowed by the time it has taken to reach a consensus on the definition of frailty (Morley et al., 2013). In addition, variation in the conceptualisation and measurement of frailty has potentially delayed the body of evidence around how to 'slow' the frailty trajectory through appropriate interventions. Kuchel (2018) suggested that frailty was still a controversial issue with new perspectives still emerging. The understanding of frailty as multidimensional and dynamic is essential to identify where the role of OTs can contribute to the identification, recognition and intervention for older people who may have become frail.

The medical definition of frailty identifies that there are "diminished strengths, endurance and reduced physiologic function" (Morley et al., 2013). Young (2015) describes that frailty is characterised as a high vulnerability to adapt to minor stress events. From an OT perspective, diminished strength and resilience may reduce occupational performance. This provides an opportunity for OTs to identify any reduced performance, assess and reduce risk factors as a route to maximising opportunities for active and increased occupations.

OT practice is holistic and well aligned to the broader conceptualisation of frailty as a multi-faceted condition (Gobbens, Luijckx, Wijnen-Sponselee and Schols, 2010). In response to a multi-faceted condition, OT considers the person, their environment and their meaningful occupations in order to achieve maximum occupational performance (Law et al, 1997).

On this basis, and drawing on the work of and Morley et al., (2013) and Young (2015) the definition of frailty used for this study is:

*“A transitional, complex and multi-level condition that can impact on the occupational performance of a person in order for them to actively participate in their chosen vocational, social, cultural and functional activities”*

## **2.6 Chapter Summary**

This chapter has outlined the relevant contextual factors for this study of the role of OT with frail older people. There are significant demographic and societal implications related to the ageing population. OT is well placed to respond to these changes because of the professional and philosophical commitment to promoting a healthy and active older age. There is a stated consensus on the ‘medical’ definition of frailty in older people and an exponential increase in this research field. However, recent work is challenging this biomedical definition of this state. The diagnosis and treatment of the condition is now perceived as multi-faceted with psychological, social and cognitive factors being relevant to consider. The study of the potential OT role with frail older people is therefore highly relevant in this described context.

## **Chapter 3: Scoping Review**

### **3.1 Introduction**

This chapter presents a scoping review of the literature examining current evidence related to the role of OT in relation to caring for older people who are described as 'frail'. The first section will provide an overview of scoping reviews and explain the specific approach I used. I then introduce the search question and report the stages of the search strategy. The findings section provides an overview of the evidence types and then goes on to report the findings of the review under three thematic headings. The discussion that follows includes an assessment of the evidence and identifies the gaps in knowledge.

### **3.2 Method of Review**

A scoping review or scoping study has been an increasingly popular form of knowledge synthesis (Colquhoun et al., 2014) to collect and organise important background information and develop a picture of existing evidence (Armstrong, Hall, Doyle and Waters, 2011). Scoping reviews can also determine the value of undertaking a systematic review (Peters et al., 2015) and identify the size and quality of research in a broad topic area in order to inform subsequent reviews. (Booth, Papaioannou and Sutton, 2012)

Conducting a scoping review is a method to 'map' the relevant literature, tends to be across a broad issue and is likely to include a range of quality of studies where there may be different degrees of depth of information extracted from the reported studies (Arksey and O'Malley, 2005). To support the process and enable scoping reviews to be rigorous and transparent, Arksey and O'Malley (2005) suggested a framework of five stages, which was then further developed by Levac et al. (2010) in order to encourage use of this methodology in future healthcare research and practice.

In the review I will follow the five stages of the framework described by Arksey and O'Malley (2005) and Levac et al. (2010). These are:

Stage 1: Identifying the review question

Stage 2: Identifying the relevant studies

Stage 3: Study selection

Stage 4: Charting the data

Stage 5: Collating, summarizing and reporting the results

### **3.3 Identifying the Scoping Review Question**

Identifying the review question guides the way that search strategies are undertaken, with careful consideration of the elements of the question including the population, interventions and outcomes. (Arksey and O'Malley, 2007).

Booth et al. (2012) suggested the use of the acronym PICOC (population, intervention or comparison, outcome and context) to help conceptualise the components of the review question. This was applied in a modified format to determine the key concepts of population, intervention and context (PIC). Comparison was not considered because it was not relevant to this review. The population in this research study were older people described as frail.

The intervention was identified as Occupational Therapy assessment or treatment and included all possible OT interventions that have been reported in the literature.

The context included all community and hospitals based settings where OTs worked in providing care to the population of concern.

The question to be answered by this scoping review was:

*“What is the evidence around the role of OTs in caring for frail older people in hospital and community settings?”*

### **3.4 Search Strategy**

I adopted a systematic approach using multiple data sources in order to locate the most relevant literature. My approach followed that recommended by Booth et al. (2012) and included a scoping search of electronic databases, searching grey literature, bibliographic searching hand searching.

#### **3.4.1 Preliminary search activities**

To familiarise myself with the topic, review the volume of literature and determine the databases to be included in the full search, I undertook a series

of preliminary activities that were then used to inform development of a structured and systematic search of the electronic databases. This included a preliminary search of electronic databases including Cinahl, Scopus, Medline, Pro-Med, OT seeker and OT CATS to define the search terms.

### 3.4.2 Conducting the electronic database search

The databases used for the electronic search were Cinahl, Scopus, Medline, Pro-Med. The search terms were developed from populations (P), intervention (I) and context (C) terms of Occupational Therapy, Frailty, Hospital or Community (PIC). They were combined using the Boolean operators of AND/OR. Truncation was also used to cover wider terms eg elder and elderly. The search was performed on title and abstract.

Table 1: The search terms used.

Occupational Therapy	AND	Frail	AND	Hospital
Occupational Therapist		Frailty		Hospital*
Occupational Therap*		Frail Older Person		Community
		Frail Elder*		Community*
				Home

### 3.4.3 Inclusion and exclusion criteria

The inclusion criteria were:

- Studies of older people over 65 years who are identified as frail.
- Studies written in English or with English translation.
- Studies published between January 2000 and July 2017.
- All primary research articles, literature, systematic reviews and expert opinion pieces

The interpretation of what age constitutes an 'older adult' that may be frail is inconsistent across empirical studies, with participant recruitment potentially



being over 60 years, 65 years or 70 years, (p6, Collard, Boter, Schoevers and Oude-Voshaar, 2012). My preliminary searches indicated that the most relevant literature consistently recruited study populations over 65 years. 65 years therefore appeared to be the most 'consistent' and inclusive starting point of data collection. No upper age limits were set.

Articles were limited to English because I do not have second language skills and had no access to translation services.

The data limits were chosen to incorporate a broad time range during which frailty models were recognised to have been developed. The frailty phenotype was first defined by Fried et al. in 2001 and the accumulation of deficits model was published by Rockwood et al. in 2005. These two articles are widely recognised as directing both scientific and applied research in this field (Wyrko, 2015). Frailty citations in PubMed have risen from "rare and exotic to nearly 1,000 in 2017" (Kuchel, 2018, p.1451) with a rapid increase between 2010 and 2017. This wide date range ensured that the search captured the early literature on the topic and could track the way the frailty concept has 'filtered' into contemporary OT thinking and practice.

The nature of a scoping review is to be inclusive rather than confining itself to empirical studies (Armstrong, Hall, Doyle and Waters, 2011). This determined my decision to include a variety of evidence sources.

The exclusion criteria were:

- Studies which did not focus on populations where 'frailty' was the primary condition.
- Studies conducted within a residential or nursing home care population.

Frailty may also be present in conjunction with other long term conditions such as stroke or a cerebrovascular incident (CVA), Parkinson's disease or Dementia. Each of these long term conditions has an evidence base specific to that condition. The focus of this review was on research where frailty is the primary condition. My preliminary searches indicated that there was a large body of literature relating to these other conditions within which frailty was a

consideration but not the primary focus. Whilst I acknowledge that long term conditions such as CVA, Parkinson's and Dementia may result in an older person becoming frail, this was considered outside the scope of my study.

Studies conducted in a full time 'care' setting either in residential or nursing homes were also considered outside the scope of the review. This is because the focus of this research study is concerned with practice across an integrated healthcare trust where an OT service is provided primarily in acute hospital and community (home) settings. There was a minimal OT service provided to nursing or residential care settings in this integrated trust so did not form part of the scope of this study.

#### 3.4.4 Grey literature and incremental search processes

I requested a library search from the Royal College of Occupational Therapists (RCOT) and networks such as the special interest group for older people at RCOT were approached for relevant material. Relevant websites (including Department of Health, the Kings Fund, British Geriatric Society and NHS England) were reviewed regularly, for relevant policy documents and reports. Occupational Therapy books and text, presentations and opinion pieces from conferences and journals were also routinely reviewed to identify if they met the search criteria or provided contextual material for the study. Grey Literature was accessed through RCOT and Sheffield Hallam and Sheffield Universities and SIGLE (the System for Information on Grey literature).

The reference lists of relevant studies or published work were reviewed to ensure a comprehensive approach to literature retrieval in this review. Citations by authors were also followed to expand the search. Incremental searching was conducted during the scoping review to capture articles that aligned with my search criteria. Alerts were set up in Scopus and Google Scholar to ensure that recently published literature could be included in the review.

#### **3.5 Identifying and Selecting the Relevant Studies.**

The electronic search was initially performed in 2014 and then rerun on 31.07.17 to ensure inclusion of more recent literature. I also set up alerts for

each of the databases in 2014 and maintained these over the course of the study.

Following the searches I followed a systematic screening process to identify the relevant body of literature. The PRISMA diagram (fig 1) details the search and selection process. At the full test screen stage, 13 articles were rejected for the following reasons:

- Minimal or unspecific detail about OT intervention.
- Research study criteria and findings provided unclear or a lack of detail in relation to OT practice with frail older people.
- Emphasis of the article on integration of services or allocation of resources rather than the role of OT.
- Geriatrician or nursing education programmes/approaches where OT was included but lack of specific detail
- Expert opinion pieces but with lack of specific detail on OT intervention.

A final incremental search (2019) included two additional publications and excluded two articles that provided insufficient detail of the OT role to inform the review. This resulted in the final number of 26 publications in this scoping review.

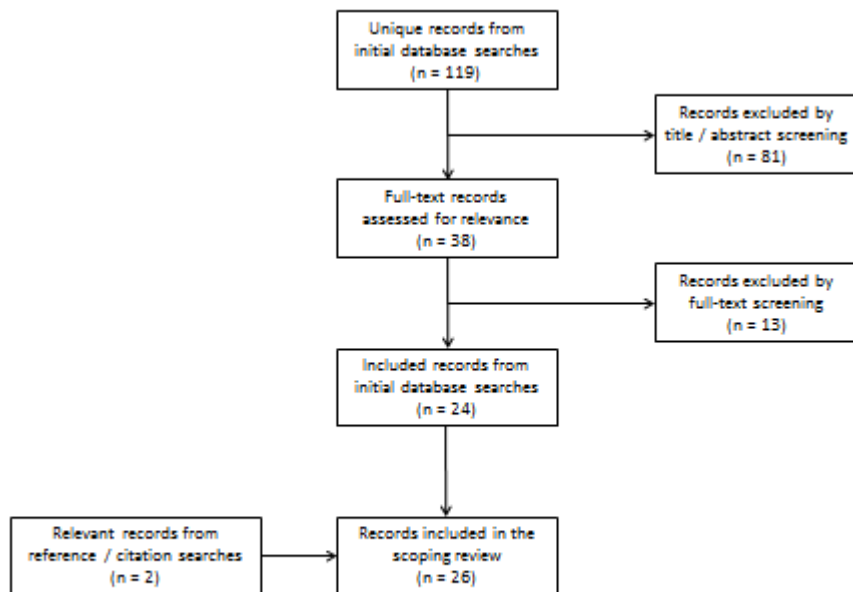


Figure 1. PRISMA flow diagram

### 3.5.1 Quality Appraisal

Scoping Reviews do not always aim to offer a quality review of the identified literature (Armstrong, Hall, Doyle and Waters, 2011 and Grant and Booth, 2009) claiming that data synthesis should be minimal. Levac et al. (2010) however argued the value of an assessment of quality that can contribute to achieving the search objective. I performed a quality appraisal on each of the empirical pieces of literature included in the review guided by the appropriate critical appraisal skills programme tool (CASP,2019). I used the results of the appraisal to inform my critical analysis of the body of literature and this is reflected in the narrative reporting of the review. No papers were excluded on the basis of the CASP scores.

### 3.6 Charting the data - data extraction

Data extraction involved two processes as suggested by Arksey and O'Malley (2007) and Levac et al. (2010). The first was to develop a methodological and thematic matrix and populate them with data extracted from the articles to provide summaries of the key information. The second stage involved further descriptive and content analysis to synthesize and make sense of the wealth of extracted data (Levac et al., 2010). This process followed a thematic analysis

approach as detailed by Braun and Clarke (2006). These are described in more detail in chapter 6, but briefly the stages of the analytic process I followed for the review are:

1. Familiarisation with the data – reading the articles
2. Generating initial codes – identifying key findings from the articles
3. Searching for themes – searching the key findings for potential themes
4. Reviewing the themes – reviewing the potential themes
5. Defining and naming the themes – naming the three themes
6. Producing the report – writing of the scoping review analysis

### 3.6.1 Overview of the literature

Table 2 provides an overview of the spread of articles in terms of time and country of origin. Table 3 provides a summary of the study types, organised in terms of the hierarchy of evidence (Ingham-Broofield, 2008).

The spread of literature indicates a gradual increase in the number of publications suggesting an increasing attention on the concept of frailty within the context of OT practice. In terms of the nature of the studies, it is notable that the early studies conducted in North America had a community practice basis in contrast to those from the same period in the UK which focused on OT practice in hospital. Overall, the amount of evidence generated from the UK is very small within only one paper identified from the past ten years. In contrast, the number of European studies has increased over the review period and they provide the largest proportion of studies over the last 5 years.

Country	Year 2000-2004	Year 2005-2010	Year 2011-2017	Frailty concept	Discharge	Home Community practice
USA	4	3	1	2	0	5
Canada	0	2	3	2	3	1
Australia	0	1	1	0	0	2
Europe	1	2	5	1	1	5
UK	2	0	2	0	3	1
Total	7	7	12	5	7	14

Table 2. Spread of literature from 2000-2017

Evidence Type	Number in Scoping Review
Systematic Reviews	1
Literature Reviews	3
Randomised Controlled Trials	6
Quantitative Studies	4
Qualitative Studies	4
Mixed Method Studies	4
Expert Opinion	4

Table 3 Evidence types and numbers identified in the scoping review

### **3.7 Findings of the review**

Appendix 1 presents two tables summarising the findings of the review. Table 1 is a methodological matrix detailing the each article by theme, type, study population, aim of the study, method and outcome measures if relevant. Table 2 in Appendix 1 is a thematic matrix with a summary of key findings from each article.

The three themes were identified from the literature are as follows:

- The OT understanding and perception of the concept of frailty
- OT assessments
- OT interventions

Each theme is presented in turn in the following sections.

#### **3.7.1 OT Understanding and Perception of the Concept of 'Frailty'**

This theme focuses on the OT workforce and explores how the concept of frailty has been examined and how it is understood from an OT perspective. Under this heading, the two sub themes of 'identifying the characteristics of frailty' and ' the importance of habituation and autonomy in understanding frailty' were identified.

##### **3.7.1.1 Identifying the characteristics of frailty**

A single empirical study (Roland, Theou, Jakobi, Swan and Jones 2011) explored how frailty is recognised by occupational therapists and the implications of this for their practice. Roland et al. (2011) conducted an

interview based qualitative study in a single study site in Canada which aimed to explore OT's perceptions on frailty and develop a definition of how they viewed and managed frailty in their practice. The study involved a sample of 11 community therapists (four OTs and seven Physical Therapists) all of whom were members of a single community care team providing an at-home service to frail older adults. Interviews followed a structured format, aligned to a repertory grid which covered the main risk factors contributing to frailty and the challenges associated with identifying this condition. The grid included a rating component that reflected participants' confidence in their ability to identify this aspect of frailty in their practice. A focus group, held three months later and involving all participants, was used to clarify and substantiate findings.

A particular strength of this study was its comprehensive approach which established a series of characteristics of frailty that extended beyond the biomedical to include a psychosocial component. The study findings were categorised into physical or psychosocial characteristics. Physical characteristics included falls, poor functional endurance and an inability to complete activities of daily living. Psychosocial characteristics included isolation, bereavement and impaired decision making.

The importance of recognising this broader perspective of frailty is reflected in two discussion pieces reviewing current evidence on frailty and its relevance to OT practice (Daniels, Van Rossum, De Witte and Van Den Heuvel, 2008) and Provencher, Demers and Gelinas, 2012). Daniels et al. (2008) outlined the multifactorial elements of frailty and the need to move from the bio-medical approach that currently dominates the field to one that is more holistic, including a range of perspectives aligned to a multidisciplinary approach. In relation to identification, he offers a critique of widely used diagnostic tools to identify frailty which he suggests could potentially miss important diagnostic factors and he makes a case for using more inclusive set of measures such as the Edmonton Frail Scale which includes a broader psychosocial component.

Provencher et al. (2012) focussed on the detection of frailty and highlighted the role that vulnerability plays in the development of a frail condition. In particular, the way that minor stressors, for example changes in the environment, may shift someone from a non-frail to a frail state because they are less able to

accommodate those changes. They suggest that an awareness of these minor stressors and the role they may play in development of frailty could assist therapists in identifying the condition at an early stage when targeted intervention are more likely to be effective.

### 3.7.1.2 The importance of habituation and autonomy in understanding frailty

Rowles (2000) conducted a mixed method, longitudinal study to understand how older people adapt to changing circumstances and the role that habitual patterns of behaviour play in enabling them to adjust to changing circumstances. The study used methods of participant observation, interviews, time-space activity diaries and aerial photography to track the behaviours of a group of 15 older people, 11 women and four men aged from 62 to 91 years over a three year period. Using this multi-perspectival longitudinal approach, the study was able to capture the gradual imperceptible environmental changes that occur over time and the homeostatic adjustments that older people made in their physical and social routines within their community spaces. These findings highlight that frailty conditions develop in the context of lives that are constantly in transition.

Horowitz (2002) reviewed the literature and presented two clinical case studies to illustrate the physical and emotional effort that is required to learn new routines and the amount of energy investment this requires from the older person to achieve meaningful gain. She went on to emphasise the therapeutic relationship that is required to influence collaborative decision making when learning new routines. This indicates the need for interventions that are tailored to individual habits and routines and introduce gradual, acceptable, environmental adjustments in order to achieve the highest possible level of well-being and independence.

### 3.7.2 OT Assessments

This theme focuses on the OT assessment of performance considering the effect of the environment and the dynamic considerations of where and how the assessment occurs. The specific issue of decision making for discharge from a clinical environment to home is addressed.

#### 3.7.2.1 Assessment of performance



The OT assessment process plays a fundamental role in informing discharge decisions. Assessing someone's capability to perform a range of everyday tasks, through a series of functional performance assessments enables the OT to anticipate or predict the levels of care and support required to enable someone to continue to live independently. The outcomes of those assessments informs decisions about what adaptive equipment or strategies are required that could improve independence and facilitate individuals to perform those tasks safely. Those assessments can take place in a number of ways. They may be performed in a clinical setting such as a ward setting or an OT departmental kitchen or they can be performed in the home environment, either within as part of a pre-discharge home or post-discharge.

In a study by Moats et al (2007), experienced OTs questioned the practice of conducting hospital based assessments in terms of what assessments are commonly used and the value of those assessments. From their experience, assessment primarily involved normal occupations rather than meaningful and enjoyable occupations for frail older people and those normal occupations could not be adequately replicated in the hospital environment.

Comparative data indicates that the environment in which daily tasks are performed affects the ability to undertake those tasks. Provencher, Demers and Gelinas (2009) reviewed the literature comparing the assessment of performance in functional tasks between a clinical and home environment across a range of older populations. The overall aim of their review was to explain the differences between settings in the performance of frail older people. The scope of the literature they included was extended to include comparative studies involving other populations of older people given the very limited number of studies specifically concerned with frail older people and the extent to which their findings are applicable to this review is therefore limited. Notwithstanding this, the information provided on six of the ten study populations suggests that at least a proportion of the participants in those studies would fit frailty criteria.

Overall, the majority of the studies they reviewed, and five of the six that involved a frail older population demonstrated that participants performed a range of tasks as well or better in the familiar home environment as compared

to the clinical setting. The tasks most dependent on the environment were meal preparation, house work and laundry. Where there was some reduction in cognitive and executive functioning, there was evidence to indicate diminished ability to adapt to an unfamiliar environment which resulted in reduced level of performance in that environment. However, in those assessed as having moderate or severe dementia, there was no statistical or clinically significant difference in the functional performance levels between settings, suggesting that the extent to which overall adaptive capability was compromised negated the beneficial effects of a familiar environment.

In a counterbalance design study, Provencher, Demers, Gelinias and Giroux (2012) compared functional performance levels of a cooking task in both home and clinic environments. Their study population of 33 frail older people aged over 65 years all met three out of the five Fried frailty criteria (Fried et al 2001) and were clinically assessed as having preserved cognitive function. They all performed the same cooking task twice; once in their home and once in an OT department kitchen, after a short period of familiarisation. Participants were randomised to determine the order in which tasks were completed. Performance was assessed using a standardised functional assessment tool and involved two independent assessors, blinded to the context in which the task had been completed.

Results indicated statistically significant higher motor ability and process ability performance in the home environment for one third of the participants. Clinical significance was judged in terms of a predetermined cut off score, taken as indicative of the person's ability to live independently. 24 % (n=8) obtained process 'Activity of Daily Living' scores that were above the cut off in the home and below the cut off in the clinic. These findings indicate the potential for over prescription of assistive devices or level of care and support when based on a clinic assessment alone.

Soderback, 2008 aimed to evaluate the outcomes of a hospital based OT assessment by measuring the effectiveness and acceptability of the OT interventions that were based on that assessment. From this small pilot study involving nine participants aged over 75 years, they reported adequate levels of user satisfaction with the OT interventions which included environmental

adaptations, improvement of housing accessibility, the prescription and suggestion of assistive devices. As the evaluation took place only two weeks post discharge, these short term findings provide no insights into whether there was an overprescribing or whether they provided long term benefit.

Wilson et al. (2011) examined the long term outcomes of OT interventions which were based on pre-discharge home visits for frail older people. They undertook a retrospective case note review on 15 frail older adults two years post discharge. This study involved a sub cohort of a larger study examining the perceived value of pre-discharge visits to a wider population of older adults and carers. The seven surviving study participants had all remained at home and none had been admitted to residential care. On the basis of these findings, the authors tentatively concluded that pre-discharge home visits enabled the older people in this study to stay at home. However there was limited evidence to suggest that the older people had adhered to the initial recommended assistive technologies and support services which raises questions about the value of that initial pre-discharge assessment.

A discussion paper by Mountain and Pighills (2002) questioned the value of the standard practice of pre-discharge home visits which involves transporting an older person from hospital to home for their assessment and then returning them to acute care, on the basis that there was a lack of evidence to indicate its effectiveness. In particular they highlighted the need for evidence to establish the effectiveness of pre-discharge home visits and their value to successful independent living in this population. Mountain and Pighills (2002) suggested that as the assessment was necessarily 'a moment in time', it could not adequately predict a frail older persons' capacity to cope at home and that the visits could be a cause of distress to the older person and their carers. They also highlighted that pre-discharge home visits were time consuming and a change in practice could release occupational therapy time for rehabilitation activities. Whilst the findings from the Wilson et al. (2011) study provide some evidence to support discharge assessments, the study design involved only examining the established practice of pre-discharge assessment. Therefore there was no means to compare the effectiveness of pre-discharge assessment in relation to other approaches.

Mountain and Pighills proposed a radical reconsideration of the discharge process and a reassessment of the timing and circumstances within which assessment take place. Their recommendations included developing intermediate care services as an opportunity for frail older people to receive assessments in their home with immediate support from community services or an intermediate care bedded unit.

#### 3.7.2.2. Decision making for discharge

The outcomes of the functional performance assessments are one component of a wider assessment that includes environmental considerations, family support structures and professional opinions about independence, autonomy and safety.

Moats (2007) explored the relationship between the models of decision making used by occupational therapists and the professional issues of enabling occupation and client centred practice. The sample of 10 experienced OTs reported a negotiated process of dispersed decision making. The process involved family members to a variable degree, dependent on the older person's levels of cognitive capacity. In that context, the OTs saw themselves very much as aligning themselves to a client centred approach in which they made recommendations rather than decisions. However the data suggested a much more complex and dynamic process in terms of how those recommendations translated into decisions. Professional and family anxieties played a major role in the process. Some occupational therapists adopted the role of advocate for their patient, aiming to achieve a balance between maintaining safety and the patient's autonomy. Other occupational therapists were unwilling to accept the level of perceived risk for 'their' patient and used intimidation, coercion and persuasion strategies to ensure their recommendations were implemented (Moats, 2007).

The safety concerns related to the deteriorating nature of the frailty condition present substantial challenges for OT practice and call into question the extent to which OTs respond to the patterns of habituation in everyday activities as reported by Rowles.(2000). These concerns were explored in a study by Atwal et al (2011) who examined perceptions of risk associated with discharge home with a group of hospital-based occupational therapists and physiotherapists.

Using a vignette approach, their findings indicated that professional perceptions of risk impacted on discharge decision making and location. Decision making within the multidisciplinary team offered one way of sharing the responsibility for risk. Similar findings were reported by Russell et al. (2002) who explored the concept of independence in relation to how OTs reconcile the competing concerns of independent living, safety and autonomous decision making when caring for frail older people. In their study involving 12 hospital and community based OTs, they used a critical incident technique to move beyond professionals' abstract ideals and examine the ways in which and the extent to which those ideals were operationalised in clinical practice. Their findings indicated a mismatch between the espoused professional ideals of enabling someone to retain independence and the reality of what they considered to be a clinical imperative of patient safety. Whilst the therapists' abstract accounts described their role in terms of 'enabling choice' to support independence, all their critical incidents were characterised by retention of professional control. They described situations in which the therapists had effectively ignored or overruled clients' wishes in order to fulfil their own anxieties about safety concerns and their professional duty of care.

### 3.7.2.3 Home based assessments

A single study compared the 'effectiveness' of OT led assessments with Social Work led assessments (Stewart et al. 2005) in a randomised trial involving 321 frail older people aged 65 and over living in their own homes and 113 carers. The primary measure was level of dependency and secondary measures were quality of life scores, psychological outlook and assessment of carer difficulty. Data was collected at baseline, four and eight months and included participants' functional level and their carer experiences. The study found no statistical significant differences for the primary outcome, however the OT arm had significantly better carer quality of life scores at the eight month follow-up which they attributed to greater use of community services. Significant delays in completing environmental adaptations were reported and considered to have impacted on the outcome data.

### 3.7.3 OT interventions

All the intervention studies were conducted in Home or Community settings reflecting the overall ambition to enable people to remain independent at home. The interventions fell under two broad categories: those with a specific focus on falls prevention and those aiming to improve functional abilities through a largely compensatory approach.

#### 3.7.3.1. Prevention of falls

There is some evidence to indicate the effectiveness of OT interventions in reducing fear of falling and fall rate. De Connick et al. (2017) conducted a systematic review and meta-analysis examining the evidence from nine studies with OT as a mono or multi-disciplinary intervention with home or community based frail older people. Fear of falling and number of falls were used as a secondary outcome measure. The five studies that contributed to that analysis reported multi-disciplinary interventions of which OT was one component. The findings showed positive trends towards reduced fear of falling although they did not reach statistical significance. Pooling of results for number of falls was not possible but two of the included studies showed reductions in the number of falls. The substantial variability between the studies in terms of the type of intervention made comparable reporting challenging and it is not possible to assess the OT specific contribution.

Gitlin et al (2006) reported positive findings from their randomised trial of a multi-component intervention to reduce fear of falling and improve functional performance. This study of 319 participants aged over 70 years who reported one or more difficulties with activities of daily living were randomly allocated to an intervention group (n=160) or control group (n=159). The interventions consisted of home modifications provision, falls recovery techniques, balance and muscle strength training, energy conservation and problem solving strategies delivered over a 12 month period. In the first six months, those in the intervention group received four 90 minute visits to the home during which they observed and problem-solved patient-identified barriers to performance, providing strategies and equipment to overcome these barriers and a 20 minute phone call to reinforce the intervention. A further three phone calls over the next six months were used to further reinforce the intervention. Fear of falls

was assessed using a validated falls efficacy scale. Results demonstrated a significant reduction in fear of falling in the intervention group at six and 12 months.

Nikolaus and Beck (2003) evaluated the effectiveness of an intervention to reduce falls in older people. In this randomised trial, those in the intervention group (n=181) received a comprehensive geriatric assessment (CGA) in hospital followed by diagnostic home visit from an OT and Physiotherapist or nurse after discharge. During the visit they assessed for home modifications and provided training in the use of mobility aids. The participants then received a follow up home visit after three months and again at 12 months to reinforce the intervention. The control group received a CGA in hospital followed by recommendations and normal care. The intervention reduced the incidence of falls by 31% with the greatest reductions in those with a history of two or more falls prior to the start of the trial. Compliance rates with the home modification equipment ranged from 82%-33% at 12 months suggesting reasonable levels of acceptability. Altering the home environment, for example removal of rugs and obstructions had lower levels of adherence.

Cumming et al. (2007) included an OT intervention in their randomised controlled trial which aimed to reduce falls and fractures in frail older people who had visual difficulties. The intervention primarily involved visual correction and the OT component was limited to those with greatest visual impairment (24/300) and involved a home visit and home modifications to improve visibility using contrast and light modifications and, if required, mobility training and the issue of a walking aid. Falls and fractures data was collected through self-reporting using a monthly postcard system over a 12 month period. Overall results demonstrated a significant increase in falls in the intervention group. However, this study provided no insight into the value of the OT component because there was no sub-analysis of the 24 participants who received the OT intervention.

### 3.7.3.2 Interventions to increase functional abilities and prevent decline

Ryburn, Wells and Foreman (2009) reviewed the grey literature and reviewed the evidence from three multi component programmes which included OT. The programmes were delivered in the UK, Australia and USA. The review



assessed the value of restorative interventions for improving functional status and quality of life. All three programmes produced some evidence of functional improvement and significant reductions in the need for ongoing services or reduced length of service. Single components of the programme including use of aids equipment and environmental modifications demonstrated important preventative outcomes.

A small pre and post intervention study by Fisher, Atler and Potts, (2007) involved eight frail older adults aged between 74 and 90 years experiencing difficulties with a range of daily activities to examine the effectiveness of an OT only intervention. The intervention phase involved four 45 minute OT sessions addressing a range of restorative, acquisitional, compensatory or combined approaches. They were informed by an initial structured assessment and negotiated in the context of a collaborative and individualised approach. The overall intention was to enable participants to use less effort to achieve activities and achieve rapid functional improvement. Whilst there was the option to use a wide range of different interventions, examination of records indicated that all the interventions applied were compensatory in nature and primarily included adaptive techniques and strategies and provision of adaptive equipment.

The results were obtained by comparing the differences in ADL motor and process abilities between the control and intervention phases. The results indicate limited effectiveness. Five of the eight participants showed clinically meaningful changes in motor abilities, with only one out of the eight showing any improvement in process abilities.

The Gitlin et al study (2006, 2008), previously reported, involved a prospective two group randomised trial of multicomponent interventions (OT and PT) to reduce functional difficulties in older people. This was an individualised programme with five out of the six interventions from an occupational therapist. The programme had standardised elements that were adapted to the needs of the individual so the older person could focus exclusively on the areas that were problematic to them. The results at both six and twelve months demonstrated statistically significant improvements in the intervention group across activities of daily living (ADL) with largest benefits occurring in bathing.



The mobility and transfer difficulty scores were also improved but not to a statistically significant level. Those who benefitted most from the intervention were those at highest risk of functional decline, who were females, individuals over 80 years and those who had been less well-educated. They also appeared to benefit most from the programme of OT and PT intervention (Giltin, Winter, Dennis and Hauck, 2008).

Findings from a study by Horowitz and Chang (2004) also support the importance of an individually adapted programme customised for a frail older person. They adapted an existing programme designed to promote well-being and engagement for older adults and delivered it as a 16 week lifestyle design programme within a day unit to 28 frail older people who were cognitively intact. The findings indicated no statistical differences between the experimental and control group on all outcome variables.

A systematic review (SR) and meta-analysis conducted by De Coninck et al. (2017) determined the effectiveness of OT to improve performance in daily living activities. Primary outcome measures which were based on the International Classification of Function (ICF) included mobility functioning in daily activities and social participation. The components of the OT programme had to be clearly evident.

The result of the SR indicated a large clinical diversity between studies either the intensity and duration of treatment programmes or the variety of outcome measures utilised. The combined study populations totalled 3,163 with ages ranging from 60 - 95 years. Seven of the nine studies included an OT component which was clearly evident and the other two involving OT and OT plus GP interventions. There was substantial heterogeneity between the studies in terms of interventions and outcome measures which reduced opportunities for meta-analysis and limited overall reporting. Common elements to the OT intervention included use of assistive technology, home based modification and provision of advice on aids and services. A meta-analysis of functioning in ADL produced a positive outcome with a pooled standardized mean difference of -0.30 indicating that OT contributes to improvement of functioning in ADL. Results also found improvements in social participation and mobility.

Daniels et al (2011) and Mezelthin et al (2012) report on the design, implementation and evaluation of a multi-factorial intervention involving a multi-disciplinary team. The overall aim of the intervention was to reduce and prevent disability within which the OT component focused on increasing capabilities in ADL, skill acquisition and environmental adaptation. Participants were identified as frail using a self-reporting measure and this assessment informed development of an agreed action plan with the older person and their carer.

The intervention was implemented across six GP practices involved seven practice nurses, six occupational therapists and 20 physiotherapists. Evaluation focused on user satisfaction with data sets from both service users and health care professionals. It indicated that older people were satisfied with this structured care approach and attention to individualised preventative treatment by the range of health care professionals. However there is no indication of effectiveness given that no outcome data was collected.

Two studies (Wilson et al, 2011 and De Almeida Mello et al. 2016) considered whether functional OT interventions, either as a single component or part of a multi-component intervention are effective in delaying institutionalisation. A substantial longitudinal study using a quasi-experimental design by compared different home care projects and assessed the effectiveness of single and multi-component Interventions (De Almeida Mello et al. 2012, De Almeida Mello et al. 2016). The participants were frail older people, over 65 years who were at risk of institutionalisation. The intervention was a single component of OT, PT, psychology, night care and day care or a combination of each.

This study compared a group who received home care interventions with a group that did not receive any. Frailty was assessed using the Belgium version of the Edmonton Frailty Scale (Rockwood et al., 2015) and within the intervention group two strata of older people with mild and more moderate/severe impairment were identified. A case management process identified when a single intervention was required (OT one option) or a multi-component intervention of which OT was a component. The OT intervention focussed on improving performance and function, with adaptations and provision of assistive devices alongside reduction in care-giver burden. Results

at six 6 months indicated the OT intervention was effective when it was delivered alone and when it was part of a multi-component programme.

### **3.8 Summary of findings**

There is clear evidence from this review that OTs perceive frailty as a multi-factorial condition that extends beyond a biomedical perspective to incorporate both physical and psychosocial components. This multi-component view of frailty recognised the range of minor stressors that increased an older persons' vulnerability and the work of Daniels et al. (2008) and Provencher et al (2012) in particular indicate the importance of identifying those stressors as potential indicators of a frailty condition. The importance of routine behaviours was also apparent, both in terms of the ways that behaviours are adapted through the process of habituation and in recognising the amount of physical and emotional effort that is required to adapt to changes or to learn new routines.

The literature indicated that OT assessments are understood in relation to discharge from hospital and as being almost exclusively conducted by a hospital based workforce. The bulk of the evidence is concerned with the question of where and how those assessments are best conducted. That evidence indicates the value of conducting an assessment in a familiar home environment because functional performance is reduced in an unfamiliar clinical environment. Consequently, judgements made on the basis of a clinically setting assessment alone may result in over prescription of support and equipment.

It is important to note that most of the assessment evidence is only concerned with the immediate post discharge period and questions arise about the medium to long term effectiveness of the decisions made on the basis of those assessments. Findings from the study by Wilson et al. (2011) indicated that most home adaptations made on the basis of discharge assessments had been abandoned after two years. Whilst a multitude of reasons may account for these findings, they indicate the need for prospective longitudinal studies to assess the effectiveness of assessments. The literature also exposed an underlying anxiety about the risk and safety issues related to discharge decision making. Whilst occupational therapists aspire to have a collaborative,

client centred approach, the reality is that discharge is a complex process where patient autonomy and choice can be compromised by professional behaviours and judgements made from their assessments.

The intervention studies included in the review were all home or community based. This indicates a significant evidence gap in relation to the role of hospital based OTs. The evidence related to their role was only related to discharge assessment processes which raises questions about what other roles they have in relation to caring for frail older people.

The majority of community interventions are multi-component and are delivered by a multi-disciplinary team reflecting the reality of community practice. There is good evidence to indicate that community based interventions that involve an OT component, are effective in improving functional independence which was maintained for up to one year. This reduced the level of home care services required and the risk of institutionalisation. However it is difficult to establish the effectiveness of the OT specific component within these multi-component interventions and establish what OT interventions are most effective at which stage of frailty because of considerable variability of the populations between studies. However, programmes where the frequency and intensity of interventions were higher appeared to deliver longer term benefit and increased adherence to OT recommendations.

Overall, this review identifies where gaps in our understanding of where and how OTs can best contribute to the care of frail older people. Although OTs routinely work with frail older people in a range of care settings, no studies have examined that role across settings and systematically examined contextual factors that influence and inform that role.

### **3.9 Chapter summary**

This chapter presented the scoping review that underpinned and informed development of the research project. It reports the systematic processes used to identify a body of literature was systematically identified and the analytic processes used. A critique of the literature under the three themes of OT professional perceptions, OT assessments and OT interventions offered

insights into the spread of evidence and the relative strengths of that evidence. The following chapter begins to detail the project developed in response to the identified gap in knowledge identified through this review.

## **Chapter 4 - Study Rationale, Question, Aim and Objectives**

### **4.1 Introduction**

This chapter provides an overview of the research project. In the first section, I explain the rationale for the project. I respond to the gaps in knowledge identified as a result of the scoping review presented in chapter three. The rationale section also situates the study in the context of key policy and practice drivers that were discussed in chapter two, and the contribution of OTs to that health and social care agenda. This is followed by the research question and the aims and objectives of the study.

### **4.2 Rationale for the Study**

There are substantial challenges associated with ensuring that frail older people receive the support and care that they require from an integrated health and social care system within the current socio-political and demographic context. However, responding to those challenges in order to provide effective care will be essential to enable older people to remain active and healthy within their communities, maintain everyday meaningful occupations, and avoid admission to acute or long-term institutionalised care.

The scoping review indicated the need for an increased level of research to specifically evidence the role of the OT in caring for frail older people and the complex interventions that are part of that role. The evidence relating to hospital based care is particularly lacking and confined almost exclusively to the OT role in relation to discharge from the acute environment.

There is a very limited body of evidence exploring the understanding and perception of the concept of frailty in OT practice. In particular there is no research that has specifically considered the role of the OT role in relation to managing frailty as a long-term condition.

The review identified a larger body of literature relating to community based OT practice. Within this there was a small amount of evidence to indicate the value of OT specific interventions such as provision of equipment, reducing risk of falls and strategies for improved levels of occupation. Additionally, within the

context of a multidisciplinary care approach, the OT contribution was often unclear and the indications from those studies is that the role was largely confined to delivering interventions rather than contributing to the identification and diagnosis of frailty.

There is an enormous demand on health and care services that can enable frail older people to maintain their independence at home, avoid reactive acute care and avoid admission to long term care (The Kings Fund, 2014). It is important to clarify the role of OTs in this care context to enable resource planning, review how services are provided and ensure a skilled workforce. This demand, in conjunction with the lack of empirical OT evidence, indicates a gap in knowledge that could address rising demand in relation to meeting the needs of frail older people (RCOT, 2017).

Integrating hospital and community services to improve population health and avoid admission to acute care is at the heart of integrated health and social care organisations. Delivering the Integrated and Accountable Care System (ACS) both at a local and regional basis is the strategic intent for health and social care provision (NHS England, 2016). The trust where this study was situated was one of the first in the country to respond to this national agenda with the formation of sustainability and transformation plans. It became one of the first integrated care systems in England.

The 5 Year Forward review emphasised the importance of the integrated health and social care agenda in relation to the population health and wellbeing of frail older people. The need to ensure the most efficient and effective use of skills across the health and social care sector (NHS England, 2014) was further supported by the Allied Health Professions into Action (2017) document which promoted the efficient and effective use of Allied Health Profession (AHP) skills, working across historical service boundaries to contribute to a reduction in duplication and fragmentation of care.

### **4.3 The Research Question**

Further evidence is required to understand the potential role of OTs in both hospital and community contexts when older people become frail. This study will respond to identified gaps in knowledge around the role of OT to the early

identification and definition of frailty, the limited evidence on how the condition of frailty affects daily occupations, and the contribution of OT interventions in supporting frail older people.

The research question for this study is:

“What is the role of OTs working within a single integrated trust in caring for frail older people?”

#### **4.4 The Aim and Objectives of the Study**

The overarching study aim in order to answer the research question was to:

*Examine the role of Occupational Therapists working within the setting of an integrated trust by exploring how, when and where they currently practice with frail older people.*

The specific objectives in order to reach the aim were to:

1. Explore key stakeholders' views and opinions on the role of the OT in caring for older people who become frail.
2. Conduct a series of case studies, across three primary, intermediate and secondary care settings, to examine the role of OTs in the care of older people who become frail.
3. Produce practice based recommendations for future OT practice with frail older people.

The methodology and method in order to achieve these aims outlined in Chapters 5 and 6.



## **Chapter 5 - Methodology**

*“Ultimately the interpretations of the researcher are likely to be emphasised more than interpretations of those people studied but the qualitative researcher tries to preserve the multiple realities and the different and even contradictory views of what is happening” (Stake, 1995)*

### **5.1 Introduction**

The justification of a qualitative approach in order to achieve the aim and objectives of this research study is now made. The philosophical considerations of the ontological, epistemological and methodological questions that justify this approach are outlined within this chapter. The selection and utilisation of case studies as a relevant qualitative research strategy is then outlined.

Bryman (2001) suggests that there is a clear distinction between quantitative and qualitative research and identifies a series of features that characterise and contrast the two approaches. These include the use of numbers versus words, a structured versus unstructured approach, macro versus micro, and a focus on behaviour versus a focus on meaning. By contrast, Crotty (1998) challenges what he describes as ‘the great divide’ between quantitative and qualitative research. He suggests that the distinction between objectivist research associated with quantitative methods and constructionist or subjective methods is not always distinct.

Traditional philosophical differences between quantitative and qualitative methods were scrutinised by Paley and Lilford (2011). They propose that the alternate methods are tools for different tasks, words being suited to the creation of models and numbers being resources for measurement. The ultimate test of a research study is not to confirm pre-conceptions but to assess how the evidence confirms or disconfirms a theory (Paley and Lilford, 2011). The ultimate approach should be synonymous with achieving the research aim and provide consistency between the methodological approach and methods that are adopted. Qualitative research aims to achieve an understanding of the subject matter by deploying a potential range of interconnected and interpretative practices (Denzin and Lincoln., 2003). The researcher becomes a

'bricoleur', piecing together meaning from a set of representations of a complex situation (Denzin and Lincoln, 2003).

The creation and interpretation of 'meaning' is determined by either an objectivist or constructionist approach (Crotty, 1998). Objectivism holds that there is truth and meaning that resides in an object and the methods of enquiry bring an accurate and certain knowledge of that truth. This positivist stance is in contrast with constructionism, in which all knowledge and therefore all meaningful reality is contingent on human practices and their interactions, developed within a social context (Crotty, 1998).

Allied to constructionism, qualitative research attempts to capture an aspect of this social or psychological world. Qualitative researchers record the messiness of real life, put an organising framework around it and interpret it in some way (Braun and Clarke, 2013). Qualitative research does not aim for generalisation and acknowledges that the 'same' accounts will not always be generated every time by any researcher (Braun and Clarke, 2013). This central role of the researcher is acknowledged in the construction of any knowledge generated and the product is a joint construction between the participants, the researcher and the reader (Finlay and Ballinger, 2006).

The conditions for a qualitative researcher to construct this joint knowledge are described by Guba and Lincoln (1989). The first requirement is that the study be pursued in a natural setting, if multiple realities are assumed then they are dependent on the time and context that the inquirer is seeking to understand. Guba and Lincoln (1989) describe that the context gives life to and is given life by the constructions that are held by the people within them. Within this natural setting the researcher has some tacit knowledge of the context but still faces the prospect of new knowledge hence the exploratory nature of this approach with people being the 'human instruments' of the inquiry. By exploring practice in a natural setting, contextual understanding is gained. One of the outcomes of this can be emergent theory (Bryman, 2001).

Finlay and Ballinger (2006) describe qualitative research as having an open approach of exploration of a research area rather than necessarily having a hypothesis to test. It aims to investigate and understand the social world rather than predict, explain or control behaviour. This inductive, exploratory approach

attempts to make sense of the world by studying people in their natural settings. Qualitative research focuses on their views, perspectives and experiences and recognises the importance of the context in which these occur and allows for continual discovery and future collaboration between researcher and participants (Curtin and Fossey, 2007). This methodological approach aligns with the context- and practice-oriented aim of this study.

## **5.2 Philosophical Approach to the Study**

The research approach and methodology is underpinned by philosophical and theoretical ideas that act as a conduit to allow the flow between the research question, the research methodology, data generation and the ultimate analysis and interpretation. The ontological, epistemological and methodological perspectives of this study will now be considered. Research is inevitably underpinned by ideas, beliefs and assumptions. This intertwines methodologies with philosophical approaches to research. However, Crotty (1998) advise that when answering a research question, a consistent philosophical approach is required, for example to be consistently objectivist or consistently constructionist.

### **5.2.1 The ontological question**

Ontology is the study of being, understanding the 'what is' or the nature of reality. Ontology questions what exists, and the relationship between the nature of the world and our understanding and interpretations of it. Gray (2004) describes two ontological positions of 'becoming' and 'being', with 'being' forming a reality composed of clearly formed entities with identifiable properties. Similarly, Bryman (2001) describes two positions when considering social ontology. One is the idea that social entities can and should be considered as objective of social actors (objectivism), the other considers social entities as constructed, built on the perceptions and actions of social actors (constructionism).

Braun and Clarke (2013) suggest that there is an ontological continuum from relativism, where reality is dependent on the way we have constructed it (constructionism), to realism, where a pre-social reality exists that then can be accessed through research (positivist). As knowledge can be viewed as socially

influenced, then potentially only a partial reality can be accessed at any one time. An ontological position where reality is constructed is an ongoing and fluid perspective where a study will reflect the experience and knowledge as constructed by the participant and the researcher at that particular point in time. Guba and Lincoln (1989) described this joint construction with the participant as the instrument within the natural setting of the study.

Objectivism is an ontological position asserting that social phenomena and their meanings are independent from the social actors (Bryman, 2001). Crotty (1998) describes objectivism as the view that things exist as meaningful entities, independent of consciousness and experience. They have truth and meaning residing in them as objects and objectivist research attempts to attain an objective truth.

In contrast, constructionism asserts that social phenomena and their meanings are continually being accomplished by social actors and in a continual state of revision (Bryman, 2001). Meaning is not discovered but constructed. Meaning emerges only when people engage with the world and interpret what is going on around them. This ontological position aligns with the exploration of experience in context. As such, it is appropriate to the aim and objectives of this study, which explores a range of individual realities to construct an understanding of OT practice with frail older people.

The construction and interpretation of individual reality is predicated upon the view that a strategy is required that respects and values the differences between people (Bryman, 2001). This interpretative exploration of practitioner experiences was required in this research study. The meshing of knowledge and reality in a constructionist and interpretative approach accepts that there is no ultimate objective reality (Barbour, 2014). This is in contrast to positivism where replication seeks to establish universal laws that can be further tested by scientific methods.

As an interpretivist researcher looking to 'construct' meaning from the study with the participants, I situate myself within the relativist section of the continuum (Braun and Clarke, 2013). There was a need to be cognisant of the potential common theoretical and epistemological bases between myself and the OT participants while remaining aware that each Occupational Therapist

had a set of 'realities' different from my own. Constructionism accepts that there are multiple and subjective realities that can only be studied holistically and that the known and knower are inseparable (Paley and Lilford, 2011). While constructivism identifies the ontological position relating to how this qualitative research is approached, further explanation is needed to define the interpretive framework that allows meaning to be constructed from qualitative data. This pertains to knowledge and understanding. As such, it is epistemological.

### 5.2.2 The epistemological question

Epistemology is a way of understanding and explaining how we know our reality. It deals with the nature of knowledge, its possibility and its scope (Crotty, 1998). Epistemology describes our understanding of what is entailed in knowing and how we know what we know. The research question for this study frames the kind of knowledge that can be generated by the study, and constitutes the underlying epistemological question of this study.

Epistemological stances in qualitative research identify what counts as valid or accepted knowledge, as well as how knowledge can be attained and produced (Braun and Clarke, 2013). Finlay and Ballinger (2006) describe the differences between a positivist epistemological and an interpretivist epistemological stance. A positivist epistemology argues that objective knowledge is gained through the researcher setting out to record behaviour, discover patterns and collect data that is assumed to lead to objective truths which explain the world. An interpretivist epistemology draws attention to how our perceptions and experiences are socially, culturally and historically produced. This produces potential differences between researchers, but provides the researcher with an understanding about the object of their study and also their own pre-understanding, expectations and cultural traditions. Qualitative research and a constructionist ontological position are therefore aligned with an interpretivist epistemological approach, and are adopted in this research study.

The relationship between the researcher and the participants forms part of the socially constructed and interpretivist epistemology. The researcher is a central figure that is inevitably implicated in the research process, since the behaviour of the researcher and their previous relationship impacts on participants'

responses (Finlay and Ballinger, 2006). This joint researcher-participant production within a cultural setting influences the outcomes of the research process. Finlay and Ballinger (2006) suggest that in order to be systematic in the interpretation of this co-production of knowledge, reflexivity was important for the researcher to consider the different and potentially contrasting realities of the participant and the researcher.

The theoretical basis of OT is frequently concerned with defining and categorising the issue of occupation and occupational engagement (Fish and Boniface, 2012). However, this foundational knowledge is not always 'overtly used or articulated' by all practitioners (Fish and Boniface, 2012). This could be because of internal personal factors or external factors such as the profession or the organisation in which the Occupational Therapist works. Potential differences between practitioners was particularly relevant to explore in this study because it ranges across different hospital and community contexts within an integrated care trust.

My experience as an Occupational Therapist over the last 30 years has informed and influenced my interpretation in this study, as a result of both the roles I have had and my cultural and social background. My position as the Head of OT may have affected the dynamics and responses of participants. Cognisant of this, I adopted methods to engage and observe the participants within their natural setting. This facilitated my attempt to understand the reality of the study participants and interpret their perspectives within their specific context.

### 5.2.3 The methodological framework

Finlay and Bollinger (2006) describe methodology as the overarching approach to the research encompassing both the philosophy and methods. A range of qualitative methodologies were considered for this research study. Barbour (2014) describes the fact that individual researchers are exposed to a myriad of methodologies and philosophical approaches and there may be more than one potential or relevant tradition. Creswell (2013) describes the five approaches to qualitative enquiry as narrative research, phenomenology, grounded theory, ethnography and case study. I considered each in turn to determine the most appropriate for my study.

Narrative research focuses on an individual or small number of participants to collect stories about their lived experiences. It has been used extensively in research into medical illness, the study of traumatic events, in education and in the life of organisations (Gray, 2004). There may be a strong collaborative element between researcher and participant as the story emerges. The stories may shed light on individual experiences or the identities of individuals and how they see themselves. This method can also form the basis of policy by combining both the inner and outer worlds of historically evolving people within a developing society (Wengraf and Chamberlayne, 2006). The types of narrative can be biographical, auto-ethnographical, a life history or an oral history. Oral history is recognised as a key tool for anyone recording the history of the recent past and has been utilised for recording the experiences and past life of older people (Adams, 2016 and Andrews, Kearns, Kontos and Wilson, 2006). Narrative research from a number of OTs within one organisation was not considered as a methodological approach to best answer the exploratory research question of this study. If I had specifically wanted to research the lived experience of an Occupational Therapist working in the organisation to date this may have been a relevant approach.

Phenomenological studies explore a meaning common to several individuals, or their lived experiences of a common concept or phenomenon. Creswell (2013) states that the focus of phenomenological studies is to describe and understand the essence of a particular experience. The purpose of phenomenology is also to find insights that apply more generally beyond the cases studied in order to emphasise commonalities between participants and wider populations. In this study, the focus is not to draw upon and understand a common experience. If I was interested in frailty as experienced by an older person this may have been a suitable methodological approach to consider.

A grounded theory approach develops an emerging theory grounded in data from the field. The theory comes from the views of participants (Creswell, 2013). A process, an action or an interaction involving many individuals in the study is studied primarily using interviews from which a theory is generated. The objective of this study was not principally to generate a specific theory and the likely number of interviews required would have been prohibitive in this research study given the resources and time available.



Ethnography is an approach that describes and interprets the shared patterns of culture in a group (Creswell, 2013). It can involve interpretation and critical analysis on behalf of the researcher and can be utilised where the researcher has privileged access in a setting. It seeks to uncover meanings and perceptions on the part of people participating in the research (Crotty, 1998). This is viewed within the culture of the participants, with the researcher striving to see things from the participants' perspective. The researcher may need to immerse themselves within a social setting for an extended period of time (Bryman, 2001). This research study was a comparative study across several settings in order to obtain a collective view and analyse current practice with older people who have become frail. I had 'privileged access'. However, the emphasis of this research was not to study cultural patterns within the organisation. Therefore, ethnography was not considered the best methodological approach.

The fifth type of qualitative enquiry described by Creswell (2013) is case study methodology. The focus of this methodology is to develop an in-depth understanding of a case or cases that use multiple sources of data. In turn, data can be compared through cross-case analysis. Case study research requires intensive analysis and descriptions of a single unit or system bounded by space and time (Hancock and Algozzine, 2017). Individuals, events or groups can be examined by case studies through which the researcher hopes to gain an in-depth understanding and knowledge of the situation and meaning for those involved (Yin, 2009). This quest for understanding by the researcher may be for commonality or uniqueness (Stake, 1995). Case studies enable a detailed description of an individual's practice within a specific setting in order to gain an in-depth understanding of that case. Baxter and Jack (2015) describe qualitative case study methodology as a research tool which allows researchers to study complex phenomena within the context in which they are situated. Case studies use a variety of data sources. Collectively, these support the deconstruction and the subsequent reconstruction of various phenomena aligned with the purposes of the research.

I selected case study methodology as the most appropriate for my study because the context was a critical aspect of the research. My decision was also informed by the observations of Salminen, Harra and Lautamo (2006). They



highlight the limited extent to which case study methodology had been used for OT research and identify the potential benefits offered by an approach that is characterised by multidimensionality. This multidimensionality is able to acknowledge and respect the basic principles and holistic nature of Occupational Therapy.

Stake (1995) and Yin (2009) are the principle proponents of case study research. There are marked differences in how they conceptualise their approaches. This is apparent in the different terminology they use and the processes they describe. Understanding those differences was a crucial next step in determining the most appropriate approach for my study.

### **5.3 Case Study Research**

#### **5.3.1 Defining a case study methodology**

Baxter and Jack (2015) state that qualitative case study design is an approach to research that facilitates the exploration of phenomena within their context. Using a variety of data sources, issues are explored from different perspectives. This allows multiple aspects to be examined in detail and collectively contribute to the development of a complex, nuanced and multi-faceted understanding of the issue of concern.

Stake (1995) describes the special interest of studying a case because of itself. He identifies case study as the study of the particular. The complexity of a single case lends itself to deep understanding, with the researcher coming to understand activity in a case within specific circumstances. A single case can be studied for its uniqueness or commonality; it is a specific functioning unit within a particular system that Stake (1995) refers to as a “bounded system”. The objective of studying a case is to learn a great deal about activity within a bounded system in order to develop an increased understanding or assertion. Stake (1995) describes that, in understanding the uniqueness of a single case or a small number of cases, the particularisation and resultant assertions can inform further generalisations. Utilisation of several cases can increase the amount that a researcher learns, with coordination of these several cases forming a collective case study design (Stake, 1995).

Yin (2009) adopts a broadly positivist position in relation to case study with a starting point that requires the prior development of theoretical propositions in order to guide future data collection and analysis. He describes a case study as an empirical enquiry that investigates a contemporary phenomenon within a real-life context. This can be especially useful when the boundaries between phenomenon and context are not clearly evident. He proposed that case study methods are particularly helpful when the researcher wishes to understand a real-life phenomenon in depth where contextual conditions are highly relevant to the study. Case study enquiry deals with a technically distinctive situation in which there is more variation of interest than data points and the use of multiple sources of evidence produces data that is used in a convergent or triangulating way to test, modify or further develop that theory. He describes this process as analytic generalisation (Yin, 2009).

### 5.3.2 Types of case study design

Determining the type of case study design is an important process to achieve the clarity needed to meet the objectives of the study, to determine the methodological choices and identify the processes to be followed (Thomas, 2011). Yin (2009) indicates five components of case study design. These are: identification of the study question, clarity about the study propositions, identification of the unit of analysis (the case), examination of how the analytical data links to propositions and finally the criteria for interpreting the findings. These five steps include the construction of preliminary theory, prior to data collection. For Yin, theory development is an essential part of case study design.

Stake categorises three types of case study design: intrinsic, instrumental and collective (Stake, 1995). An intrinsic case study is interesting for the specific and particular characteristics of that case. In contrast, an instrumental case study is used in order to understand something else from that case. A collective case study design is a series or number of instrumental case studies which is concerned to represent multiple perspectives. In collective studies, balance and variety are important to provide an increased opportunity for learning from comparative analysis between the cases. Each case is instrumental to learning

but coordination is required between the cases in the analysis stage (Stake, 1995).

Fisher and Ziviani (2004) categorise case studies in terms of their overall purpose which they identified as descriptive, exploratory or explanatory. Descriptive and exploratory case studies are designed to investigate complex phenomena where there is a lack of literature, and where exploratory research may be a useful precursor to future research by defining questions for further studies (Gangeness, 2006). Explanatory case studies provide further testing of an existing theoretical.

### 5.3.3 Determining my approach

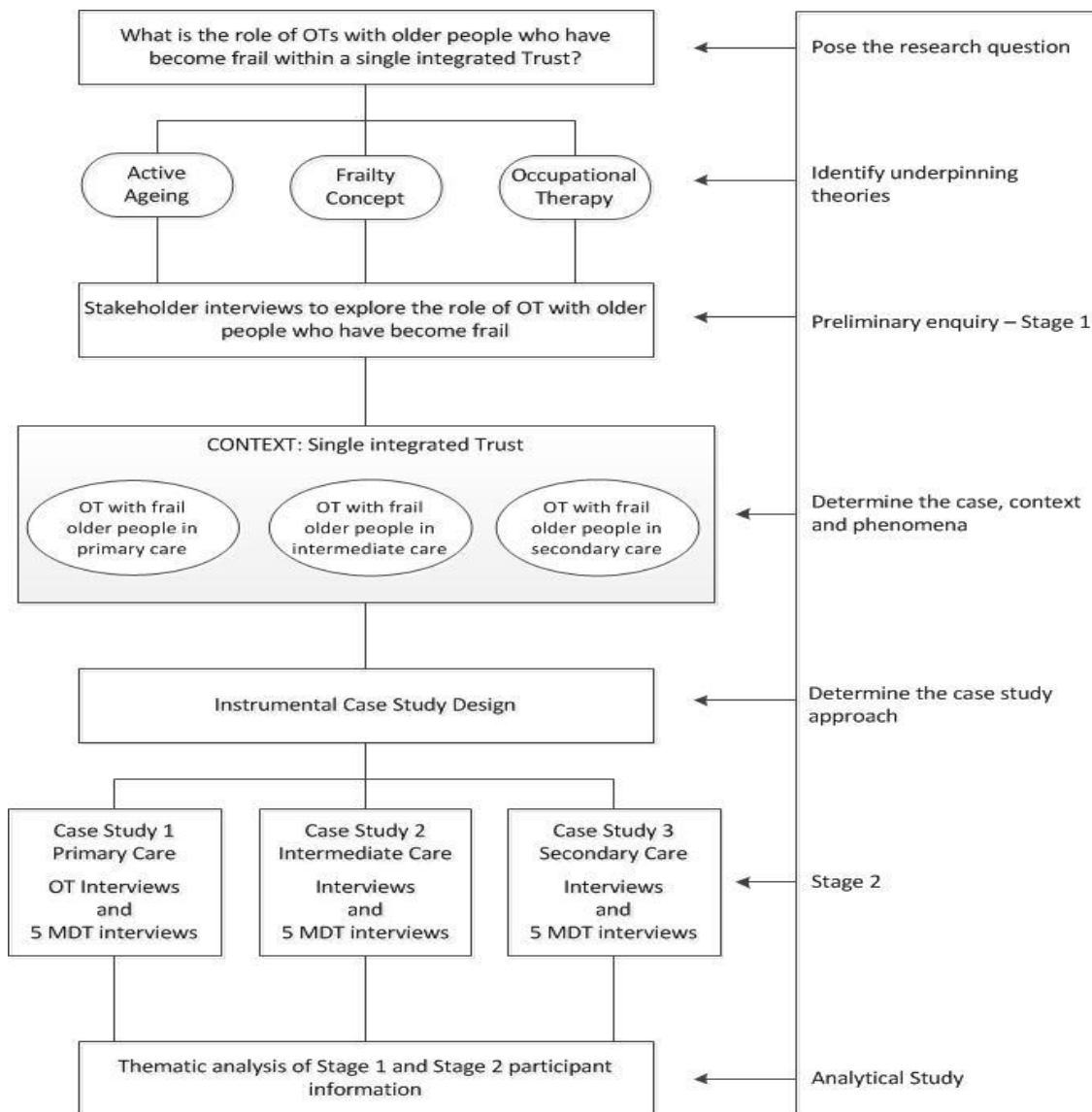
The aim of my research was to examine the role of the Occupational Therapist within the environment in which they practice. Through this, my aim was to explore the particularity and complexity of OT practice in both hospital and community contexts. The explanatory case study approach and design propounded by Yin (2009) was not deemed appropriate for my study as I was not setting out to test or develop a defined theory in relation to OT practice with frail older people. I determined Stake's (1995) standpoint to be more appropriate for this study. In line with this, I explored multiple realities of practice through several instrumental cases. This study held a constructionist position, with theoretical assertions emerging through the ongoing interpretation of case studies in relation to one another.

This study generated and analysed three OT case studies to examine OT practice in three different health care settings. These studies were designed to understand OT practice with frail older people. Individually, each case was the instrument through which to examine the individuality and particularity of OT practice within a specified context. My overall approach aligned with Stake's collective case approach, in which the conduct of multiple or collective cases, conducted in a sequential manner, are used to capture a moment in time in order to enable analysis and interpretation across the cases.

Rosenberg and Yates (2007) suggest the use of a schematic representation to illustrate the key concepts and procedural steps in case study design. The schematic representation helps to achieve procedural clarity and

methodological integrity in case study research. The stages for this study are outlined in Figure 2 below. This provides a visual illustration of the research design, allowing for iterative flexibility during the conduct of the study (Rosenberg and Yates, 2007).

Figure 2: Study Design Schematic



### 5.3.4 Defining the case

Miles et al. (2014) allude to the important, but sometimes difficult question of defining the case for case study research. A case can be defined as a phenomenon of some sort occurring within a bounded context. The case is a unit of analysis and a single research study may involve a single case or

several. Miles, Huberman and Sadana (2014) describe the case as the heart of the study. The selection of the case is to maximise the learning that can lead to assertions or potential generalisation (Stake 1995). Stake (1995) describes a case as a unique, specific, complex and functioning unit of study. Baxter and Jack (2015) suggest that in order for the researcher to determine the case, they have to decide whether it is an individual, a programme or a process that is the focus of analysis. In my study I defined the unit of analysis as the OT within their context of practice. The OT practitioner is my case.

The boundary of a case can be indeterminate but requires definition. In order to 'bind' the case, Yin (2009) and Stake (1995) suggest the parameters or boundaries are made explicit, in order to maintain the relevance to the research question, retain specificity and ensure that the researcher is not overwhelmed with data. Binding the case helps to ensure that it stays in scope (Baxter and Jack, 2015). I determined the boundary of the case as the local team in which the OT practiced. This team was made up of different disciplines or professions who, in turn, have a range of perspectives on the practice of OT with frail older people within that team. The multiple perspectives described by Stake (1995) were derived from the Occupational Therapist and the immediate team members who observe their OT practice.

#### 5.3.5 Determining and selecting the cases

Instrumental case studies aim to provide insight into the case in order to develop understanding into a specific issue. In this study, I generated an increased understanding of current practice by exploring the practice of OTs with frail older people and how it is influenced by individual experiences and the contexts in which they work. This in-depth scrutiny enabled an insight into the 'ordinary activities' of each case, and their collective 'multiple realities'. The integrated trust provided a range of contexts in which OT practice could be explored across primary, intermediate and secondary care services. OT interventions are provided in hospital, community and home environments.

The number of cases selected would determine the number of individual contexts that could be explored. The number of cases selected should give confidence in the analytic findings (Miles and Huberman, 2014). However, study size can also depend on the complexity of individual cases. If there is a

high level of complexity then the number of cases needs to reflect this due to the amount of information potentially generated. An assessment of practical and intellectual capacity in selecting the number of cases is therefore recommended (Miles and Huberman, 2014). The objective of my study was to explore OT practice in an integrated trust through an in-depth analysis. There needed to be enough cases to reflect a range of contexts, but the number of cases also needed to be attainable and realistic.

Case study research can be one of the most challenging of all social science endeavours (Yin, 2009). The amount of data that is generated can be overwhelming. Within this study, the number of instrumental case studies realistically allowed those different contexts to be explored in depth. These contexts were selected to reflect three care contexts: acute (hospital, ward based), an intermediate service context (community admission avoidance or immediate post discharge from hospital) and a primary care context (community care). This range of contexts within the single trust was anticipated to illustrate the particularity and uniqueness of each instrumental case study across both hospital and community contexts.

Stake (1995) suggests that case study research is not the same as sampling research. In case study research, the first obligation is to understand that case. He acknowledged that some cases may provide more insight than others. However, good instrumental research does not depend on being able to defend the typicality of a case. In collective case studies, selection by sampling of attributes is not necessarily the highest priority. Balance and variety are of equal importance when selecting cases.

#### 5.3.6 Determining sources of data for the case studies

Case study evidence can come from multiple sources of data that contribute to answering the research question. Yin (2009) and Stake (1995) both describe a range of potential sources of evidence, such as documentation review, observation and interviews. The authors adopt different positions on the issue of where information should come from to support cases. Yin recommends gathering data from a wide range of sources such as archival records and physical artefacts, in addition to observations and interviews, in order to confirm or develop the initial and provisional theoretical stance. In contrast, Stake

proposes interviews as the main source of data because they can portray the multiple realities of the case study participants, all of whom have unique experiences and a special story to tell. Interviews also provide an opportunity to explore not only what is said but also what is meant by the participant (Stake 1995).

Interviewing as a data-collection technique has been variously described and codified. Yin (2009) describes interviews as in-depth or focussed. Braun and Clarke (2013) describe interviews as structured, semi-structured or unstructured. Barbour (2014) describes interviews as both an art and science, encompassing a continuum of approaches from realist to constructionist. The interview style for a study needs to align with the epistemological basis of that study. The semi-structured interview is part way along that continuum, with the interview having a focus of investigation but incorporating an element of co-construction between the participant and the interviewer (Kvale and Brinkmann, 2009). Because of this, semi-structured interviews are well suited to experience-type research questions where a constructionist approach is taken (Braun and Clarke, 2013).

I considered a range of possible data sources in relation to my case studies. These included participant observation and review of documentation. I rejected these because my clinical role and the positional power associated with it made this unfeasible. I also considered collecting some quantitative data as part of the case study, for example information related to clinical outcomes. I rejected this because there was no consistent use of outcome measures used across settings and I did not feel the information that is gathered for this purpose would have contributed to answering the research question. My overall decision for data collection was to conduct individual semi-structured interviews with all case study participants.

### 5.3.7 Ensuring quality of case study methodology

There are many perspectives about the set of definitive quality measures in qualitative research that ensure rigour in the research processes (Creswell, 2013). Concepts such as 'triangulation', 'participant validation' and 'reflexivity' contribute to rigour and evaluation. However, they can also be utilised to persuade the reader of the credibility of the work (Finlay and Ballinger, 2006).



Lincoln and Guba (1985) suggest methods for checking that the criteria for rigour are followed. Credibility being demonstrated by prolonged involvement, persistent observation, triangulation, peer debriefing, negative case analysis and member checks.

Quality measures are important to consider because they establish the importance and relevance of the study in terms of generalisability and transferability. A model of generalisation advocated by Polit and Beck (2010) is applicable to this study. If the analysis and interpretation of a study is considered rigorous and credible then the reader may consider that the findings reflect a sufficient depth to warrant a degree of generalisability in relation to a 'field of understanding'. The emphasis is on the inquirer to 'prove' any claimed generalisation (Lincoln and Guba, 1989). Transferability can be considered as parallel to external validity, with the burden of proof for any claimed transferability being on the receiver (Lincoln and Guba, 1989). The reader evaluates the extent to which the findings apply to other situations (Polit and Beck, 2010). The design of this study considers the practice of three OTs who work in different settings but within the same organisation. The claim of generalisation or transferability of the findings requires transparency in the methods used and analysis undertaken within the study context. A reader may recognise similar conditions and phenomena identified. However, they need to carefully consider applicability to their context and comparison to the 'thick description' given in this research study.

Stake (1995) provides an extensive 'critique checklist' for a case study report. This provides 20 criteria for the assessment of quality, which are simplified by Creswell (2013) to the following six criteria, fundamental to designing and conducting a high-quality case study research project:

1. Is there a clear identification of the "case" or "cases" in the study?
2. Is the "case" or are the "cases" used to understand a research issue or used because the "case" or "cases" have intrinsic merit?
3. Is there a clear description of the "case"?
4. Are there themes identified for the "case"?
5. Are assertions or generalisations made from the "case" analysis?



6. Is the researcher reflexive or self-disclosing about his or her position in the study?

I applied these criteria in designing the study and the application of points 1-5 is reflected in the subsequent chapters of this thesis. Reflexivity as a quality measure is a recognition that the researcher is an active participant and influences the research process (Curtin and Fossey, 2007). Reflexivity recognises that the researcher's 'voice' can be heard within the discussion of how the topic is selected, investigated and analysed (Finlay and Ballinger 2006). Detailed diaries or logs maintained through the study demonstrate a reflexive approach (Taylor, 2007). Throughout this study I made personal notes and completed many reflective pieces. Chapter 1 outlined my personal perspective on the topic selection and the reflective thoughts section in chapter 9 provides my key learning points throughout the project.

I also applied the specific quality measures of triangulation, member checking, and reliability/dependability to the study. Triangulation is a commonly used and widely applied quality indicator in case study research. However, there are multiple views on what the term means and how it should be applied in any study. In broad terms, triangulation means collecting evidence from multiple sources to either confirm or validate the findings. Stake (1995) states the importance of triangulation in order to gather data that collectively contributes to the validity of study findings. However, he also proposes that if reality is constructed (relativist) then it is difficult to believe that any complex observation or interpretation can be completely triangulated.

Curtin and Fossey (2007) suggest that triangulation provides confirmation and completeness. They propose three ways to triangulate data in case study research; triangulation in time, space and person. Space triangulation is the collection of data about the same phenomena in two or more settings, where researchers wish to understand how a context may shape the issues being explored. Time triangulation refers to the collection of data at different intervals to understand change over time. Person triangulation is a collection of the information from more than one level of persons including individuals, groups and collectives. In my study, the range of three specific settings offered space triangulation where the same phenomena (OT practices) are explored in order

to understand how the context may influence or affect the OT role. The design of the three case studies also utilised person triangulation where information from the individual occupational therapist and members of their immediate multi-disciplinary team (MDT) were collected.

A second quality indicator used in this study was participant validation and member checking. Member checking can involve checking of draft material for accuracy and palatability by gaining feedback from participants following analysis of the information collected (Stake, 1995). I adopted this approach through prolonged involvement with the participants and the teams in which they work. This was facilitated by my privileged access to the study site and participants. Throughout the study period I shared my analysis of their own 'case' with them and also presented this in team meetings and professional conferences (Appendix 2). This member checking continued over the entire period of data analysis and informed the cross case analysis and the write up of the thesis including the recommendations for clinical practice.

The final quality measure of this research study is the objectivity and governance of the research process. The reliability or dependability of this study was ensured by explicit use of protocols, utilisation of research governance principles and on-going academic supervision. Objectivity is achieved by a clear audit trail of verifiable documents proving how the study was conducted (Finlay and Ballinger, 2006). Study files, reflective accounts, letters of authority or approval, participant information and interview schedules are all examples of documents relevant to this study. Appendices 5-14 evidence the approvals gained from both the academic and healthcare institutions and the participant information, consent and interview schedules. The study information remained consistent across all the stages and research participants. The interview schedules differed across the stakeholders (Appendix 6), the OT cases (Appendix 9) and MDT members (Appendix 12), depending on the stage of the study and the context of the interview.

#### **5.4 Chapter Summary**

In summary, this chapter has provided a detailed description of the methodological approach for this study, including my overall ontological position and epistemological stance. The use of a case study approach was

justified as the means by which the study objectives would be achieved. A range of potential case study design options were considered, with the conclusion that the research question could best be answered through a collective case study design, describing three occupational therapists in three unique settings. The quality of the study was ensured by consideration of triangulation, member checking, reflexivity and reliability/dependability measures. The next chapter will provide the specific methods undertaken from this methodological approach.

## **Chapter 6 - Methods**

### **6.1 Introduction**

This chapter describes how the study was conducted and the methods used. After an initial section outlining the two parts of the study and explaining how they are aligned to the study objectives, I detail the study sample, recruitment processes and data collection methods. I will then present the case study approach. Firstly, I describe the context within which the cases were situated. I then move on to describe the composition of each case study, recruitment of participants and data collection approach. This will be followed with a data analysis section within which the overall approach to data analysis is explained. This is followed by separate accounts of the data analysis processes used for stage one and stage two of the project. The final section of this chapter will address the ethical considerations and detail the ethical approvals that were secured.

### **6.2 The study design**

There were two parts to the study. Part one involved semi-structured interviews with a purposeful sample of key stakeholders. These were identified on the basis of their understanding and perception of clinical services for frail older people, and their understanding of how OT contributes to those services. The purpose of these interviews was to provide a broader national and local picture of OT practice as a context within which to specifically examine local OT practice.

Part two involved a series of case studies across acute and community settings in order to examine the OT role with frail older people. The findings from part one were used to inform development of data collection tools in part two of the study. The study objectives were presented in section 4.3. The two parts of the study align directly with objectives one and two of the study and the findings from both parts contributed to the third study objective.

## **6.3 Part 1 - Stakeholder interviews**

### **6.3.1 Study sample**

Potential stakeholder participants were identified from a range of backgrounds and settings. This was a purposeful sample designed to provide an informed and diverse view on OT practice with frail older people. Purposeful sampling specifically seeks out a cohort of people of interest to the researcher and selected on the basis that they individually contribute rich sources of information to the study rather than on the basis of any claims of representativeness (Topping, 2006). They were identified to include individuals working around the frailty agenda, from a range of different organisational roles and positions. They span both the commissioning and provision of health services and the provision of workforce education.

### **6.3.2 Recruitment**

I identified six potential participants, all recognised as having extensive knowledge and experience in the care of frail older people and OT practice in this context. They all held senior positions and influential roles at a local and/or national level. I contacted them by email to explain the study and invited them to participate. A study information sheet and consent form was attached to the email. (Appendices 4 and 5). Five of the six agreed to participate.

This purposeful sampling process resulted in the recruitment of the following five participants:

- A lay person who had been a past representative on a trust committee for the care of older people and previous member of Healthwatch (a consumer advice service for health and social care services in the city).
- A lecturer and academic researcher in Occupational Therapy
- A clinical commissioner who had the lead for older people in the local clinical commissioning group.
- A clinical director of a range of allied health professionals (including OTs) within the integrated healthcare trust.
- A consultant geriatrician who was also the national clinical director for older people for NHS England and advisor to the British Geriatric Society and The King's Fund.

### 6.3.3 Data Collection

I conducted individual face-to-face interviews with each stakeholder. In interviews, I explored their thoughts and opinions on the role of occupational therapists in the care of frail older people. This method allowed each stakeholder to express their unique perspective and provided more in-depth information than could have been obtained from a survey or questionnaire.

The interviews were conducted in locations convenient to each stakeholder. One was conducted following a national conference that the participant and I both attended and the other four were conducted in the participants' workplace.

Immediately prior to the interview, I outlined the purpose of the study, ensured that they had received and read the information sheet and secured written informed consent. The interviews all used a semi-structured format. I used an interview schedule (Appendix 6) as a guide, but maintained flexibility to respond to the interviewee's agenda and views. By structuring interviews in this format, I allowed for co-construction of the content between myself and the interviewee. This enables the interview to cover issues raised by the participants that may not have been anticipated by the interviewer (Todd, 2006; Kvale and Brinkmann, 2009). All the interviews were digitally recorded and fully transcribed. I transcribed the first interview and organised for the others to be professionally transcribed due to time constraints.

The stakeholder interviews were all conducted between 14<sup>th</sup> June 2014 and 28<sup>th</sup> July 2014. The length of the interview ranged from 30 minutes (the lay representative) to 90 minutes (the lecturer and academic researcher in Occupational Therapy).

## **6.4 Part 2 - OT Case Studies**

### 6.4.1 Study context

Part two of the study was conducted in a single combined integrated acute and community care trust (See Glossary of Terms and Section 5.3.4) within which I was employed. The integrated Trust was established in 2011 in line with the policy document, Equity and Excellence: Liberating the NHS (Department of Health, 2010). Primary and intermediate care services that had previously

provided by a primary care trust were merged with the acute hospital services under one organisational and managerial structure to create a combined acute hospital and community services organisation. This structure provided the opportunity to explore OT practice within a single organisational boundary but across several settings.

Although I considered other study sites, my role within the organisation of study meant that I had insight and access which enabled me to uncover detailed data about the service. In addition, this organisation of study offered the most logistically-appropriate opportunity to focus on an integrated care trust. I wanted to study an integrated care trust rather than separately managed services because this would provide the opportunity to develop cases within a context which specifically and organisationally prioritises care pathways which cross primary, intermediate and secondary care services, and care provision which spans hospital, community and home environments.

The integrated trust, within which part two of the study was conducted, serves a northern city with a local population of approximately 575,400 (Sheffield City Council, 2016) and employs 15,000 staff across all settings. It provides approximately 2,000 in-patient beds to deliver acute services across a wide range of acute local and regional specialities and a range of emergency and urgent care services. It also provides community services in a range of settings including people's homes, community venues and residential and nursing home accommodation.

The Trust has an organisational commitment to avoiding admission to acute care and minimising length of hospital admissions wherever possible and appropriate. The intermediate care service was established to support this agenda. There are two components to the intermediate care service. Firstly, a number of small bedded units located in residential homes. These predominantly cater for persons discharged from hospital. They focus on rehabilitation with the goal of timely and effective discharge to the home environment and prevention of rapid readmission. Secondly, the active recovery service. This consists of a team of therapists and nurses who are based in hospital but work solely in the community. They deliver care to people

in their own home with the aim of avoiding admission to acute care and support people immediately following discharge from acute services.

Therapy services, including occupational therapy (OT) and physiotherapy (PT), are provided in these acute, intermediate and community settings as part of a multi-disciplinary team (MDT).

#### 6.4.2 Selecting the case studies

To achieve objective two of the study, I elected to conduct a case study in each of the three care settings: acute, intermediate and community. Each case focussed on an OT. For each case, data collection consisted of conducting semi-structured interviews with the OT and then with several members of the MDT. These MDT members worked closely with the OT and could offer a range of professional insights into their role with frail older people.

My aim in selecting three individual sites was to examine as broad a range of OT practice as possible. I considered a number of organisational factors in the selection of sites for the case study. In the community setting, the domiciliary therapy service was the only service with a specific remit to support delivery of primary care to frail older people. They received referrals from general practitioners, a range of community services and directly from secondary care. This service, which had traditionally been provided by physiotherapists, had been recently expanded to include OT. At the time of the study, three OTs were employed to work in this service. For these reasons, this site was identified as the most appropriate community care setting.

In the choice of intermediate care setting, I needed to decide between one of the bedded units or the active recovery service. I rejected using the bedded unit because my professional experience indicated that the OT practice in the bedded unit was likely to be comparable to that in the hospital setting. As my third case is a hospital, this practice type is explored elsewhere in the study. In contrast, the active recovery service was a new and innovative way of working in which the professional roles were still evolving. Including this site offered the opportunity to observe and inform the development of emerging practice.

Selection of the acute case study site also required careful consideration. Frail older people receive treatment across all services in the acute setting, including



emergency assessment units and medical, surgical and neurological wards. Following discussion with clinical and service managers, I selected a medical 'care of older people' ward on which an occupational therapist was based. This decision was based on the fact that this ward setting provided a high caseload of older people who had become frail, required a hospital admission and received OT intervention. Other wards, units or specialities would have offered less detailed insights because they had more variable caseloads in which 'frailty' was unlikely to be the primary condition.

#### 6.4.3 Access to the OT case studies

Bonner and Tolhurst (2002) describe the disadvantages of being an 'insider' researcher. 'Insider' researchers risk bias in the interpretation of findings, reliance on participants who are familiar and focus on extreme examples rather than routine or regular examples. As the professional lead for OT in the trust, I was the known leader and manager to all OTs employed in the organisation. This dynamic of being not only an 'insider' (Bonner and Tolhurst, 2002) but one with seniority and authority required careful consideration at all stages. I needed to be sensitive to my organisational position and take measures to ensure that individuals did not feel obliged to participate. I also anticipated potential difficulties in conducting the community-based case studies because I was less 'well-known' to the primary and intermediate care staff. As my professional role was based in the hospital, I could be perceived as an outsider or intruder (Gray, 2004).

My first step was to meet with the service managers and the OT lead for each of the three services to explain my project and the involvement I was seeking from their service. I shared the study information sheet with them (Appendix 7) and discussed how I planned to recruit to the study. They were all supportive of the study. I discussed with each manager which OT would be most appropriate for the case study in their setting, based on their experience of the role.

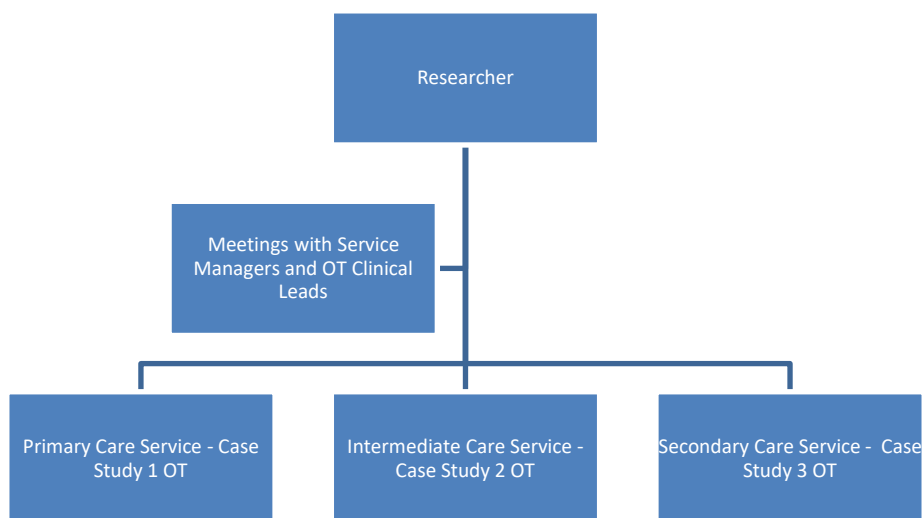
In the community care site, one of the three OTs employed in the service had been in post from the start of the OT service. In contrast, the other two OTs in the service had only been appointed recently. As she had considerably more experience of the role than the other two, she was selected on this basis.

In the intermediate care setting of active recovery, the service manager proposed a member of the team who was a highly experienced therapist. They could offer a high level of insight into the role of OT both in the prevention of admission and in the discharge of frail older people from acute settings.

For the acute site, the service manager identified one of the OTs who was based on the ward and carried a full caseload of frail older people. She was recommended on the basis of her experience.

I then emailed each of the potential cases using work email addresses. I introduced myself, provided information about the study and invited them to respond if they were interested to participate. All three agreed to participate in the study.

Figure 3. Access to OT case studies



#### 6.4.4 Conducting the case studies

I completed data collection for each case study before starting the next one. Prior to data collection, I needed to decide the order in which I would conduct the case studies. After consideration, I decided to work from community through intermediate into acute care. This decision was based on the fact that I

was less familiar with the community care service and therefore less susceptible to confirmation bias in this setting.

Each case study participant was asked to identify four MDT members that could give the most insight into their role. This approach was used because the size and the skill mix composition varied between teams. The ways in which the occupational therapists worked with other members of the team was also variable.

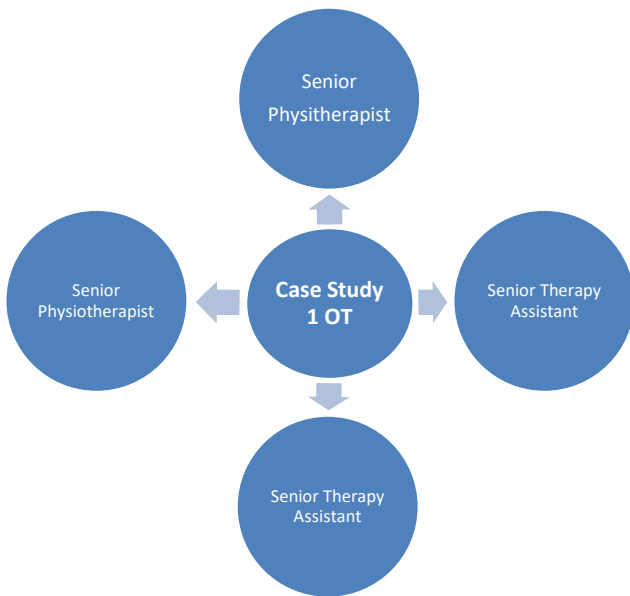
The community care OT identified senior physiotherapists that she worked closely with. She also identified therapy assistants who could offer insights into her professional leadership and training role in the service.

The intermediate care OT worked in a team that consisted of OTs, PTs, therapy assistants and a senior community nurse. She identified individuals from each professional group who she felt were best placed to contribute to the study.

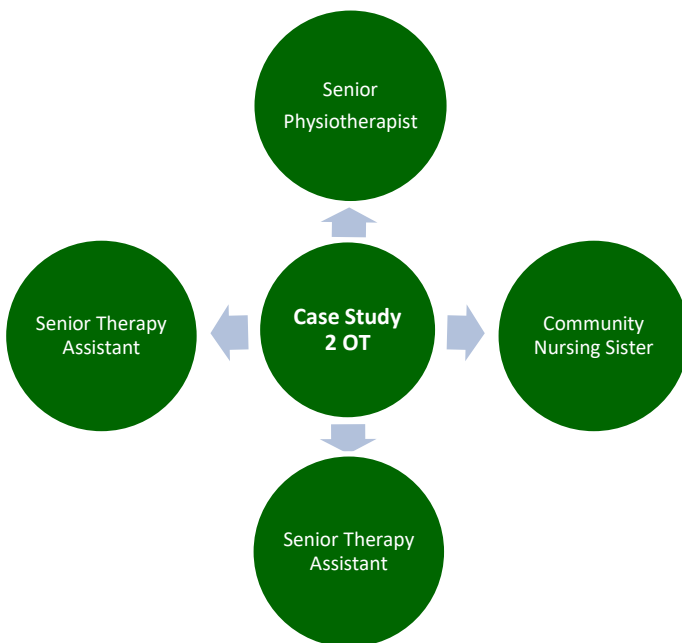
The acute OT was based on a ward. She had close working relationships therapy, nursing and medical colleagues. She selected a senior PT, therapy assistant, the ward matron and a consultant geriatrician. The opportunity arose to include an OT student who had been supervised by the participating OT and she was also interviewed. Figure 4 illustrates the MDT members selected in each case.

Figure 4. MDT Members selected across the OT case studies

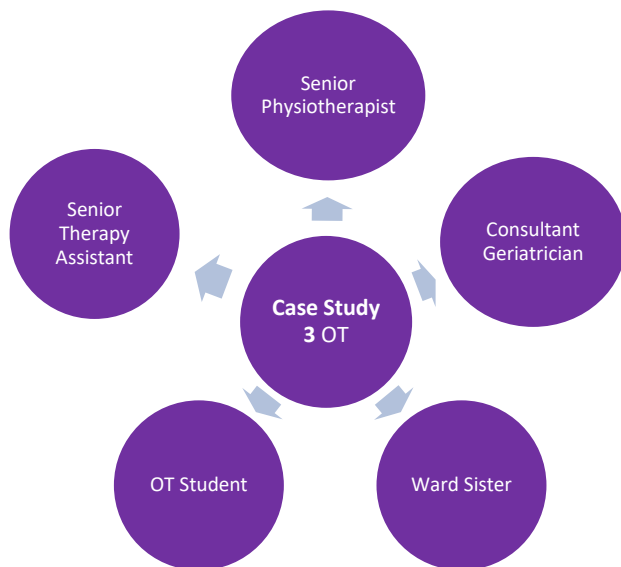
Case Study 1: Community Care Setting



Case Study 2: Intermediate Care Setting



### Case Study 3: Acute Care Setting



#### 6.4.5 Data Collection Approach

Semi-structured interviews were conducted with the OT and the MDT members. They were interviewed at a time convenient to them during the working day and in a private space where we were not interrupted. At each interview the study information was reiterated and written consent secured. Separate interview schedules were developed for the OT and the MDT interviews to reflect their different roles in the case study. These were used to guide the interview (appendices 9 and 12). Interview schedules were informed by the findings of the scoping review and by preliminary analysis of the Phase 1 stakeholder interviews. The OT interviews lasted between 60 and 90 minutes. The MDT interviews were shorter and lasted approximately 30 minutes. All interviews were digitally recorded and fully transcribed.

Data collection was completed over a 12 month period as follows:

- Case Study 1 OT and MDT members: November 2014 – February 2015
- Case Study 2 OT and MDT members: April 2015 – June 2015
- Case Study 3 OT and MDT members: October 2015 – November 2015

A full time line of the stakeholder, OT and MDT interviews is provided in Appendix 13.

## **6.5 Data Analysis**

Within this section, I describe the overall approach to the analysis. This is followed by the specific analytical methods used in both Part One and Part Two of this study. For this study, I considered the analytical methodological guidance of both Yin (2009) and Stake (1995). Yin (2009) describes five techniques for analysis: pattern matching, linking data to propositions, explanation building, time series analysis, logic models and cross case synthesis. This study was not 'testing' a theory or proposal therefore an analytical approach that started with linking data with a proposition was not deemed appropriate. Instead, I aligned to Stake's (1995) overall guidance. In this approach, the researcher reaches new meanings from the cases through the analytical processes of categorical aggregation and direct interpretation. To fulfil this, I needed a clear and structured analytic approach that would provide analytic consistency. The methodological stages described by Braun and Clarke (2006) provided this. They describe a clear sequence of methodological stages, with appropriate analytic methods and techniques applied at each stage.

### **6.5.1 Overall approach: thematic analysis**

My overall approach to data analysis was thematic analysis, following the stages detailed by Braun and Clark (2006). This approach was used for the stakeholder interviews, the individual case analysis and the cross-case analysis. Thematic analysis is a method for identifying and reporting patterns (themes) within the data (Braun and Clarke, 2006). It organises, describes and interprets data by searching across it to find repeated patterns or meanings. Braun and Clarke (2006) describe this process as recursive through several stages.

These phases (Braun and Clark, 2006) are as follows:

1. Familiarisation is the first stage. The researcher 'immerses' through familiarisation with the qualitative data. This then allows familiarity with the depth and breadth of the content. Immersion requires repeated reading of the data in an 'active' way. The aim of the analysis informs the style of reading. A detailed analysis may require a semantic approach, while an overall analysis

may require a theory-driven reading. This reading and re-reading is a time consuming process but it provides the foundation for the rest of the analysis. Transcription of verbal data is then required. This process is itself a method of familiarisation with the data. As a minimum standard, the transcribed data requires a rigorous and thorough 'orthographic' script to be produced that is 'true' to the original nature of the information.

2. The second phase is the generation of initial codes. This begins after familiarisation with the data. Through familiarisation, the researcher may identify a first set of ideas about interesting features in the content. This phase involves producing a set of initial codes from the data. Codes identify a feature of the data (semantic content or latent) that is interesting to the analyst. These basic elements start to allow the researcher to assess information that is meaningful in regard to the phenomena that are being investigated. At this stage, the process of coding is part of the analytical process of organising data into meaningful groups. It is important to work systematically through all the information with equal attention across the body of work. At this stage there may be interesting aspects that are repeated. These may begin to form repeated patterns or themes across the data set.

3. The third phase is the organisation of codes into potential themes. This includes the collation of all relevant data extracts into codes under potential themes. This is the start of an analytical process to consider how the different codes may combine to form an overarching theme. Visual representations are helpful at this stage to help this organising process. An example could be the drawing of an initial thematic map. Some initial codes may form main themes but others may become sub-themes. The formation of a theme that is 'miscellaneous' is acceptable if it does not fit into the main themes.

4. The fourth stage of analysis is the organisation and visualisation of initial themes. This involves review on two levels. The first level involves reviewing the data extracts within each theme to consider whether a coherent pattern is formed. If a coherent pattern is not apparent then the theme either requires reconsideration or there is data that does not fit and should be somewhere else. This may mean reworking the theme or potentially creating a new theme.

Once this first level has been completed, a thematic map can be produced that is a more refined representation of the set of identified themes. The second level of this phase considers if this thematic map accurately represents the meanings in the data set as a whole. This process is to assess if the themes 'work' in relation to the data set or if additional data requires coding that may have been missed in earlier coding stages. By the end of this phase there should be clear picture of the different themes, how they fit together and the overall 'story' they convey.

5. Phase five names the themes. The thematic map forms the basis for further definition, allowing the researcher to name the themes. Names emerge by identifying what is of interest within the data extracts under each theme and why this is. Names should be concise, descriptive, and clear. As part of this stage, a detailed analysis is required to consider how each theme fits into the analysis as a whole to ensure there is not too much overlap between the themes. Within this analysis, there is consideration of the relevant sub-themes within the main theme.

6. Phase six describes the story of the data. This narrative is constructed from the preceding analysis of themes. By describing what the data says, the researcher builds a complex story of the data, giving authority and validity to the analysis. This write up provides sufficient evidence within each theme with examples from the data extracts to demonstrate the weight of this analysis. The most indicative examples are embedded in this analytical report.

### 6.5.2 Thematic analysis of stakeholder interviews

For this study, the analysis of stakeholder interviews followed the stages of thematic analysis detailed above. I familiarised myself with content of the interviews by listening back to the recordings and reading the transcripts several times. Initial codes were then generated and then grouped into initial themes. These themes were reviewed across the stakeholder data to ensure capture of all significant information. I then defined and named the final overall themes of the stakeholder interviews.



Because the study was conducted in two parts, I was able to use the analysis of the stakeholder interviews to inform the interview format and questions for the OT case studies. For example, the first stage of analysis led to the inclusion of three questions about the concept of frailty, how OT's understand and identify the condition and how this is relevant to their OT practice. They gave a broad but highly informed review of the health, social, political and social care context from which to develop the interview schedule. This informed view also led to an increased understanding of the broad context of the role of OT with older people who may become frail. This range of perspectives and experiences of OT practice further enriched the interpretation and analytical processes of the study. This first part of the study provided a valuable, in-depth and informed platform on which to build the second stage of the study. The timeline in Appendix 13 indicates the methodological order.

### 6.5.3 Individual OT case study analysis

Each of the three cases were analysed according to the sequence described in the study design. In each case the OT interview was analysed first followed by their MDT member interviews. Data for the community care OT case study was analysed first. This was followed by the intermediate care OT case study and lastly the hospital OT case study.

In each case the recorded interviews were transcribed. The process of familiarisation was achieved by listening back to the interview recordings as well as reading and re-reading the transcripts for each case in turn. This enabled me to check the accuracy of the transcripts and note initial ideas and potential codes. I generated initial codes from each transcript, for each case in turn. I identified key words and concepts of interest at this stage. A sample of this is provided in Appendix 14. This inductive process generated a large number of initial codes per case study. Initial codes were then grouped together. This grouping of codes provided the initial set of themes. Appendix 15 illustrates the initial codes for each case study, along with grouping of codes and potential themes. Each case study had five or six transcripts. This number was dependent on the number of MDT members interviewed for each case. Each case had its own unique set of codes and grouping of codes dependent on the setting and content of the interviews. These codes were grouped into

themes which were specific to the setting and content of that case. As a result, these themes captured the unique context of that case.

#### 6.5.4 Collective Case Analysis

The final analytical stage of part two of this study occurred across the three OT case studies. I analysed cross-case themes by considering how different case-specific codes could combine into overarching themes. This was assisted by the use of thematic maps for each case. These illustrated the multiple elements and complexity of the data. By reviewing these themes, a pattern became evident which identified three broad themes common to each case. These themes also provided the scope to represent the particular and specific detail of each setting.

This style of cross-case thematic analysis was influenced by Attride-Stirling (2001) insofar as I developed basic, global and organising thematic networks to understand the data. These became a thematic map, following Braun and Clarke (2006). This was an active process of pulling the information apart and putting it back together more meaningfully (Stake, 1995). It was a highly reflective process, because the cross-case analysis brought about a re-engagement with the analysis of each individual case.

Cross-case analysis is designed to develop informative generalizations that represent multiple accounts within and across case studies (Ayres, Kavanagh and Knafli, 2003). By comparing codes and themes (variable elements) for each case, the researcher can develop an idiopathic generalisation by simultaneously looking within and across the cases (Ayres, Kavanagh and Knafli, 2003). Baxter and Jack (2008) stress that each data source should not be treated independently during this stage of analysis. Instead, the researcher should ensure that data is converged in an attempt to answer the overarching research question.

The process of bringing all case study data was a challenging analytic process which was conducted over several months. The process of going 'in and out' of the data was repeated several times in order to construct a comprehensive set of overall themes. Appendix 16 illustrates a developed thematic map of the main themes and sub themes. The set of themes was also reviewed and

refined in this cross-case analysis. I moved from four to three overarching themes because the fourth theme was not coherent in relation to the whole data set. This cross-case analysis was the final iteration of a lengthy and involved analytical process considering all stages of the case study design.

## 6.6 Ethical considerations and approvals.

### 6.6.1 Ethical considerations

This study took consideration of the ethical principles of beneficence, non-maleficence, autonomy and justice. Beneficence is the moral imperative to reach and maintain high standards of professionalism. This considers the benefits of intervention against the risk and cost to those involved. In the context of this study I considered maintaining my high levels of personal and professional behaviour when planning the study, contacting the service managers and participants and in my written, verbal and non-verbal communication. I considered the benefits to the participant's involvement which included increased awareness of the study taking place in the organisation and the opportunity to have finding fed back to them.

The study aimed to reduce or minimise the risk to all of the participants. The study employed the principle of non-maleficence, or inflicting the least possible harm in order to reach a beneficial outcome. In the short term, an obligation to take part in the study may have been perceived by participants because the request came from the professional lead of the employing organisation. This was mitigated by taking a staged approach to recruitment, by discussing the recruitment strategy with each service manager and then contacting the participant. The participant was first contacted by e-mail. If a favourable response was achieved, personal contact was made to arrange a time and place that was convenient to them. At the outset of each interview I took time and care to explain the process carefully before written consent was gained. I also explained that the interview could be paused at any time at the participants' request. I also considered the possibility of unintentional harm to participants by the release of unexpected findings. This may have included examples of poor or unsafe practice, failings in service delivery or unintended consequences of the interview itself. The design of the study built in the awareness and support of the service managers of this research. Their

involvement would have been essential poor practice had been uncovered. Unintentional long-term risks to the participants were again mitigated by careful and considerate written and verbal communication, opportunity to pause or withdraw from the study at any point and early sight of findings.

Failure to respect the principles of beneficence and non-maleficence would mean a failure to respect a person's autonomy. In this case, the participants' intentions and actions when making the decision to participate in this research. I aimed to explain the risks and benefits by providing clear study information (Appendices 7 and 10), gained individual consent (Appendices 8 and 11) and organised a familiar environment for the interview where they could feel empowered to express individual views. In the interview, I respected their answers by actively listening. I didn't offer my opinion, but explored their views in order to gain as much clarity as possible. It was important that each participant was involved in an equitable and consistent way across the study. Similarly, the MDT members suggested by each OT were approached and interviewed in an equally consistent and considerate manner. I ensured that I was flexible with their clinical commitments in order to provide a context where they could fully and openly participate with the interview, were not under time pressures and were willing and able to contribute to this research study.

#### 6.6.2 Ethical approval

Ethical approval for parts one and two of the study were secured at the same time from Sheffield Hallam University (19 March 2014). Additionally, the study was registered with STH for research governance processes and approvals, secured on 20 May 2014. Confirmation of both approvals can be found in Appendix 3.

### **6.7 Chapter Summary**

The exploration of OT practice with frail older people using case study methodology was carried out in three bounded cases within the local integrated trust. The initial stakeholder interviews provided an external perspective which informed the second stage of the study. This was designed to counter internal bias. The three OT case studies and their MDT colleagues required careful selection with a considered approach. This was necessary because of my

professional position as Head of OT in the trust under study. The interviews across the three OT cases were carried out within a 12 month period with the analytical processes occurring in a sequential pattern across the case studies. The final analytical stage considered all three cases in a collective case study approach. This in-depth process considered a large amount of information and required a robust and rigorous approach to ensure accuracy and representativeness of the data. Chapter 7 describes the initial analysis of the three OT cases and Chapter 8 is the result of the combined cross-case analysis.

## Chapter 7- Findings

### 7.1 Introduction

This chapter presents the first part of the study findings. This begins with the stakeholder analysis and is followed by the individual case study analysis. They are presented in terms of the broad themes identified through the thematic analysis.

### 7.2 Stakeholder Findings

The stakeholder interviews and findings were to inform the remainder of the study, providing a set of diverse views on frailty as a condition and the OT role with frail older people. There were three themes identified in this section:

- A complex condition requiring a complex intervention
- The 'hidden art' of OT
- Aspirations

#### 7.2.1 A 'complex' condition requiring a 'complex intervention'

There was a variation in how frailty in an older person was described. The patient representative suggested it was:

*"Somebody who struggles with their everyday living, they find it difficult to do things, to get around and generally live life" (Lay Representative Stakeholder)*

The signs that someone may be frail were discussed by the Consultant Geriatrician as muscle loss and weakness, slow walking speed and fatigue, falls, lack of Vitamin D if unable to go outside, social deprivation, depression and isolation. A deficit in 'cognitive reserve' was referred to by the OT lecturer and academic stakeholder who acknowledged this was not necessarily separate from the physical symptoms but could impact on daily living tasks and normal routines. The variation in how frailty presents and its transience was reflected to bring a complexity to the interpretation of the condition:

*"I think often the term frailty is seen as a permanent thing whereas for the people I have worked alongside emotional frailty effects everybody but actually for older people it might come and go at different points and I think for me*

*there's something about its transience. Frailty isn't just a fixed thing, it is people's self-perception" (OT Lecturer and Academic Stakeholder)*

The lack of social contact or opportunities to engage with others in society was reflected in the findings as consequence of becoming frail. The concept of 'diminished reserves' being not only physical but emotional, cognitive and social was recognised:

*"It's also got that social reserve as well and there is a decline in people's ability to engage or to the extent their capacity to engage is reduced" (AHP Lead Stakeholder)*

The OT Lecturer and Academic Stakeholder acknowledged that in the past she had been constrained by the boundaries of wanting a clear definition but over time had become more attuned to emotional frailty, its transience and the need to acknowledge the implications in practice:

*"In healthcare documents, frailty is seen through the eyes of the healthcare provider and what levels of support are required, I conceptualise frailty as does someone's physical, emotional and cognitive wellbeing impact on their ability an older person to do what they want to do? I think frailty is defined by the person" (OT Lecturer and Academic Stakeholder)*

Occupational Therapists (OTs) were described by the stakeholders as having high level communication skills and ability to 'engage' patients in activities that are important to them, their practice was described as holistic and 'person centred':

*"I can relate to OTs because of their generally very holistic view of the person and their ability to elucidate and articulate that view, sometimes I struggle with other professions who are so focused on their domain, OTs seem to go out of their way to understand" (AHP Lead Stakeholder)*

This ability to engage and maximise the ability of older people was discussed:

*"They are very clear at getting people to understand what their capacities and capabilities are and maximising that and that has often brought back that quality of life to some extent or opened up a window that had seemed closed off" (AHP Lead Stakeholder)*

*“OTs to me are very good at seeing the person, whatever their condition, drawing that out and promoting that amongst the team” (Consultant Geriatrician Stakeholder)*

This engagement with the older person, families and the MDT was acknowledged as vital in order to facilitate discharge from hospital and potentially prevent admission from a community setting.

*“I couldn’t do my job without OTs, they help us get large numbers of frail older people back home and they are worth their weight in gold from that point of view” (Consultant Geriatrician Stakeholder)*

OTs were observed to problem-solve in a collaborative style in order to find a solution that was acceptable to all parties and their ability to understand the multi-factorial elements that contribute to a frail condition was acknowledged and valued. OTs had been asked to train other professionals in the complex presentation of frailty: a Consultation Geriatrician routinely asked his junior doctors to spend time with OTs.

*“It gives them a greater understanding of managing the frail and it’s not all about medication and tablets, it’s about these other functions” (Consultant Geriatrician Stakeholder)*

How OTs ‘practice’ was also observed to be curious, proactive, adaptable, open and pragmatic. The AHP Lead Stakeholder discussed that OTs’ use of ‘self’ demonstrated that the qualities of the therapist themselves were in fact a therapeutic tool.

*“A lot of professionals are trained to use tools and tasks which is a very different place that I think OTs would find themselves in, I think they are much more comfortable using themselves, the most important tool you use with a patient is yourself” (AHP Lead Stakeholder)*

The management of risk by OTs was referred to from a positive perspective in that they were observed to encourage older people to take risks as part of normal activities of daily living. In the acute hospital setting, however, there was also a view discussed that OTs could be perceived as ‘risk averse’.



*“I’m not one of those doctors that go round labelling the OTs as risk averse”  
(Consultant Geriatrician Stakeholder)*

There was variance across the stakeholders of the approach of OTs to risk management, from an empowering approach to one that was more cautious, and there was a reported difference between OTs that work in an acute hospital environment as compared to a community-based setting in their practice.

*“She had become so risk averse because of the environment she was working in; she had really lost sight of what she was really trying to do” (OT Lecturer and Academic Stakeholder – hospital OT)*

*“She’s not risk averse, she uses her reasoning skills that people are aware and life is about living” (OT lecturer and Academic Stakeholder – community OT)*

The stakeholders recognised that frailty was a complex condition with a variable presentation but reported that OTs had the skills, qualities and behaviours that were well-matched to unravelling the detail of the condition. They did, however, recognise that there was variation in OT practice from their experience across contexts. Secondary care was discussed as potentially creating a potential philosophical tension for OTs in that the empowering approach of the profession may not always ‘fit’ in this context.

### 7.2.2 The 'hidden art' of OT

In the opinion of the stakeholders, OTs were autonomous and reflective practitioners but OT clinical reasoning was a hidden art. They observed that OTs did not always articulate this art. Other people did not always understand the role. A mastery of this art comes with experience and confidence and, when observed, appears a fluid and simple intervention, but masks a level of complexity that is not always apparent. This subtle approach can lead to blame or, at times, a misunderstanding of the OT role within the healthcare system.

*“It might just look like they are observing someone making a cup of tea but actually there is so much more behind that you are not aware of because they are doing it in a nice way” (Commissioner Stakeholder)*

The commissioner suggested that GPs and other commissioners had little understanding of the OT role and that, whilst working with older people who may become frail should be a growth area for the profession, this would be difficult if the OT role was not more widely understood.

Several stakeholders advocated proactive management of older people prior to a point of frailty. The Occupational Therapists' impact on the prevention of falls and in reframing a person's outlook to improve health was used as an example by the AHP Lead Stakeholder. The commissioner highlighted that the small number of OTs currently based in the community made early intervention challenging for the profession. He went on to suggest that, unless further investment was made by commissioners who understood the potential impact of OT working within the community, this challenge would remain.

The role of OT within an MDT was acknowledged as essential and complimenting a comprehensive geriatric assessment (CGA) because of the challenges that the OT perspective could bring. However two stakeholders expressed concern about the extent to which they were involved in the care of older people outside of specialist frailty units or care of the older people wards because they felt the OT role was less understood and valued in those contexts. They suggested that some of the responsibility for this was lay with the professional body for OT who did not promote the OT role sufficiently , citing the findings from the Francis Enquiry Report which examined case of findings in care at Mid Staffordshire NHS Foundation Trust between 2005 and 2009.

*“There has been great debate following the Francis Enquiry\*, it's all about doctors and nurses and at no point have I seen the College of OT saying we are really important in discharge planning, so quite happy to have all these stories about poorly planned discharges without saying we own a lot of the solutions, they have kept their heads well above the parapet” (Consultant Geriatrician Stakeholder)*

Criticism was also levelled at OTs themselves for not being assertive enough about their value and contribution, not only to the care of older people but strategically within and outside of their organisation. The research profile of the profession was also described by some of the stakeholders as 'hidden'; a

comparison to physiotherapists, who appeared more confident, proactive and articulate in their role:

*“One of the things I would like to see is more OT research because again whilst the evidence base isn’t the be all and end all it does help and is another language to articulate what you do” (AHP Lead Stakeholder)*

It was clear that the stakeholders interviewed valued the role and contribution of OTs with frail older people, however they were also frustrated at the perceived lack of professional confidence and the ability for them to articulate their ‘art’ in order for them to be better understood and appreciated.

### 7.2.3 Aspirations

*“The OT profession needs to be more vocal in celebrating what it does well and its crucial importance to living solutions” (OT Lecturer and Academic Stakeholder)*

The OT Academic expressed her ambition for OTs within the context of ‘frailty’, including how the role could be enhanced to benefit both older people and the profession itself. The importance of shared information across contexts was discussed, including the use of shared records, a consistent language, a common data set and use of common outcome measures. The Consultant Geriatrician Stakeholder expressed frustration about the lack of trust in assessments done by colleagues across organisational boundaries. It was acknowledged that there could be significant improvement by integration of teams who then could share a common intervention framework ensuring a consistent clinical approach.

The stakeholders wanted OTs to reflect and be critical about whether they were making best use of their skills at their point of intervention and within the environment in which they worked.

*“I’d say to OTs are you working with the person at the right point you know, do really reflect on the impact that you are having, are you thinking, articulating and is that informing your practice?” (OT Lecturer and Academic)*

The provision of a seven-day service and a consistent offer over the weekend was raised by the stakeholders as being important in future planning of OT

services for older people. This should include a review of the flexibility of roles, use of unqualified staff, and utilisation of qualified skills for the most complex people and situations. The issue of OT resources and staffing levels was seen as important across health and social care settings. A comparison was made to specialist areas such as stroke and neuro rehabilitation which generally have higher staffing levels in the hospital than in community settings.

The stakeholders were aspirational for OTs to have an increased academic and strategic profile in order to raise the awareness of the profession. They wanted OTs to get involved in change programmes, to utilise local renowned current OT researchers and translate research findings into practice. The importance of modelling in professional leadership was acknowledged. This included professional forums where research is presented and encouraged as an expected element of clinical practice. The openness to current thinking was viewed as being critical for professional confidence and the ability for OTs to influence future service design and provision. Strong, clear leadership in the profession was recommended in order to influence national policy, influence the future design of services for older people and shape clinical practice.

### **7.3 Case Study 1 Findings – Primary Care**

The second section of the findings describes the individual OT case studies incorporating the MDT findings. Each case study is presented under the sub headings of the three common identified themes.

- The setting.
- Frailty conceptualisation.
- OT practice in the setting.

#### **7.3.1 The primary care setting**

From this point I will refer to case study 1 OT as the primary care OT. The primary care OT and physiotherapy (PT) service aimed to facilitate older people to remain active and independent in their own home. The team comprised OTs, PTs and non-registered therapy assistant practitioners. The Occupational Therapist received referrals from within the team and other professionals such as District Nurses, Social Workers, Community Support Workers and General Practitioners.

The majority of OT interventions in this service were within the older person's home with a smaller number in residential or nursing homes. She was working with people in their home and she emphasised that any intervention had to be carefully considered in collaboration with them:

*"It's their home so you can't go and say we'll do this, we'll do that, we'll do the other, we have to suggest things and be quite gentle about it, but look at minimising the risks as much as possible" (Primary Care OT)*

The primary care community environment provided the opportunity to work with carers and family members alongside the older person; she described the importance of having a relationship with family members as well as the older person. This relationship then afforded a negotiated approach to any OT intervention where she aimed to empower the older person.

*"Sometimes when I do assessments when relatives are there I have to say please just stand back and sometimes they are quite surprised at what people are able to do" (Primary Care OT)*

The primary care Occupational Therapist identified the importance of established normal habits and routines when suggesting any changes; this included the introduction of new equipment or alternate strategies. By this introduction she identified that in the attempt to reduce risk the opposite effect may occur and therefore she was 'cautious' if there were long-established methods that the older person had adopted. She reflected that the home environment was the most accurate context in which to assess an older person's abilities and that the hospital environment could be disempowering for a frail older person.

She observed that there was often an 'over-prescription' of equipment when an assessment was made in a hospital environment, with this prescription changing when the older person was back in their familiar home environment. If the older person had cognitive difficulties, again the home environment was considered the most accurate and relevant in order to assess any difficulties:

*"Especially with patients with cognitive difficulties, making a cup of tea in the kitchen, they know the kitchen is different, when they go home they know how to do it, it is definitely more meaningful" (Primary Care OT)*

A further reflection on the transition from a hospital to home environment was described that a technique introduced in hospital could be then practised at home, for example getting out of bed independently.

*“Generally the things that OTs do in hospital are to prepare them for when they are at home so that when they are at home they need to put those into practice, don’t they?”(MDT member - Therapy Assistant)*

The primary care Occupational Therapist acknowledged there would be different perspectives and expectations between the primary care and hospital environments. Having worked in hospital she recounted the pressure from medical teams to discharge older patients as soon as possible, and that OT input was perceived as the mechanism for safe discharge. She reflected that this focus on safety and pressure on discharge from acute care could have led to important factors not being considered:

*“You may miss something really important to the person” (Primary Care OT)*

The flexibility of working in a community environment was apparent with a level of autonomy in her practice. The primary care Occupational Therapist undertook home visits alone, with assistant practitioners and with PTs when a joint approach was beneficial.

### 7.3.2 Frailty conceptualisation

The perception of a frail condition by the primary care Occupational Therapist was that it was potentially synonymous with the end of life, with an increasing level of care needed from relatives and/or carers. She also associated frailty with falls, vulnerability, social isolation, depression and cognitive deficit. The triggers for frailty were identified by the primary care Occupational Therapist as an illness, infection, falls and hospitalisation. She discussed that a fall can then lead to fear of future falls, with the older person attempting less activity and consequently becoming less mobile and more dependent on others.

*“I see it as someone who is towards the end of their life; you know they’re the very old group. Possibly, well, definitely having some problems with mobility: may have fallen; vulnerable, very vulnerable group of people” (Primary Care OT)*

*“Cognitive difficulties, it’s a kind of picture of dependence on others and feeling vulnerable, very vulnerable” (Primary care OT)*

The process of hospitalisation in itself was raised as a trigger of increased vulnerability for a frail older person. Their fears or ‘emotional frailty’ were discussed as future admission to hospital, increasing dependence or having to go in to residential care. The primary care Occupational Therapist gave an example of a lady she was working with who avoided healthcare professionals. She was currently supporting her by telephone as she went out if she knew someone was visiting.

Bereavement was raised as a trigger to increased vulnerability that could lead to a loss of confidence in current and future roles. New roles may be difficult to achieve if the older person was already in a frail condition from a cognitive or functional perspective. Depression was also discussed as a trigger within frailty and can be overlooked for older people; she identified that depression may be as a result of bereavement, isolation or gradual loss of independence in established roles:

*“There’s a bereavement situation when the person is very ill, the daughters live with, take it in turns to live with her, they’re bereaved as well and it’s a very difficult situation. They don’t want more care, but they are all struggling emotionally” (Primary Care OT)*

A ‘social’ trigger of increased vulnerability for a frail older person that was identified was a change in accommodation, for example a move to extra care housing or residential care. The act of transition and the disruption on lifestyle routines and established social networks were viewed as potentially detrimental to the level of frailty experienced. Examples were given of not being able to continue to visit the local shop or adjusting to eating/socialising with new people in a residential setting. If an older person has cognitive or sensory deficits, these were identified as requiring specific consideration with a change in accommodation.

*“As you get older you may not be able to participate in as many activities as you used to, so you’re lost. You know, you might have gone to the shops every*



*day and suddenly you can't mobilise to the shops every day so you lose that social contact" (Primary Care OT)*

A further area discussed in relation to the effect of frailty and potential vulnerability was in relation to advancing technology and societal changes in everyday processes. The reliance on computer access for banking and paying bills was used as an example. If an older person is not able to participate in these processes and cannot easily leave the home environment, this can result in an increased vulnerability and dependence on others.

*"I think with technological advances, it's left this group of people behind. Even paying a bill used to be such a simple thing, either go to the bank or the Post Office, which is apparently still available but if you had a problem what do you do?" (Primary Care OT)*

### 7.3.3 OT practice in the primary care setting

In this setting the range of interventions included assessment, rehabilitation activities and provision of advice, support and equipment along with education of older people, carers and staff. The primary care Occupational Therapist described the aim of the service as sustaining older people to remain as independent and active as possible within their daily occupations. Her assessments included the physical, functional and cognitive abilities of an older person along with consideration of social and psychological factors. She gave examples of the assessment of functional tasks such as bathing/showering, cooking, going up and down stairs and psychological assessments of cognitive decline and depression.

Provision of equipment, advice, support and strategies to improve independence and safety for the older person was described as routine practice. In addition she adopted the advocacy role for some older people in complex scenarios, for example co-ordinating the decision to no longer live at home when an older person was at the end of their life or for a couple who both experienced deteriorating dementia:

*"There's a lot of people fall through the net if nobody is taking sole responsibility, everybody is doing their bit around the person but nobody is in*



*the middle with the person and going on that journey with the person and linking other professionals in” (Primary Care OT)*

Improving safety but embracing risk in order to improve independence was discussed, for example strategies and assistive technology to reduce the risk of future falls. Signposting older people and their families/carers to further advice and support was described and acknowledged by the MDT member. The primary care Occupational Therapist was regarded as an expert in the range of agencies and solutions that could be relevant when problem-solving how to help or support a frail older person at home.

The educational role of the Occupational Therapist in this team was valued by the members of the MDT. The therapy assistants had both received training, coaching and mentoring from the Occupational Therapist and thereby were able to provide many examples of working and problem solving together:

*“She taught me, the way she sat and explained what they could do to solve the problem, like stepping stones it just gave me more of an insight into how to approach it differently” (MDT member – Therapy Assistant)*

The ability to manage complexity with a pragmatic and problem-solving approach and style was recognised by all the MDT members interviewed. It was evident that she was sought out by individual team members to discuss, reflect or problem-solve complex cases, and all of them had carried out joint visits with her. This joint problem solving was reported to be extremely beneficial for the older person. They had ‘learnt’ from the techniques, strategies and approaches used on the visit. Examples of specialist OT knowledge included equipment, cognitive strategies, upper limb rehabilitation, safeguarding and moving and handling techniques.

This patient and carer training role by the primary care Occupational Therapist in the team with patients and their families was discussed. This was to enable the patient to be more independent and safe in their home environment, she also, on occasions, trained staff in Nursing Homes in techniques to enable residents to be more comfortable, independent or cognitively stimulated. The Occupational Therapist in this setting had provided specific training to the MDT members along with education about the potential of the OT role in this setting:

*“I really enjoy two people seeing a patient because sometimes if they’re a bit complex or you’re just not sure about something, I can bounce off her and say what did you think about this? Whereas previously we worked a lot in isolation so it would just be me and maybe a therapy assistant would get involved” (MDT member – Physiotherapist)*

She has also encouraged reflective practice and contributed to team problem-solving with complex patients. In adopting this approach has appeared to influence their practice. Reframing situations with patients and team members occurred with the Occupational Therapist being interested in the detail of a situation in order to find a solution:

*“Assessments that OTs do, digging out things and the way that they work I think that they make patients think about things they may not have thought about before really” (MDT member – Therapy Assistant)*

The skills required with frail older people described in this case study were observed by the MDT to be a high level of communication and problem solving-skills associated with complex situations, an empathetic and sensitive approach and a pragmatic style to find collaborative solutions with the older person and their family/carer. The Occupational Therapist was also observed to be curious and interested in the detail of a situation in order to find a solution.

## **7.4 Case Study 2 Findings – Intermediate Care**

The findings of the second OT case study in intermediate care are described under three themes.

- The intermediate care setting.
- Frailty conceptualisation.
- OT practice in the intermediate care setting.

### **7.4.1 The intermediate care setting**

The setting for this case study Active Recovery Service (AR) was previously detailed in chapter 6. This service provides support for up to four weeks in order to avoid admission to hospital or immediately after discharge from acute hospital care. The team comprised of OTs, PTs, Nurses and non-registered rehabilitation assistants. The registered staff carried out generic assessments

and then recommended a care and therapy package for the older person. The intermediate care Occupational Therapist carried out generic assessments as well as providing some therapy intervention and supervision of registered and non-registered staff.

The AR service supports older people who have become frail in a more 'acute' phase of their condition in order to provide the care, support and therapy to enable them to stay within their home environment. The intermediate care Occupational Therapist described this acute service:

*"I think this service is a virtual medical ward, I feel like active recovery is like one huge medical ward" (Intermediate Care OT)*

The AR service provided both care and therapy to facilitate recovery from an acute episode. The intermediate care Occupational Therapist described her role to prevent further deterioration and to support transition from the hospital to the home environment for the older person. In this period of recovery for the older person she expressed that the older person was not always ready for active therapy intervention as they were still recovering and it was towards the end of the four week period that people were more accepting of active therapy intervention. On occasions older people did not want to be referred onto another service and she identified a missed opportunity for continuity of care. The intermediate care Occupational Therapist described a case in which during that four week period intervention she had enabled a lady who had been deteriorating to adjust to living downstairs and to accept some adaptive equipment, however when they tried to refer her on to the primary care service for more intervention the lady refused:

*"If you come back I'll have you but I do not want any more blue t shirts".  
(Intermediate Care OT)*

In relation to being able to achieve more continuity the intermediate care OT expressed a wish to provide a more proactive primary care approach:

*"I think it would be really great to follow the patient really wouldn't it? This is it, this would be the key. It would be fantastic if you could have somebody who was highlighted by the GP and was seen without any boundaries by an OT and*

*that person followed through. It's not an outrageous idea to actually have the same therapist to deliver is it?" (Intermediate Care OT)*

A further reflection by the intermediate care Occupational Therapist was that the care provision of the service brought a tension in relation to the OT role. She described that in order to leave hospital, a high level of care may be required to enable an older person to be safe at home; this can be promised to the person and their family and therefore 'expected' on return home:

*"Because people come out of hospital with a massive care package this works against the OT Process, you are working against a plan of action in the patient's eyes and the family's eyes". (Intermediate Care OT)*

She described that OTs typically have a role to promote and encourage function and occupational engagement and that in the past the service had been commissioned to provide support for up to six weeks. This had allowed time to provide more therapeutic interventions such as meal preparation, self-care activities and bathing/showering:

*"It has got even more difficult for OT to do OT" (Intermediate care OT)*

The generic nature of the service also appeared to provide some philosophical tensions for the intermediate care Occupational Therapist. The OTs and PTs in this service had all received training to be able to undertake competency based tasks that are non-traditional to their role, for example nursing observations. These were to a basic level to enable a level of generic practice from a nurse, OT or Physiotherapist. The effect of this, however, appeared to be that the Occupational Therapist did not feel she was utilising her OT skills to a full extent with frail older people in this phase of their condition.

*"There is a lot of emphasis on being able to take observations and do non-traditional tasks on the initial assessment, to be able to take and monitor saturation levels, sort out the care if it's not right, in this particular job there needs to be the ability to know and access services to keep somebody at home". (Intermediate Care OT)*

The context of working in the community in a 'generic' team was reflected upon by her. She observed that learning and modelling from other OTs was more

difficult in community settings as compared to the more structured environment of acute care. This was in relation to less experienced therapists, but appeared important to her in relation to professional isolation.

#### 7.4.2 Frailty conceptualisation

The intermediate care Occupational Therapist described the effect of a frail condition on an older person and the activities they may wish to perform:

*“Frailty really impacts on occupational performance, it will mean that in some of your performance of your activities of daily living it either becomes more effortful or has more risk for you” (Intermediate Care OT)*

She linked effort, the smoothness of activities and associated risk with an older person who is frail. She then applied her role as an Occupational Therapist to how she could then reduce effort, make activities smoother and more fluid, and therefore reduce the risk of daily living activities:

*“Analysing the activity and working out if it can be done differently, to be safer, more successful or less effort full, you know because I think that word effort is a word I use now more than I have ever done” (Intermediate Care OT)*

The transience of the frailty condition was referred to by the intermediate care Occupational Therapist:

*“It’s not like a journey but a state of being” (Intermediate Care OT)*

This is relevant to the remit of the AR service where older people are in transition from hospital to home, or have reached a point where admission to acute care has been considered due to an increased level of frailty. In this transitional phase the Occupational Therapist considered the role of prevention in this context:

*“I feel like it’s kind of an engine, it’s getting older and it’s getting more difficult to work and run and if intervention had have been earlier people’s occupational performance would have remained higher and also they may not have needed as many services that they now have got to this point because a crisis has arisen” (Intermediate Care OT)*

She discussed the fact that a diagnosis of frailty is not always clear when they see someone at home, and during an assessment or treatment she becomes aware that the older person is not eating, has fallen, is mobilising less and the consequential effect of this. She linked a physical and functional state with a psychological effect that could contribute to the state of frailty:

*“Because the fall has happened they lose confidence and then they stop going out and then they stop going to the walking group...” (Intermediate care OT)*

The consequent lack of social contact was referred to by the intermediate care Occupational Therapist as “a real marker” in the assessment of a frail older person, giving an example of an older person involved in a luncheon club who would often bounce back more than a person who wasn’t. She also identified that the level and type family support could affect the level of frailty or ‘vulnerability’. She gave an example of an older lady who had fallen, discussing the support she had from her family:

*“Families don’t have the time, people don’t have the time to take me out somewhere flat and walk round with me. Everybody has got busy lives and that’s not what families do. And they come round and they come and see me but I never get out of these four walls and its lovely they come and see me, that’s better than nobody coming to see me” (Intermediate Care OT)*

The reason for referral into this service was linked with a sudden crisis or change in the level of the older person’s condition; this could be due to many factors such as a fall, infection or health crisis or a more gradual pattern of decline. She was aware of the social, psychological, physical and functional factors that could underlie this decline and expressed the wish to be involved earlier.

#### 7.4.3 OT practice in the intermediate care setting

This intermediate care Occupational Therapist described her role as 80% related to the provision of rails and equipment specifically to increase independence and safety in toileting and bathing. As many older people have just come out of hospital, this emphasis on safety is clear after a period of acute illness or a fall. The smaller percentage of the OT role related to provision of OT intervention and ‘engagement’ in rehabilitation with an

emphasis to incorporate rehabilitation into functional tasks that the older person wished to do as part of their daily activities.

The emphasis on functional independence in order to enable the older person to remain at home, either through the provision of equipment or intervention, was also stated and observed by the MDT members to be the main element of the OT input. The MDT members reported that if there was a level of complexity then they would refer back to the Occupational Therapist for a more in-depth knowledge of equipment or strategies for independence. An activity they regarded as a specific OT intervention was the provision of equipment, especially non-standard equipment particularly when the older person was more complex and frail:

*“I think now the OTs have got more of a job on with people that are coming through now in our service with frailty, assessing for ramps and things like this more”. (Intermediate Care Therapy Assistant)*

*“They’ve got more experience in the social side of things, who to liaise with, if I get stuck on where to go with a patient in that way I’ll ask, I’ll phone them to ask if they have got any thoughts or where to signpost me to. So they’ve got that background, and around equipment as well”. (Intermediate Care Therapy Assistant)*

OT skills such as signposting and assessment of cognition and communication were also identified by the MDT members. The range of knowledge of MDT members of the scope of OT practice varied considerably from an assistant who found it difficult to describe the unique qualities of an Occupational Therapist to the Physiotherapist who had a deeper understanding of the clinical reasoning and analysis of OT practice.

This intermediate care Occupational Therapist described their ability to follow the patient home from hospital to assess them in their home environment, check their safety, provide equipment and take an adaptive approach to restoring function. She discussed rehabilitation activities for frail older people within the home environment, such as strengthening and falls prevention exercises which she described as *“kitchen sink exercises”*. She was keen to adopt a functional approach, adapting exercises into daily tasks, rather than a



formulaic approach. The rehabilitation assistants referred to how they had learnt and modelled their practice from experienced OTs, particularly taking advantage of shadowing opportunities with them.

The generic assessor Nurse interviewed referred to the Occupational Therapist for advice on equipment and environmental issues and to discuss rehabilitation potential and she described the OT's abilities to problem-solve and direct the next stage in care following an acute assessment. The nurse also identified an eye for detail in assessment:

*"It just brings an extra bulk to the assessment really, little things we as nurses may not think of straight away or historically would not have considered".*  
(Intermediate Care Nurse)

The Occupational Therapist has had an influence on other professions by working alongside them, for example joint visits, and a greater understanding had been reached about each other's skills and knowledge:

*"Having the OT there just expands things I suppose, and puts the pieces together in a better way"* (Intermediate Care Nurse)

The PT interviewed appeared to have the greatest insight into impact of the OT role; she described the Occupational Therapist as having a greater insight into cognition and mood, the environment and specialised equipment, upper limb knowledge, and skills and experience of the social and community services available. She described joint treatment sessions with the Occupational Therapist in the home environment which gave the insight into a person's normal life; she described how jointly *"they facilitate people to draw on their own resources, not to do it for them but to help them achieve their potential"*.

### **7.5 Case Study 3 Findings - Secondary Care**

The setting for the third case study third was an acute medical ward for older people that admitted older people from a range of admission units including A&E and the frailty unit of the hospital. Details of the case have been described previously in chapter 6. The findings of this case study are described under the following themes:

- The acute context.



- Perceptions of the frailty condition.
- OT practice on the ward.

### 7.5.1 The secondary care setting

*“Sometimes you think they literally have just been really poorly, they’ve come off the IV’s and near enough that night or the next morning we’re sending them home” (Hospital OT Assistant)*

The nature of an admission to an acute medical ward indicated a level of healthcare crisis for the older person who has been unable to be discharged from an admission unit or A&E. The consultant alluded to the fact that it was often difficult to determine the level of acute on chronic illness however an admission was an opportunity to investigate and piece together the jigsaw of someone’s life. The Occupational Therapist described a scenario in which someone may have been struggling for some time at home and be *“on the cusp”* of being able to maintain independence. The ward team aimed to discharge older people from the ward within five to seven days and utilised ‘discharge to assess’ (NHSE, 2016) principles to facilitate transition to the home environment. The ward team made regular referrals to the AR team (Case Study 2) to provide the support, care and therapy assessment immediately post discharge from the acute setting.

The level of health crisis for the older person required close liaison with family members/care agencies in order to establish the reasons for admission. The hospital Occupational Therapist was proactive in seeking out this information in order to problem-solve solutions prior to discharge. Previous levels of function and knowledge of the home situation were sought from families by the Occupational Therapist, if the older person was unwell. She recognised that the acute environment was unfamiliar and that a true picture of the person’s abilities may not be apparent in the acute phase of a health crisis. This was particularly relevant if the older person had a pre-existing condition of dementia.

The hospital Occupational Therapist saw that it was her role to *“unlock”* the complexity of the presentation of frailty and described an example of a couple who had been struggling prior to admission. In a treatment session with the

family she had managed to obtain a clearer picture of a deteriorating situation and then identified support acceptable to both the couple and the family. The consultant explained that this background information from the Occupational Therapist could often provide a different picture and that this was crucial to him from a diagnostic point of view:

*“Like we often have cases where, you know, it’s oh query delirium and confusion and actually through the work that the OTs do they can tell us actually from the information they’ve entailed, from their function at home, their function with the family, they’re very different i.e. what’s going on. It’s using the MDT team together to give that comprehensive assessment and it’s that diagnostic” (Hospital Consultant)*

The PT also relied on the social and environmental history from the Occupational Therapist to inform her assessment and intervention:

*“They have very early engagement with families, I tend to use their notes in relation to the social history, I always think they have a bit more expertise around what people do in their own environment and then you can have a good conversation about what the problems might be” (Hospital PT)*

The complexity of the presentation of frailty in a ward setting was viewed by the hospital Occupational Therapist and her team as a challenge to understand. She described how the increase of therapy assessments in A&E and on the frailty unit had affected the complexity of needs experienced by the older people who were admitted onto the ward. If it had been possible to discharge the older person, this would have already occurred before they arrived on the ward. The strength of having the structure of an MDT in one place to determine the most appropriate treatment was valued by both the hospital Occupational Therapist and her team members.

The acute hospital environment was described as being time-pressured due to meeting the ongoing demand for in-patient care, however the Occupational Therapist gave an example of how she adapted her approach to not lose focus on the person and what they wanted to achieve on return home. The OT assistant reported that an older lady had appreciated that the hospital

Occupational Therapist had asked her about what was important to her, for example the stages of getting back to gardening, once she was back at home.

The 'discharge to assess' model adopted by this ward was embraced by the hospital Occupational Therapist, who acknowledged that it was more appropriate to conduct a more in-depth, detailed level of assessment out of the acute environment. This had required an alteration to her practice however, which was also acknowledged by the MDT:

*"I think the OT on the ward is really good to work with because she has that kind of courage to go forward with it (discharge to assess model) and go yes this is going to change our role but then this is better for the patient and we can see this" (Hospital PT)*

#### 7.5.2 Frailty conceptualisation

The hospital Occupational Therapist perceived that the condition of frailty was multi-faceted and on admission there were often a number of factors that came together. She recognised that there could be physical, functional, social and cognitive dimensions to the presentation on an acute ward. She described that the crisis leading to an admission to hospital may have been caused by falls, an infection or a gradual deterioration of psychosocial factors including bereavement and depression.

Utilisation of the word 'frailty' within a secondary care setting, she reported, was not always welcomed by older people and their families; however, her view was that the condition needed a 'wide view' of the factors underneath the presenting condition:

*"We've had a couple of relatives have said that the word frailty, they don't really like it, because I think a lot of people perceive it as like a little old lady or gentleman, who's skinny, you know. But I don't think it's often that, it's the bigger picture, it's socially, emotionally and functionally" (Hospital OT)*

She described the admission as a 'crisis point' for an older person but that this provided the opportunity for her to investigate and understand the reasons underlying a complex presentation. She acknowledged that, for an older person to be admitted for in-patient care, a higher level of frailty was present that was

unable to be addressed prior to admission or within the range of admission units.

### 7.5.3 OT practice in the secondary care setting

The practice of the hospital Occupational Therapist in this acute environment included in-depth assessment of the reasons for admission, early links with the family, a functional and psychological assessment and identification of next steps in order to facilitate discharge out of hospital. The MDT members relied on this information generated by the OT assessment and liaison with families, recognising her role as an assertive patient advocate and a source of knowledge and information for trainees. The consultant discussed this beneficial role with medical students to help them understand the condition:

*“The feedback that we get from students about, actually, you know, I now have a greater understanding of MDT working, I have a greater understanding of managing the frail and it’s not all about their medication and tablets, it’s all about these other functions. On a ward round they do not pick issues up but when they were with the therapist they realise how people are not functioning and why the relatives are stressed” (Hospital Consultant)*

Qualities described by the team members of the hospital Occupational Therapist included a listening and inclusive approach towards the older person and their family. The OTs were keen to understand the important issues to older people and then problem- solve how to support them:

*“Knowing when a key piece of that jigsaw is missing and then potentially solutions to fill that bit of the jigsaw”. (Hospital Therapy Assistant)*

*“OTs are very key to looking at the support of when it doesn’t work and what’s happening and what else they can offer...” (Hospital PT)*

There was an emphasis on timely functional assessment in order to establish any equipment that may improve independence, increase safety on the ward and reduce risk factors for the older person. The role in discharge planning was central to her practice and she was considering discharge home from the very beginning of her intervention. Referral and signposting to services that could

support the older person was a priority and her opinion and knowledge was respected across the MDT members:

*“They offer a very sort of thorough review actually of the patient’s function and assessment but often a lot of what they are doing is that almost behind the scenes work that as medics we don’t see what’s going on at home, what being done at home, what can be done at home. Actually we don’t need to do this because it’s already been done”. (Hospital Consultant)*

The achievement of meaningful occupational goals within a short period or on discharge was a focus of the hospital Occupational Therapist, as observed by an OT assistant:

*“It feels like giving them their life back really, it’s giving them the sense of they’re an individual again and their role, sometimes even if they are living on their own but just that role of I can still be the meal provider and I can still bath myself and I can still wash my hair and I can still have a bit of a soak. It’s making them not lose their identity. I think as an OT you kind of promote independence as much as you can really with support in order to make it the best that it can be” (Hospital OT Assistant)*

The hospital Occupational Therapist on this ward described the ‘discharge to assess’ model as one that she had adopted. This had facilitated a better relationship with community colleagues in addition to improving the discharge process for older people out of the acute environment:

*“We have got to know our community colleagues and I think this has helped with the transfer of patients from hospital to home. Previously patients who may have become a little bit stuck while we were doing a bit more digging and a bit more investigating, just kind of go. It’s a shift isn’t it? They are solving it in their own environment” (Hospital OT)*

The hospital Occupational Therapist did not report conducting formal cognitive assessments, however related cognitive difficulties (e.g. memory) to the achievement of functional tasks. The OT student observed that OTs had an awareness of the psychological effect of being in a ward environment and described how the OT service had facilitated singing and reminiscence groups on the ward for older people. She also gave an example of the Occupational

Therapist taking a lady with depression out of the ward to a green space in the hospital grounds while waiting to go home.

## **7.6 Chapter Summary**

These findings provide a comprehensive insight into the role of the OT in caring from and supporting frail older people, from the external of the stakeholders and the internal perspective provided by the case studies. These findings feed into the interpretive analysis across the individual cases which is presented in the next chapter.

## Chapter 8 - Cross-Case Analysis

### 8.1 Introduction

The cross case analysis identified balance as a core concept and three themes that collectively illustrate how, within the dynamic nature of frailty, the precarious state of balance is threatened and restored. The three themes are 'a precarious' balance, 'the tipping point' and 'restoring the balance', and each contains three subthemes. Each of the three themes will be presented in turn in this chapter. As a preliminary, two figures provide an overview of the analytic structure. Figure 5 provides a diagrammatic overview of the conceptual framework that was developed to illustrate this 'balance of frailty.' Figure 6 provides an overview of the three themes and their sub themes.

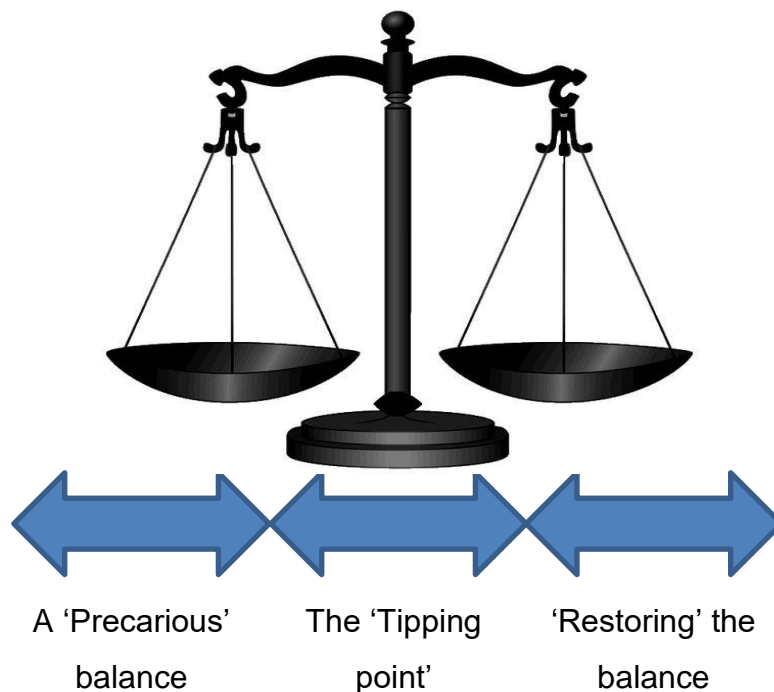


Figure 5. The 'balance of frailty'

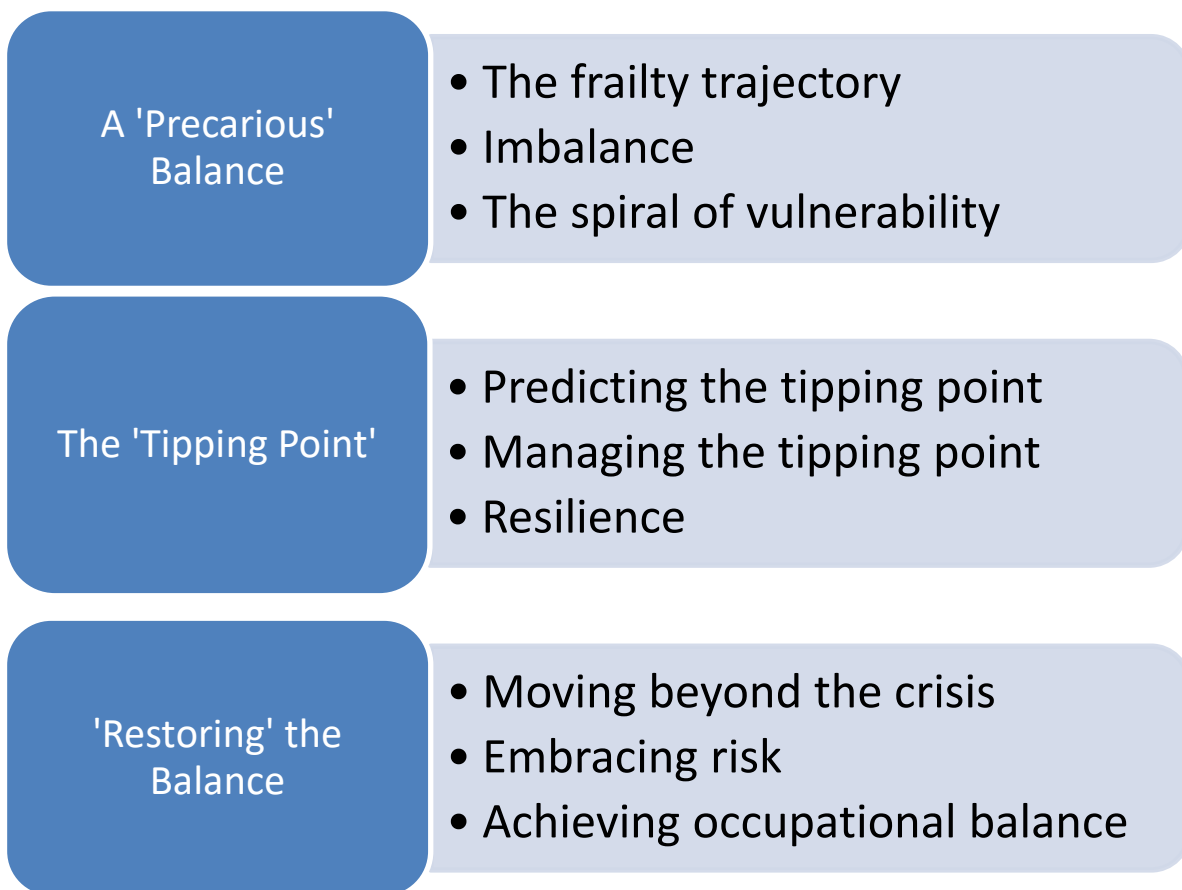


Figure 6. An overview of the themes and their sub-themes

### **8.2 A 'Precarious Balance'**

From the findings, there appeared to be a link between a frail condition and an older person being able to maintain a sense of balance and control in their lives. The trajectory of frailty in older people can be gradual, subtle and undetected, or may present suddenly with a crisis event. A number of factors or triggers can contribute to this presentation and can lead to a state of imbalance. These triggers can be conceived as a 'weights' on the scales within a 'balance of frailty' framework leading to imbalance and instability for the older person. This state of imbalance equated to a vulnerable condition, as reported by the Occupational Therapists (OTs) can lead to a sudden spiralling deterioration. This is captured as the third subtheme of 'the spiral of vulnerability'.



### 8.2.1 The frailty trajectory

The OTs in this study described both a gradual and sudden onset of a frail condition in the older people that they had seen in their practice. The context in which they worked determined how frailty presented.

The hospital Occupational Therapist described the acute crisis that had brought someone into hospital, but also how underlying this someone may have been struggling for some time, indicating a declining trajectory:

*“People have been struggling at home, who’ve maybe come in, almost a crisis point, have lost a bit of weight because of not being able to support themselves at home” (Hospital OT)*

If there had been a gradual deterioration at home this may or may not have been detected by any supporting family or carers. A gradual deterioration aligned with referrals to the community-based OTs. The primary care Occupational Therapist described the referrals as less acute. A more gradual deterioration in function was described in this example from practice:

*“I’m thinking of a particular case where there was a couple with dementia. I was going in and talking about well changing the environment and then going a few months later and looking at the deterioration” (Primary Care OT)*

In the situation of a gradual deterioration she appeared to embrace a case management role in order for the older person and their family to navigate the ‘precarious balance’ of living at home for as long as possible. The primary care Occupational Therapist described her role as detection and management of a gradual change in collaboration with their families or carers. She gave examples of older people who required palliative care or who had dementia being referred to her. This was in comparison to the other two case study OTs who were concerned with the management of a sudden crisis in a more urgent, time-limited context.

The opportunity for the intermediate care Occupational Therapist to potentially prevent or slow the rate of deterioration was described when she reflected on a referral to prevent admission to acute care:

*“If the intervention had been earlier, people’s occupational performance would have remained higher and they may not have needed as many services that they’ve now got at this point, because a crisis has arisen” (Intermediate Care OT)*

Her perspective was that a gradual deterioration may have been detected with earlier intervention but as the crisis had arisen this led to an increased level of dependency. She discussed scenarios of both admission avoidance and post-acute discharge management at home and it was evident that her intermediate care service was a crisis-driven short-term intervention where frailty may be a pre-existing condition. Her referrals were more likely after a sudden crisis or deterioration to such a point where acute admission was likely:

*“Yeah, so I think it is once we see people they are at that crisis point really, and either they’re really very poorly or they’re just coming out of being really poorly or they’re declining, yeah” (Intermediate Care OT)*

A gradual decline or trajectory was detected by the hospital and intermediate care OTs that may have contributed to an acute crisis for a frail older person and then generated a consequent referral to the service in which they worked. A gradual deterioration may be identified for the first time by an admission to acute care. A therapy assistant in the hospital case study discussed how, by first appearance, people may appear to be coping, but then on visiting their home they have no carpet, no lights working and no heating. An acute admission presented an opportunity to identify and investigate the factors that may have led to the crisis point.

An admission to acute care can therefore arise potentially from either a sudden or gradual deterioration within a frail condition. Understanding the history and the reason behind the decline was discussed by the Consultant Geriatrician in hospital, and he recognised the Occupational Therapy (OT) role in gaining the collateral history from families that was essential to his diagnosis:

*“I always say the patients come in bundles which usually includes family members and the earlier engagement you have with those families, you are listening to their concerns, you need a collateral history and more often than*

*not, often the OT they're looking at that functional state, they have already got that collateral history" (Hospital Consultant)*

Understanding the pattern or trajectory of deterioration appeared to be a complex task in the secondary care setting, where an acute presentation made the detection of normal or baseline functioning difficult to ascertain. In order to contribute to this picture, the hospital Occupational Therapist had valuable communication skills. Factors behind the deterioration not attributable to the acute environment were expressed as difficult to understand within a frail condition:

*"I've spoken to the family, last week they were functioning, they were walking to the shops and they were doing their own bank account, they currently don't know where the toilet is. They can't now undo a button, that's got nothing to do with the fact they are in hospital" (Hospital Consultant)*

This assessment of "normal baseline" (Intermediate Care OT) appeared to be a challenge, unless an ongoing relationship with the older person was established. In an acute crisis if there had been a gradual deterioration, information-gathering from the older person and their support network was critical in order to plan future treatment with realistic goals and expectations.

### 8.2.2 'Imbalance'

Triggers are those factors that may underlie an older person becoming frail or contribute to deterioration in their frail condition. The OTs discussed a wide range of factors that could lead to a stepped change in functional abilities and independence for the person (see the quote above from the Hospital Consultant). The ranges of triggers outlined by the OTs were physical, functional, psycho-social, emotional and cognitive in nature. Their perspective was that the level of frailty was affected by specific factors that could lead to further decline, deterioration and a state of imbalance for the older person.

The types of triggers identified across the settings had some commonality including social triggers such as bereavement and physical triggers such as an acute infection. A cumulative number of triggers could lead to a crisis or state of imbalance. An example of this across the OT cases was the incidence of an older person falling:

*“An event such as a fall or a fracture, in my experience that happens frequently, that somebody has a fall and that creates a fear, because they might have been admitted to hospital and have fractured something and it might have taken a long time to recover and they don’t want it to happen again. So it’s almost like they’re’ protecting themselves from it happening again, so they do less” (Primary Care OT)*

Each of the OTs reflected on the importance of prevention of future falls due to the dramatic impact a fall can have on an older person’s life and what they are able to achieve. The factors leading to a fall or the consequence of a fall were linked and conceived as triggers. The impact of the psychological effects of falling, i.e. fear, lack of confidence, depression and isolation, were also considered vitally important due to their impact on the physical and functional abilities of the older person:

*“Because then the fall has happened and then they lose confidence and then they stop going out and then they stop going to the walking group”  
(Intermediate Care OT)*

The hospital Occupational Therapist discussed that less obvious triggers may lead to an admission, for example an older person not eating or drinking would be susceptible to infections. Dehydration and malnutrition indicated a potential gradual frailty trajectory. The admission provided an opportunity to understand how and why this point had been reached. An MDT member in hospital described this as *“some patients are teetering”* when they come into hospital.

The effect of the setting on the apparent level of frailty was acknowledged by the hospital Occupational Therapist, with the acute environment itself being a trigger of a potential increase in level of frailty assessed. It is an unfamiliar environment where normal habits and routines are impossible. Functional abilities may appear to be lower than at home. The shock and trauma of an admission to hospital was recognised across the OT case studies.

One significant and consistent trigger that affected the balance in the life of an older person was identified by each Occupational Therapist as a recent bereavement and the bereavement process. Adjusting to consequent changes in roles and tasks at home, with potential social isolation and loneliness, were

acknowledged as significant. The hospital Occupational Therapist suggested that a recent bereavement was a common factor she had noticed when older people were admitted to her ward.

The link between a physical or functional decline and social isolation was also discussed as an important factor to consider in the balance of frailty:

*“So challenges such as social isolation, as you get older you may not participate in as many activities as you used to, so you’re lost. You know you might have gone to the shops every day and suddenly you can’t mobilise to the shops every day and you lose that social contact” (Primary Care OT)*

The concept of a trigger leading to a change in frailty level and ‘imbalance’ was consistent across the OT cases. An emphasis on cognitive, emotional and social triggers was identified as important to consider. This appeared to complement the medical model in hospital. The primary care Occupational Therapist additionally identified triggers such as moving into a care home, cognitive deterioration and sensory decline. Given that this setting was not as crisis-driven, this gave her the opportunity to look at additional social factors that may be triggers for ‘imbalance’ in the condition of frailty for an older person living at home.

In the ‘balance of frailty’ framework the triggers of frailty could be conceived as the ‘weights’ on a balance scale, with multiple weights (e.g. poor eyesight, a fall and social isolation) leading to an accelerated decline or ‘spiral of vulnerability.’

### 8.2.3 The ‘Spiral of Vulnerability’

The word ‘vulnerability’ was frequently used by the OTs and their MDT members linking an identified situation with a level of risk for the older person which then affected their level of independence:

*“They perhaps are having some problems with mobility, may have fallen: vulnerable, very vulnerable group of people. You know at risk of having infections, definitely at risk of social isolation. Frail older people living in their own homes, yeah just not engaged with society, dependence, it’s a picture of dependence on relatives and carers” (Primary Care OT)*

The Hospital Consultant (interviewed in hospital) stated that older people “*by definition of the word frail are more vulnerable*”. He made a direct link between frailty and a state of vulnerability. The environment or setting could also be associated with a level of vulnerability. For example, an unfamiliar hospital environment increased dependence on ward staff and healthcare routines; as already discussed, this dependence emphasised the level of frailty and vulnerable state.

The primary care Occupational Therapist described a scenario in which an older person she had visited who had consciously avoided contact with health professionals in fear of admission to hospital. The lady associated hospitalisation with increased dependence for her in the future. The primary care Occupational Therapist worked with her to prevent this scenario:

*“She’s extremely independent and is fearful that her independence is going to be taken away. So I’ve worked with her and not always successfully, you know to try and help, to try and make her feel a bit more safe at home” (Primary Care OT)*

The intermediate care Occupational Therapist gave an example from her practice of an older person recently discharged from hospital, but she then received new carers who assessed that she was not safe using her stair lift.

*“So then suddenly she went from managing to just about get on the stair lift and just about get upstairs to the new care provider saying well we don’t think that transfer on the stair lift is safe. And now she’s downstairs and then she’s upset and she’s hostile to us” (Intermediate Care OT)*

The level of this lady’s vulnerability had been exposed by her stay in hospital; she had lost familiar carers who accepted her level of risk prior to admission. The hospital stay had led to an increased level of dependence with a spiralling loss of control and frustration for her. The OT role in this setting considered reducing risk and the level of associated vulnerability, balanced with facilitating independence in activities of daily living. This dynamic appears important to consider for an older person who becomes frail across both hospital and community settings.

The psychological effect of physical decline for an older person was discussed as important when recovering from a trigger event in order to prevent a downward spiral.

*“This patient is at risk of falls, they’ve been generally unwell, they might have had a chest infection but their confidence has gone down a bit and they’ve got down in the dumps. We take them out, assess them on the stairs because they don’t want to go upstairs to bed, because they’re frightened, and you just give them confidence” (Intermediate care rehabilitation assistant)*

To slow or prevent deterioration and thereby vulnerability the case study OTs prescribed equipment, advice and strategies for the older person and their families. The intermediate care Occupational Therapist described her link between risk, effort and vulnerability when analysing everyday activities, and how she made them less effortful, smoother and therefore less risky:

*“I think that effort is a word I use more now than I have ever done in any other practice. Yes the person can do the task, the toilet transfer, but it’s effortful, and when something’s effortful it’s less smooth, it’s vulnerable isn’t it? To not always be successful. And there might be a fall or there might be a mishap or the person won’t feel confident doing it” (Intermediate Care OT)*

This conceptual link between how effortful activities are and how they link to the reduction of risk was an important concept she articulated within the condition of frailty. Within the ‘precarious balance’ of frailty phase the effort required to maintain equilibrium or balance is potentially an important concept for OTs and older people to consider. Choosing how, where and when to expend effort in daily occupations could be critical for an older person who has or may become frail.

An area of vulnerability for older people who are frail and dependent on care and support was discussed in relation to safeguarding. The OT assessment was reported by the MDT members to identify whether an older person was vulnerable. This included whether an older person was deprived of cognitive stimulation or financially vulnerable. Their knowledge and approach to areas of potential vulnerability was recognised as unique in the primary care team:

*“She has particular knowledge and picks things up that maybe we wouldn’t”  
(Primary Care physiotherapist)*

The theme of ‘precarious balance’ has been described from the case study findings. The deteriorating trajectory of frailty can be at different rates with a potential range and cumulative effect of triggers. Being alert to a spiralling picture of risk, vulnerability and consequential dependence may predict or prevent a ‘tipping point’ being reached.

### **8.3 The ‘Tipping Point’**

The ‘tipping point’ occurs within when the ‘balance of frailty’ is disrupted and reaches a critical point of transition from stability to instability. The ‘precarious balance’ phase may have been a precursor to this accelerated phase of crisis for an older person. Three sub-themes were identified, firstly how a tipping point can be predicted, secondly how the tipping point is managed and thirdly, resilience in recovery from a tipping point. Figure 7 illustrates these sub-themes.

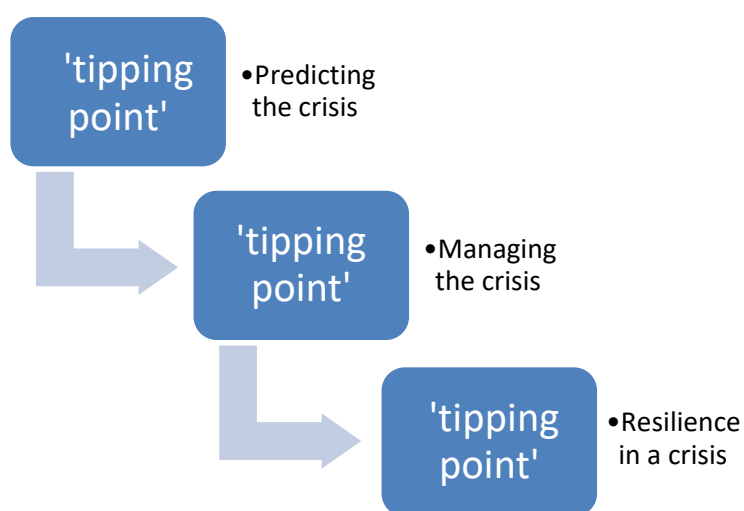


Figure 7. The subthemes of a ‘tipping point’

#### **8.3.1 Predicting the tipping point or crisis**

For those in a ‘precarious balance’ state there is an increasing risk of reaching a ‘tipping point’ where they may no longer be able to stay at home.

Bereavement, changes in role, caring for a partner with dementia and having a palliative condition were all identified as contributory conditions prior to someone reaching a tipping point. The primary care Occupational Therapist



viewed her interventions as to try and delay reaching this tipping point for the older person and their family:

*“People I see are often referred for moving and handling reasons and often the relatives have been caring for them for a long time and very well, and they’re starting to have difficulty moving them because they are immobile and a lot of carers I find are lifting the patients” (Primary Care OT)*

By contrast, the intermediate care services became involved when the tipping point had been already reached, and the interventions were to implement strategies to avoid admission or following discharge from hospital. This service was not designed to predict the tipping point; it was to react to, and manage the crisis. The Occupational Therapist in hospital similarly described a position of a gradual or sudden decline leading to the tipping point of an admission onto the ward. The entry into secondary care can be conceived as the tipping point having been already reached. The OTs’ contribution to the diagnostic importance of understanding how the tipping point had been reached was acknowledged by the hospital Consultant Geriatrician:

*“It’s when they come to me and say well actually things are different, you know they are different to how they were. And actually from a diagnostic point of view it can be absolutely crucial” (Hospital Consultant)*

There is an MDT approach to the diagnosis of the condition of frailty on this ward, whereby the medical perspective is added to by other members of the team including the OTs. The factors that led to the tipping point may not be obvious in an acute setting and the hospital Occupational Therapist was able to add to the diagnostic picture of how this point of crisis had been reached.

In all of the settings the OTs incorporated signposting to a wide range of services in order to prevent a tipping point being reached, anticipating future requirements to enable older people to live as independently as possible. The MDT members made frequent reference to the Occupational Therapist as a valuable source of information on services for onward referral. Having this OT resource in the team enabled them to become more knowledgeable to meet the future needs of older people who may be approaching a tipping point.

### 8.3.2 Managing the tipping point

The 'tipping point' resulting in an acute crisis was reached and 'managed' across all the study settings; however the particular context affected the approach of the Occupational Therapist and their intervention. There was a similarity between intermediate and secondary care settings as the older person had reached a level of crisis, at which point they may be or have been admitted to hospital. The primary care Occupational Therapist identified an increasing and unsustainable level of dependency on family or services in primary care as the tipping point for an older person becoming increasingly frail.

The multiple triggers identified by the hospital Occupational Therapist included malnourishment, dehydration, infections and dementia, all of which had affected an ability to manage at home:

*"We get a lot of people with dementia and who have fallen, we get a lot of people who come in with urine infections so that might indicate they are not drinking enough at home, you know, and that might flag up that somebody's not really coping at home very well" (Hospital OT)*

The intervention of hospital Occupational Therapist at this tipping point was to adopt an investigatory approach to find out the detail prior to admission, to gain a picture of what led to the crisis from the perspectives of the older person and their family members. This could be added to information already gained in A&E or an admission unit:

*"So finding out how somebody was managing previously, if they had any carers, any family support, what they were able to do previously for themselves, any equipment they may have. If they have already been seen by somebody at the front door, we'd check it with them or look into it in a bit more detail" (Hospital OT)*

The adjustment to this acute phase and future implications for the older person were observed by the OT student who described relatives as often being desperately anxious about how they will cope in the future. The hospital Occupational Therapist approach was to adopt an inclusive communication approach and build a relationship with both the older person and their family in preparation for discharge:

*“They always explain what they’re going to do and what the goals are so that they always make sure that the patient or the family member or whoever’s involved always is up to date and what’s happening, from what I’ve seen in my own experience” (Hospital OT student)*

The admission avoidance roles of the Occupational Therapist in intermediate care were to ensure the older person was safe to stay at home and assess their immediate care and health needs:

*“This service is mainly assessment of that person’s function in their home environment, so it is almost like a safety check and a keep-safe check are your first skills” (Intermediate care OT)*

*“In this service I’ve always felt that the OT requirement, you know might be needed straightaway when they first come out for equipment and rails, and set up for home and then no more intervention. In an ideal world I would think maybe the OT review and intervention, if deemed necessary would happen more at, even post four weeks really” (Intermediate care OT)*

She reflected that the initial management of the tipping point at home for an Occupational Therapist was to provide the equipment to improve safety in that period but then further intervention could have been later in their recovery. A tension between the provision of ‘care’ and a timely therapeutic intervention within the intermediate care service was expressed by the intermediate care Occupational Therapist.

An older person who had reached this ‘tipping’ point required a level of OT assessment to identify needs at this point however the older person may also have required a level of ‘support and care’ to remain at home. The level of dependency indicated the older person was still in crisis and recovery had not started.

*“I think it’s quite traumatic for people, (a) to have been in hospital and then (b) to have four double handed calls a day coming into their house. I think it’s really traumatic for people. And people don’t engage with therapy because it takes them a couple of weeks to get used to” (Intermediate care OT)*

*“I don’t know if I can say this here, but it’s kind of, the provision of care works against the OT process, because people come out of hospital with a massive care package and they have been told that they can have four calls a day for six weeks for free” (Intermediate care OT)*

The crisis of a tipping point in primary care was described when an older person was no longer able to remain in the home environment were the primary care Occupational Therapist utilised her case management, coordination and communication skills.

*“So I advocated for him, you know GP, district nurse, care agency, social worker, to have a meeting to discuss his needs. And it was decided that 24 hour care was more appropriate now that he’d expressed he wanted that, so I have done that role” (Primary Care OT)*

The Occupational Therapist in the primary care setting expressed frustration about the occasions when she had identified a ‘tipping point’ for an older person in crisis and other professionals had not always taken action.

*“I try and communicate to the GP that it’s breaking down so much that this person may have to go into respite care which is not what the family want. So GP is saying well that’s not my job. Social Services are saying that’s not my job. Active recovery is saying that’s not my job. Well, this person might be re-admitted to hospital and that certainly isn’t the hospitals’ job, a social admission. So sometimes you come up against a brick wall” (Primary Care OT)*

Her sense of responsibility to ‘manage’ this tipping point was evident, along with her professional isolation to enable a change to occur; this isolation did not appear in the other cases where the OTs had accessible MDT support. Having identified the tipping point, the primary care Occupational Therapist did not want the older person to go into hospital and appeared to be searching for strategies to prevent this.

The contrast between managing the tipping point in the community and the hospital was highlighted by an MDT member in primary care:

*“The thing is, in hospital you can adjust the things to make it so the patient can do it. You’ve got to find a way around it in the community. It’s not always*

*possible. There's not always the bed in the right place and you're not always able to use a bed lever" (Primary Care therapy assistant)*

Working in the community to manage a tipping point needed a pragmatic approach with creative problem-solving skills. OTs had to adapt their approach and assess what equipment was required and acceptable in a timely way in order to manage the crisis in the home environment. The OTs' knowledge of a "wide repertoire" of the equipment available was also observed by an MDT member in primary care. Home is familiar to the older person but may provide logistical challenges; hospital is unfamiliar but is likely to have a standard layout and adaptive equipment available.

The tipping point and level of crisis of an acute admission is still evident on discharge and transition from acute care to the intermediate care service. The vulnerability of older people who have become frail on discharge was described:

*"Sometimes you go in and they're like on the...., they're like death's door and you think Oh My God. And so you have to 999 it again and get them took back in" (MDT member, intermediate care)*

Clearly the transition for the older person from hospital to home was unsuccessful. The remit of the intermediate care service was a timely response to a discharge process however it is apparent that the older person was still at a crisis point. The intermediate care service would assess if this crisis could be managed at home however this period remained one of imbalance and vulnerability for this older person.

### 8.3.3 Resilience

The perception of recovery from a tipping point was influenced by the timing of OT intervention at that point. Identified factors that improved 'resilience' included family support and an existing social network. Having reached a tipping point that required an acute admission, an older person who is frail may find the 'effort' of engaging with therapy overwhelming.

In the hospital case study the OT assistant described going to see someone on the ward three days in a row and trying different techniques to "cajole" and "find

*routes*” to motivate an older person in preparation for returning home. The ability to ‘bounce back’ after or during a ‘tipping point’ could have been additionally affected by being in a hospital environment with its detrimental effect on mood and motivation.

Motivation to engage with a rehabilitative approach varied across the case studies and the level of crisis experienced by the older person. The primary care Occupational Therapist described an older lady who was extremely resilient but resistant to health care professionals’ intervention. She struggled at home, taking 45 minutes to get out of bed using a belt, however when appointments were made she was often not at home. The Occupational Therapist discussed that she fell frequently but had an alarm system which she utilised but then refused to go into hospital. The interpretation of ‘crisis’ differed between the older lady and the healthcare system. The lady demonstrated personal resilience resulting in her remaining at home, the primary care Occupational Therapist adapted her approach, supporting her over the phone.

Family support and provision of care were identified as required for recovery, but could work against a ‘rehabilitative’ and restorative approach. The Occupational Therapist in the primary care case study described a situation where she encouraged the family to stand back from helping an older person so they could see the abilities of the older person.

Psycho-social factors such as bereavement, loneliness, fear of falling and lack of confidence in mobilising all were all discussed as relevant to being able to recover from a tipping point and will be explored further in the context of the OTs’ role in trying to restore the equilibrium for the older person who is frail.

#### **8.4 ‘Restoring the Balance’**

The ‘balance of frailty’ describes frailty as a dynamic, transient condition where the phase of imbalance at a tipping point or crisis can be ‘restored’ to a more stable position. The role of each case study Occupational Therapist was to facilitate and support transition from imbalance to balance within each setting. Regaining this balance was identified as comprising three stages: moving beyond the crisis; assessing and managing risk to restore balance and finally how occupational balance may be achieved and considered in the recovery

process.

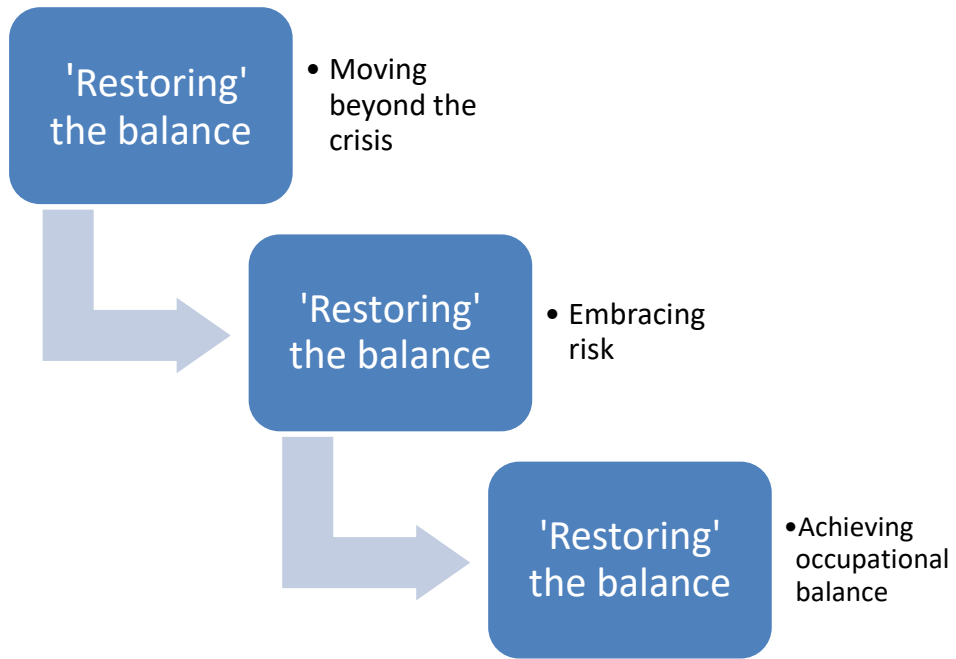


Figure 8. The sub-themes of 'restoring the balance'

#### 8.4.1 Moving beyond the crisis

The context and service parameters determined how the Occupational Therapist worked with an older person beyond a sudden or gradual crisis event. In hospital the role of the Occupational Therapist was influenced by the health and 'readiness' of the older person, along with the expectation that discharge planning would start almost on admission so that the person was able to be discharged as soon as possible after becoming medically fit.

Within the hospital OT's practice there appeared to be limited focus on active rehabilitation, instead there was an emphasis on gaining a collateral history, conducting functional assessments for discharge and transferring information to community colleagues. If an older person was not able to be discharged she delegated to a therapy assistant for practice of daily living skills:

*"We'll do the initial transfers assessment, if we think they need practice our assistant will come and see them" (Hospital OT)*

Time was a limiting factor in the delivery of what she could do to restore the balance and move beyond the crisis. Taking the time to complete an assessment or add to information gained in A&E was critical to enable her to formulate a detailed discharge plan. In hospital, the Occupational Therapist appeared pragmatic about the small window of opportunity to 'restore balance', accepting her momentary role in the beginning of this process. It was acknowledged that assessing an older person in a hospital kitchen was not a fair representation of their abilities and the OT in primary care reflected that she had made inaccurate assessments in the past when she had worked in the hospital setting.

*"You can make mistakes in hospital. You can overprescribe I think or sometimes under, or you could get it completely wrong because you haven't assessed the physical environment yourself" (Primary Care OT)*

The contribution of the intermediate care Occupational Therapist in 'restoring the balance' was also limited. The name of the intermediate care service, 'Active Recovery', suggested a restorative and participatory philosophy. The Occupational Therapist questioned, from a therapy perspective whether this was the case. She experienced a philosophical tension between her current



interventions, with a focus on the provision of care for the older person, and her aspirational, more enabling approach. She reflected on her ability to provide the OT role in the current four week timeframe of the service:

*“There is a window when it might be better for us. What used to happen is we saw them more and for longer, we saw them for six weeks and the OT intervention used to increase in the last three weeks. You normally got people to do meal prep, self-care but bathing was the one you often referred onto primary care, because that was the one you’d not quite got done” (Intermediate Care OT)*

Her observations suggest that in a four week window older people may still be in their tipping point ‘phase’. This indicated the importance of considering that the time to restore and recover their balance was only just beginning. The resilience and ability of an older person to cope with active rehabilitation after an acute crisis could be important in the trajectory of their frailty condition. The emphasis of assessment versus rehabilitation, acute crisis versus gradual recovery and service parameters all impact on the range of potential OT interventions. Adapting to change, understanding of ageing transitions and the timing of intervention to restore balance following a sudden or gradual tipping point are relevant to consider.

The primary care Occupational Therapist described a less acute picture, seeing older people later in their recovery post-discharge or receiving a referral after a gradual deterioration. Her approach and intervention in this recovery phase was an empowering, an engaging and an enabling one wherever possible. She appeared to have more time, flexibility and opportunity to restore the balance, often describing a case management approach to finding longer term solutions to maintain a quality of life for the older person who was frail. Her interventions included provision of advice, signposting, equipment, being an advocate for the older person and practice of daily living activities:

*“When you practice things more and more and do things more, you will feel better etc., and then monitoring that. Meal preparation, somebody’s ability to prepare hot food safely, looking at sequencing in particular when there’s a memory problem” (Primary Care OT)*

This time and opportunity to 'practice' would appear to be greater out of hospital and was considered to be more relevant by both the hospital and community therapists. In contrast the intermediate care Occupational Therapist appeared 'caught in the middle' compared to the pragmatism of the hospital Occupational Therapist and the primary care Occupational Therapist who was more comfortably situated at a less acute phase of either recovery or decline within a frailty condition.

#### 8.4.2 Embracing risk in recovery

Restoring the 'balance of frailty' incurred an element of potential risk which was assessed and managed across the OT cases. Strategies for minimising risk and increasing safety in the home environment were described by both the intermediate and primary care OTs:

*"It's their home so you can't go and say right we'll do this, we'll do that, we'll do the other, we have to suggest things and be quite gentle about it, but looking at minimising the risks as much as possible" (Primary Care OT)*

There was an urgent need in intermediate care to perform an initial safety check. In contrast, the primary care Occupational Therapist was able to take a more collaborative and empowering approach to managing the risks longer-term in the home environment:

*"You have to advise somebody safely without making them feel that you're telling them what they should and shouldn't be doing with their life" (Primary Care OT)*

In hospital, the Occupational Therapist carried out a risk assessment to anticipate potential risks on discharge but appeared to be realistic that this was an initial process that was continued at home. An MDT member in the intermediate care case study referred to things being *"not so obvious in hospital setting but then become more obvious once people are at home"*.

The hospital Occupational Therapist discussed her close relationships with community colleagues and she referred to 'test cases' in developing the 'discharge to assess' way of working. This built trust between them and allowed others to continue the assessment process in the more familiar and realistic

environment of home. In effect, allowing her to transfer the responsibility of the risk assessment and management to them.

Management of any risk also required an agreed way forward with the older person themselves as to what was acceptable. Acknowledgment of the importance of habituation and the relationship with risk was highlighted in the primary care setting by the Occupational Therapist.

*“I think if they’ve been living in that environment for a long time they generally do things the way they have always done things, which is not always the way we would recommend. But sometimes it’s better to leave it that way because changing a routine or a way somebody does something can increase the risk of them falling” (Primary Care OT)*

This understanding that changing a well-established habit or routine within the condition of frailty could increase rather than decrease risk was an important finding in this study. Imperceptible small adaptations in the ‘precarious’ balance phase may contribute to their continuing to achieve activities despite them being more “*effortful*” (Intermediate Care OT). In a restoration phase after a ‘tipping point’, changing any normal habits and routines may require additional effort and therefore have associated risk.

Managing risk in recovery with the older person and their family member or carer was sometimes described as a negotiated position to enable the older person to achieve maximum independence but in a safe way. The intermediate care Occupational Therapist described a negotiated position with a family in making a meal that then became part of a therapeutic intervention:

*“So sometimes you have a family member who says I’m doing the lunchtime call and it would be great if they could do that themselves. And you’re like way hey that’s great we can do that, we can work with that” (Intermediate Care OT)*

The hospital Occupational Therapist described a negotiation between an older couple and their niece to establish the risk factors at home and plan the discharge with them all. The primary care Occupational Therapist had an empowering approach, advocating for the older person and asking the family to allow them to be as independent as possible.

*“Again it’s about reducing the risk to them. I give advice to relatives. And sometimes I do assessments when relatives are there I have to say please just stand back. And sometimes relatives are quite surprised at what people are able to do” (Primary Care OT)*

Managing and embracing risk as part of restoring the balance was described by each case study Occupational Therapist. Anticipating and providing equipment that could reduce potential risk was common to each. In primary care however she had moved beyond the initial provision and considered longer term acceptability and adherence.

#### 8.4.3 Achieving ‘occupational balance’

In order to facilitate the frail older person to recover from a tipping point and ‘restore the balance’, the case study OTs considered the activities of daily living or ‘occupations’ as being central to their practice. At a tipping point these occupations may have been compromised; the focus in recovery was their facilitation of future occupational achievement for the older person. The setting in which they worked had an effect on the range of occupations considered and how occupations were used as a therapeutic medium to restore ‘occupational balance’.

In the acute phases in hospital and the immediate post discharge period, the OT practice appeared to focus on adjustment and the transitional effects of the crisis. There was limited time and scope for achievement of a restorative balance or facilitation of return to previous levels of function or occupational balance.

In the intermediate care setting, the Occupational Therapist gave several examples of the ‘readiness’ for occupational goal-setting being reached at the end of the four week timeframe when she had to stop her intervention and as a result was unable to utilise her progression and rehabilitative skills:

*“I think the challenge is the goal-setting, you’re in for a very short time, you don’t have the same discussion because people are in a whirlwind really, to be honest people are just overwhelmed” (Intermediate Care OT)*

Achieving 'occupational balance' in this current acute intermediate care service was not possible from her perspective; the time available for older people in the service appeared to be too short. The intermediate care Occupational Therapist had completed an audit of twenty patients which identified how many required on-going treatment after the four week period. One of her main findings was that some older people refused to be transferred to another service after the four weeks finished so their occupational goals were not able to be achieved.

The resilience of the frail older person to cope with multiple transitions, when recovering their balance, appears an important consideration. In primary care the Occupational Therapist referred to the transition from hospital to home and the impact this could have on occupational independence:

*"They've had a period of time in hospital where things were done for them and this is what I'll try and say, well you used to be doing that and you were managing quite well so shall we try again? You are negotiating with them rather than they're negotiating with you" (Primary Care OT)*

An assessment appeared to be multi-dimensional in primary care, looking at the "whole picture" of a person's life and what they wish to achieve: *"it's got to be their needs and wants, not yours"* (Primary Care therapy assistant). This may be an easier discussion in a person's home as compared to an acute episode in hospital where it may be more difficult for the therapist to keep achievement of occupational goals on an equal standing with the pressure for discharge.

The occupation of making a meal and the time required to facilitate this was discussed by the primary care Occupational Therapist. She was frustrated that the care agency did not have the time to cook with the older person only providing a 'ready meal'. The Occupational Therapist wanted the process of cooking a meal to contribute to 'restoring the occupational balance' for this lady:

*"And she can do it and I've been with her while she does it but she needs help with decision making but that's not available, Oh no we can't do that, we can't"*

*provide that extra time. And it's so frustrating because the system is making people dependent, and it's not empowering them" (Primary Care OT)*

The achievement of occupations in the home by provision of equipment was widely recognised by MDT team:

*"With her knowledge of what's available to help them it can change the quality of a patient's life, in that just by knowing that there is a tin opener, equipment that can just make a massive difference that a patient hasn't been able to eat that type of food because they haven't been able to open the tin (Primary Care Physiotherapist)*

There was an acknowledgement that a hospital environment takes a lot of things away from an individual and that older people can be isolated by their bed and *"I think a lot of older people get bored"* (Hospital therapy assistant). The geography of a ward environment can also work against achievement of everyday occupations.

*"It's not your home, so then trying to actually have that independence and get to the toilet becomes so much harder because you are faced with a big open space and especially if you have come in with falls and you've lost your confidence" (Hospital Physiotherapist)*

Maintaining an occupational balance in an acute environment is clearly challenging, as compared to being at home, but examples of group work, trips off the ward and encouraging social dining were examples provided in hospital. An insight and understanding of how occupational deprivation could further disrupt the balance of a frail condition in hospital or a care home environment is potentially useful to consider for future practice.

The context of hospital appeared to align more with assessment of some occupations and the home for assessment and progression or practice of wider occupations in order to 'restore the balance'. The urgency of the intermediate care service led them to prioritise the safety of immediate and vital daily occupations; the primary care setting was more conducive to a greater range of activities, however this was still reliant on referral on to other services for longer term 'occupational balance'.

## **8.6 Chapter Summary**

The three cross analysis themes presented in this chapter collectively contribute to the 'balance of frailty' concept which captures the dynamic and non-linear nature of the context in which OTs are working. The following chapter will discuss these findings and their relevance to professional practice in relation to the existing body of literature.

## **Chapter 9 - Discussion of Findings**

### **9.1 Introduction**

The aim of this study was to explore the role and practice of three Occupational Therapists (OTs) with frail older people within an integrated trust. In this chapter, I will provide a summary of the key study findings. In the discussion section that follows, those findings will be considered in relation to the wider body of literature and in terms of their implications for practice. The discussion will be centred round the 'balance of frailty' conceptual framework and its original contribution as a new method of describing the condition of frailty and how the role of OTs applies across the potential transitional stages.

There are three sections to the discussion. The first will consider the triggers of frailty and how these can be better identified and understood. The second will focus on the risks of a frail condition for older people and explore the inherent tensions associated with managing that risk. In the third section, the discussion will move onto considering the 'windows of opportunity' for OT interventions. The final two sections of the chapter will detail the strengths and limitations of the study followed by a reflective account that highlights my key challenges and learning.

### **9.2 Summary and Key Study Findings**

This study found that perceptions of the condition of frailty are variable across health, social care and academic professionals. The biomedical perception of 'diminished reserves' in order to identify, 'label' and measure frailty was contrasted by the stakeholder view that frailty should be defined by the older person. The stakeholders recognised that OTs had the skills to identify the triggers of frailty and that they were proactive, adaptable, open and pragmatic in using problem-solving skills to help people achieve meaningful activities. The behaviours they observed included a curiosity to understand complexity and an empowering approach with older people. They commented however that the holistic approach of OT did not always 'fit' within a biomedical environment. The OT approach to managing risk as part of their role was discussed as a positive attribute of the OT role. However, the stakeholders observed that the



environment in which an Occupational Therapist worked could impact on how their management of risk may be perceived.

The stakeholders were ambitious for the future role of OT with frail older people. They described a role in prevention, including avoidance of admission to acute care and prevention of deterioration or deconditioning. The stakeholders identified that OTs could promote physical and psychological health and wellbeing, promote social engagement and anticipate the trigger points for an older person becoming frail in the future. This proactive management of 'pre-frail' older people was discussed with specific reference to the risk of falling and for those who are bereaved.

The cross-case analysis identified three stages or states of a frail condition. These were a precarious balance, the tipping point and restoring balance. These stages of a frail condition exist within a deteriorating trajectory of the long-term condition of frailty. They contributed to development of the conceptual framework 'balance of frailty'.

A precarious balance was a state that described the vulnerable and transient nature of the condition of frailty. Within this stage the deteriorating trajectory of frailty was identified as being either sudden or gradual and imbalance could be caused by a single or series of stressors or triggers. The spiral of vulnerability (Section 8.2.3) identified the consequential relationship between the numbers of triggers that could lead to a tipping point. This tipping point indicated that the 'imbalance' had reached a point of crisis for the older person. How this tipping point was managed included the diagnosis of how this point had been reached and was discussed in Section 8.3.2. The identification of immediate intervention along with factors leading to resilience for an older person was identified in order to recover from a tipping point.

The third main phase within the 'balance of frailty' conceptual model was 'restoring' the balance by moving towards a more stable position from imbalance to balance. Moving beyond the crisis with the acknowledgement of the risk factors within a frail condition was identified in order to achieve occupational balance. To 'restore the balance', the OT had a role that included use of assistive technology to maintain function, independence and education of the older person, families and other professionals.

The key findings from this study are:

1. OTs had an approach to the assessment and treatment of older people who have become frail which contributed an additional and enhanced psychosocial dimension to the traditional biomedical model of the frail condition. This was demonstrated by their identification of the range of 'silent' triggers that may contribute to the diagnosis of a pre-frail or frail condition.
2. This enhanced psychosocial approach occurred across acute, intermediate and community care settings. However, the specific setting had a significant effect on the time available for assessment, the level of assessment and the frequency and intensity of treatment possible to deliver. OTs had a role across all levels of frailty and in both acute and community contexts.
3. The assessment of risk across the trajectory of frailty was embraced by the knowledge, skills and approach of OTs in home and community settings. The specific setting had an influence on OT practice, producing variance in the perception, assessment and 'management' of the risk factors for a frail older person. The assessment of risk and the empowerment of older people to make choices when they become frail is a key area of OT practice.
4. There were key windows of opportunity for an Occupational Therapist to contribute to the health, well-being and active ageing of an older person who is at risk of frailty or who had become frail. These opportunities were constrained by the time available, service criteria and the transitional phase of the frail older person, rather than the aspiration or skills of the therapists themselves. Occupational Therapists had a unique 'occupational lens' to the transitions within a frail condition in both the acute and the home contexts.
5. OT brings a unique perspective to our understanding of the frail condition. From this perspective, the effect of a frail condition manifests

in terms of occupational performance and the focus is on how a frailty trajectory is caused by occupational disruption and can lead to occupational deprivation. This perspective has substantial value in terms of its contribution to a MDT or a comprehensive geriatric assessment (CGA) of the diagnosis and associated risks of frailty. It is also well aligned with a proactive community-based approach to prediction and intervention for the early stages of frailty.

6. The 'balance of frailty' offers a conceptual framework for understanding the condition of frailty and how the role of OTs may be applied, working across the potential transitional stages in acute and community settings to support the individual and maximise health outcomes.

The findings of this study and the 'balance of frailty' framework will now be considered in the context of current literature. The implications for practice will also be considered. The discussion will focus on three aspects: firstly identifying and understanding the triggers of frailty, secondly the risks of a frail condition for older people and finally the 'windows of opportunity' for OT intervention.

### **9.3 The Triggers of Frailty**

The point at which an older person becomes frail can be unclear. The response to a sudden crisis may result in the condition becoming visible but it may have been present for some time. This section will explore how the frailty trajectory may start and how OTs can be instrumental in the diagnosis of the silent triggers that may indicate that an older person is experiencing a level of frailty. The primary care Occupational Therapist utilised the word 'trigger of frailty' (Section 7.2.2.) rather than the more medicalised term of 'stressor' (Young, 2015, Lang et al., 2009). There was recognition across the OT cases that there were significant events that could affect the older person and recovery from these events was affected by the level of frailty experienced. The 'balance of frailty' conceptual framework indicated the range of phases in which the triggers of frailty can be better detected.

### 9.3.1 The 'frailty trajectory'

In the literature the identification and diagnosis of frailty has been approached largely from a medical perspective, ranging from the phenotype of frailty (Fried et al., 2001), the cumulative deficit model (Rockwood et al., 2005) and the integrated model of frailty (Gobbens et al., 2010). However, there has been a gradual recognition that the diagnosis of frailty cannot rely on physiological measurement alone and that the components of mood and cognition (Bergman et al., 2007) and social factors (Gobbens et al., 2010) are important to consider. An OT specific measurement of frailty was not apparent during my scoping review of the current literature. However, Young (2015) advocated the use of the PRISMA questionnaire in primary care by all care professionals to seek to establish the presence of frailty. The British Geriatrics Society (2014) advocated a MDT contribution to a CGA. McIntyre and Atwal (2005) suggested the International Classification of Functioning (WHO, 2001) as a framework to promote occupational performance for older people. The constructed 'balance of frailty' framework from this study provides a 'practice' model in which therapists and other professionals can recognise the stages of frailty that may be present.

Daniels et al. (2008) highlighted the need for OTs and Physical Therapists (PTs) to have a more comprehensive understanding of the multi-dimensional nature of frailty in order to target appropriate intervention. The case study OTs demonstrated a wide-ranging perspective on the components of frailty including physical, functional, psycho-social, emotional and cognitive factors. Oliver (2017) suggested that holistic models of care were required for the multi-faceted needs of older people and that a purely medical model was no longer 'the answer' in the treatment of frailty. The dual training of OTs in physical and mental health conditions and consideration of the achievement of meaningful activities (occupations) was highly applicable to the condition of frailty. The findings from this study indicated that in the deteriorating trajectory of frailty activities may become more difficult in the pre-frail (Lang et al., 2009) or 'precarious' stage. OTs conducted assessments of the activities of daily living

or occupations and through this, detected when these activities become more difficult in a frail condition.

The case study OTs identified that an obvious 'drop' in function can be caused by a trigger event such as a fall, or could be as a result of an accumulation of events that may be linked. The positioning of the case study OTs in an integrated healthcare trust translated to a largely reactive model of care following a trigger event. In their investigation of this trigger event they identified wide-ranging possible causes including psycho-social factors such as bereavement or a recent change in accommodation. The OT role considers the person, their environment and the activities or occupations they wish to achieve (Law et al., 1996). This can give them an 'umbrella' or applied view of a range of factors that may have led to a sudden event or a gradual decline. OTs in this integrated trust were more likely to detect the early stages of frailty in community care. In all settings however they were likely to investigate the history behind a trigger or stressor event, thereby detecting any disruption to occupations.

### 9.3.2 The silent triggers of frailty

The start of a frailty journey, that is the transition from non-frail to a pre-frail state, is potentially unclear, undetected and ultimately may be untreated in older people. Lang et al. (2009) referred to a latent, or clinically silent, phase of frailty when higher levels of frailty could be prevented or postponed. The case study OTs described their focus on both the social and psychological factors that were important in their assessment of a frail condition. These factors may have been previously undetected. Building on the description of 'clinically silent' Lang et al. (2009), these can be framed as the 'socially silent' and 'cognitively silent' factors that can indicate the beginning of a frail condition. The OTs provided several examples of the factors that can be detected by an occupational assessment or a tenacious enquiry when the picture is either not complete or does not add up. The hospital Occupational Therapist described this as her "*weird-ometer*" being triggered.

The diagnosis and remediation of occupational disruption by OTs can contribute to the early detection of the 'silent triggers' of frailty. Occupations change to meet the internal and external demands of an individual (McColl,

2003). The diminishing reserves (Rodriguez-Manas, 2013) at the start of the frailty journey could be interpreted as an 'internal demand' that could be clinically silent (Lang et al., 2009) for an older person. The effect of this internal demand is then only apparent when external demands (e.g. occupations) become more difficult. If there has been a subtle change in occupations, for example having to use an adapted technique, this could indicate the beginnings of a frail condition when silent triggers are present but undetected. If occupations need to change or be adapted, McColl (2003) described that 'mastery' of a new technique is required. The skills and knowledge of OTs can enable them to recognise those silent triggers that may indicate the presence of frailty and detect the resultant difficulty with daily activities. OTs then problem-solve how to master these activities in an adapted method and compensatory approach.

The training and knowledge of OTs in physical, functional, psychological, cognitive and social factors enables them to assess a wide range of silent triggers that may be present and indicate a level of frailty in an older person. The case study OTs described a range of silent triggers that were significant for an older person. In hospital, detection of silent triggers may require a detailed level of assessment. If this is a first admission then this could have been the first time these difficulties were identified and investigated. This early proactive assessment is essential, especially in a time-limited period in acute care. Detection of silent triggers may contribute to the presence or level of frailty diagnosis and any follow up care, support or rehabilitation needed after discharge.

In a community setting there are likely to be more 'obvious' signs that occupations have become more difficult as this is their normal situation. A community setting enables silent triggers to be detected within the normal routines and activities of someone's life. The signs that occupations have become more difficult could include activities, both inside and out of the home environment, being affected. An example given by the OTs included a fall with no physical injury, leading to a lack of confidence to mobilise outside of the home. Occupations are disrupted resulting in isolation and deconditioning. Unless the 'root cause' is addressed then the 'spiral of vulnerability' (Chapter 8) may begin for an older person at the beginning of a frailty journey. The

philosophy and approach of OTs align with a holistic view on the wide range of underlying factors relevant to the detection and diagnosis of frailty in older people. Their contribution could be incorporated and recognised in both primary care and secondary care processes in order to anticipate and/or prevent deterioration and deconditioning.

Knowledge of the concept of 'silent triggers' could assist less experienced OTs or other care professionals to be alert to the early signs that an older person is becoming frail. A trigger event often results in a referral into a service.

Investigation into the background of what had led to the event will give insight into potential silent triggers. Investigation into 'silent triggers' is likely to be more meaningful in a person's familiar environment. This can contribute to the future management of a frail condition. In these cases, the relationship between the older person and the Occupational Therapist is essential in order to maximise the prevention of future deterioration and reduction of risk factors.

### 9.3.3 'Acceptable' intervention

The relevance of awareness and detection of silent triggers or stressors of a frail condition is to utilise this knowledge to reduce the impact for the older person in their day-to-day life. This acknowledgment that there are the beginnings of a 'deficit' (Rockwood et al., 2005) could be a sensitive and emotive discussion with an older person. One stakeholder inferred that frailty was defined by the person themselves. If there is no acknowledgment or recognition by the older person of any required change or adaptation, the OTs may need to have an open discussion on what is important to the older person and the ways in which this could be achieved.

The community care Occupational Therapist gave an example of an older lady going out when she knew health professionals were visiting in order to avoid them. This could have been a result of fear of what may be suggested or expected, or perhaps the lady did not consider that she needed help. The required communication and engagement skill of an Occupational Therapist to blend their assessment with what is acceptable to an older person at the beginning of a frailty journey may come with clinical experience. All the case study OTs were at a senior level and demonstrated that they understood this

tension between their professional perspective and what the older person would find helpful and meaningful to them.

An older person may be more assertive about their wishes in the 'precarious' stage of pre-frailty. If a tipping point is reached then the dynamic between the professional and the older person is likely to be different. Moats (2007) described how this dynamic favoured the professional in discharge decisions from the acute setting. Their study did not address the older person's perspective about the approach that was most acceptable to them. It would be useful to build on the knowledge of silent triggers and how and when OTs can empower an older people at an early stage of this long-term condition.

## **9.4 The Risks of Frailty**

The identification of frailty and a consequent set of risks are often referred to interchangeably and in direct association with each other. The identification of silent triggers can be linked with 'hidden risks' within the frailty trajectory. OTs explore when activities become difficult. The correlation between effort required in daily tasks when an older person has become frail and associated risk factors has emerged in this study. The approach to the management of risk in frailty can be one of co-production, where risk is embraced or an approach in which control is exercised. The context in which OTs' work can influence this perception and the perception by others of them.

### **9.4.1 Hidden risks of frailty**

In the attempt to identify an older person who has become frail, the factors can be formally measured and associated with elements of risk. The concept of frailty and risks are often used interchangeably. As an example, the 'Frailsafe' tool (Downes and Stewart, 2010) asks three screening questions about reduced mobility, the presence of confusion and whether the person resides in a care home. If these are positively answered then further assessments are recommended. These three questions provide potential risk markers for frailty. Fried et al.'s (2001) five frailty phenotype questions target weight loss, exhaustion, slow walking speed, poor endurance and weakness as indicators of a frail condition. These indicators are then potentially associated with



physiological risks of malnutrition, falls and difficulty completing essential daily tasks. The Edmonton Frail Scale (Rockwood et al., 2005) includes a score of 'Functional Independence' including meal preparation, shopping, transportation, using the telephone, housekeeping, laundry, managing money and taking medication. Any reported difficulty with each activity contributes to a level of frailty score.

Formal measurement tools identify where there may be an obvious or reported difficulty. However, if the stressor/triggers are less apparent or 'silent' then there may be a missed opportunity to identify future risk factors. A score of 'difficulty with' in itself does not determine the underlying reason behind the difficulty. An Occupational Therapist investigates when daily occupations are disrupted and explores possible underlying reasons. Assessment is by observation and analysis of the activity in order to ascertain the cause. This investigation may reveal silent triggers with consequent 'hidden risks'.

The primary care Occupational Therapist discussed how everyday activities, such as financial management and meal preparation, had subtle and hidden risks. As an example an older person with 'cognitively silent' early stage dementia may find the planning and sequencing of cooking a meal using fresh ingredients overwhelming. The primary care Occupational Therapist described how the task could be achievable with guidance and support. However, the home care worker did not have the time to do this. A ready meal was provided, which the person did not want to eat. The potential consequences of this were reduced nutritional intake, weakness and lethargy which align with the phenotype of frailty (Fried et al., 2001). Frailty tools measure outcome of deterioration beyond 'normal' parameters, but they do not detect the cause of this deterioration. OTs can contribute to an increased understanding of the risk factors as a result of a change in frailty level.

Exploring day to day occupations is therefore a potentially powerful indicator of frailty. Embracing risks associated with the achievement of everyday activities aligned with the practice of the OTs in this study. OTs can pay particular attention to a task, exploring which elements have become difficult and adopt a collaborative approach with the older person in order to address and reduce the level of risk. Howlett and Rockwood (2013) identified that accumulated deficits

or frailty indicators can be quantified in a frailty index. However these deficits may not be absolutely aligned with risk. They identified that mitigating factors can affect the level of risk. OTs can mitigate risk for an older person who is becoming frail by assessment of occupations and implementing a range of strategies. This can include advice on an alternative technique, practice of this technique or provision of equipment to reduce the associated risk. The case study OTs were aware of those factors that may increase risk such as isolation or poor support networks, These 'socially silent' factors, if detected, provided an opportunity for OTs to address the 'hidden' risk of those factors.

The trajectory of frailty was identified by the case study OTs as a gradual deterioration or something that becomes apparent following a sudden crisis and consequent drop in performance as described by Young (2015). A crisis or sudden change is likely to instigate referral into a reactive healthcare service. However a gradual deterioration may go undetected with a higher likelihood of 'hidden risks'. The OTs discussed how a fall can be the start of a spiral of vulnerability (Chapter 8) with subsequent fear of future falls, reduced mobility and social isolation. If a fall and the consequences are undisclosed (silent) then the first 'sign' could be associated with a higher level of risk for the older person. Early identification of a pre-frail condition appears to be a potential timely opportunity in which to assess 'hidden risks' early. The current design of the healthcare system is reactive in nature. Associated OT resources may therefore be unlikely to be aware of these early opportunities. The 'detective-like' and curious approach by OTs to a sudden drop in occupational performance may reveal 'hidden' risks resultant from silent triggers. In urgent care, reactive services, this investigation is still essential, potentially to prevent future admission or readmission to acute care.

#### 9.4.2 The 'effort' of frailty

OTs can provide a unique perspective to the consideration of everyday occupations across the trajectory of the phases of a frail condition. This study has identified that the condition of frailty led to occupations requiring more effort. This increased effort may result in an increased level of risk to achieve the desired task. The intermediate care Occupational Therapist discussed the link between effort and risk for an older person who has become frail. She

described an observed correlation between effort and the 'smoothness' of an activity or occupation. If the activity was less smooth then it was associated with a higher level of risk. This was an important observation that is applicable to the variable condition of frailty. Detection of an activity being less smooth in the pre-frail or 'precarious' phase of a frail condition may well be an indicator of subtle and/or gradual development towards a higher level of frailty.

OTs 'break down' activities into stages or steps (activity analysis) to determine which elements of a task are difficult. The assessment of a subtle or gradual decline in performance in the early stages of frailty through activity analysis would be a valuable contribution to the reduction of future risk for the older person. Bathing or showering independently and safely is a practical example of an everyday activity that may be affected if the older person has reduced mobility, strength, endurance or a weak grip as described in the phenotype of frailty (Fried et al., 2001).

If the condition or level of frailty has been identified as more advanced, then the effort and associated risk in daily activities may both be higher. The advice, strategies or equipment to reduce the risk and effort can be provided by OTs in conjunction with the MDT. In secondary care, the case study Occupational Therapist unsurprisingly described higher levels of frailty that required an immediate response to reduce the risk of an unfamiliar environment and the additional risks this could present. Potential deconditioning through inactivity (NHSE, 2017) and exposure to infection are well-recognised in secondary care (Kings Fund, 2014). The 'effort' for an older person, who may be already frail to adjust to an acute environment could present as the sudden drop (Young, 2015) in functional abilities. This may then not present an accurate reflection of their usual performance. The community OTs reported an over-prescription of equipment from secondary care. Once at home, the equipment was not always needed or was 'incorrect'. The discharge to assess principle (NHS England, 2016) aims to mitigate the effects and risks of a prolonged stay in acute care so that a person can be discharged and receive a more accurate assessment within their own home.

The increasing effort of everyday activities for older people who are frail was explored by Fisher et al. (2007). They suggest that improvements in activities of

daily living using a compensatory approach could enable the task to be done differently and with less effort. The development of the 'balance of frailty' conceptual framework in this study builds on the findings of Fisher et al (2007). The level of effort and associated risk can be mapped across the phases of a frail condition with an adapted approach according to the level of frailty identified. A crisis or tipping point would require a more robust response to the risk reduction or 'safety first' approach as described by the intermediate care Occupational Therapist in order to reduce the likelihood of admission.

An important factor linked to the 'effort' of every-day tasks is the learnt habits and routines that have been adopted in order to continue to achieve the activity. The importance of considering habituation when making any adaptation to a task was discussed by the community care Occupational Therapist. She stressed the importance of considering that a change of habit and routine could in fact increase rather than decrease the risk of undertaking that activity. The model of human occupation (Keilhofner, 2005) is a well-established occupation-focused framework that considers how volition, habituation and performance capacity affects occupational achievement with illness or disability. Habituation comprises habits and roles which can be resistant to change, the interwoven nature of habits and roles are evident in daily life. The onset of disability or illness can disturb established habits and so new habits would need to be learned or developed. This requires sustained practice in order to change habituation. With the onset of a frailty process this sustained practice to relearn an established habit will be affected by the amount of effort and energy levels that are experienced by the older person. Higher levels of frailty may require a higher level of effort for the older person in order to establish and new habit or routine.

For older people who have become frail, Rowles (2000) suggested that gradual, imperceptible environmental adjustments may have been made and 'learnt through repetition' (habituation). This gradual adaptation of habits and routines forms a 'rhythm' to the day (Rowles, 2000). If this rhythm is disrupted by a sudden change in the trajectory of a frailty condition this gradual achievable adjustment may be insufficient to achieve desired tasks. OTs can contribute to preserving or creating and sustaining the habitual patterns of daily activities. Changing well-established occupational methods needs to consider

the level of effort required in order to establish new techniques and the consequent risk factors. If there are cognitively silent factors present then the executive functions required to learn an unfamiliar and new method could potentially be affected ('old habits die hard'). Adaptation of a familiar environment therefore requires careful and sensitive consideration for an older person who is or may become frail, in order to maximise their well-being and quality of life without limiting their autonomy and freedom.

A hospital ward environment provides little opportunity for usual occupational patterns and rhythm, with an older person being catapulted into an unfamiliar environment with little autonomy in daily routines. If occupational balance was maintained by adapted habits and routines in a home environment, it is unsurprising that the acute environment in itself presents challenges and risks to an older person who has previously been in a 'precarious' stage of their condition. Comparing performance of a cooking task between the home and a clinic environment, Provencher et al. (2013) found that performance at home was higher, especially if executive functions had been affected. OTs aspired to assess occupational performance in the acute setting by replicating 'normal' conditions as far as possible. However, given the imperceptible and subtle techniques that may have been adopted at home by a frail older person, the individual may still be disadvantaged in this unfamiliar context. It is important that an Occupational Therapist making an assessment outside a familiar environment considers the effort and existing adaptive strategies for an older person who has an increased level of frailty. Without this consideration inaccurate assessments and conclusions could occur.

#### 9.4.3 Control vs co-production of risk

The close link between a frail condition and risk factors for the older person was acknowledged across the case studies. The OTs perceived that their role was to minimise the level of risk to prevent future harm, however their approach appeared to be affected by the context in which they worked as well as the level of frailty of the older person. As previously discussed (Section 9.2.3), the power dynamic between a therapist and an older person in the assessment of discharge from hospital was explored by Moats (2007). She stated that the balance between safety and autonomy within discharge decisions can be

compromised, particularly if the older person is cognitively impaired. The hospital Occupational Therapist in this study emphasised the importance of liaison with family members to understand the factors, including any contributory risk factors, which led to admission.

The assessment of risk and 'control' measures in an acute setting is vital in order to prevent harm or injury (for example pressure sores or falls). However, this is compromised by the further risk factors of inactivity, deconditioning, an unfamiliar environment and disruption of normal habits and routines. Facilitation of discharge out of the acute environment was the predominant theme of the hospital OT literature. This study suggests that there is an essential role for OTs on admission to acute care to detect and consider the silent triggers and associated risks for frail older people. The hospital Occupational Therapist liaised between the older person, their family and the MDT members to 'manage' the crisis of admission and facilitate discharge. OTs need to be aware of the specific risks of occupational disruption in an acute environment for a frail older person. The tension is how to empower and embrace positive risk-taking, including discharge decisions, while also reducing the risk of future harm.

An enquiring OT approach to identify and 'embrace' risk in order to facilitate discharge from the hospital setting is endorsed by the RCOT (2018) guidance. Findings from this study contributed to this document. One of the stakeholders suggested that there is a perception by colleagues that hospital OTs could be 'risk averse'. However, the opposite enabling and empowering approach was evident in this hospital OT case study. Some cautious behaviour and less autonomy were reported in hospital OT practice by a stakeholder. This aligns with the view from Turner (2011) that organisations could have a constraining effect where professionals have to align with the philosophy of their employer rather than their profession. The perception that OTs in hospital may be 'risk averse' could arise from their investigative approach to understanding less obvious and silent triggers and 'hidden risks'. OTs may highlight factors that had been previously undetected. In the acute environment, this could be perceived as 'caution' or preventing a rapid discharge.

Unravelling complex presentations in a short time-frame is required in an acute environment, frailty being a complex multi-faceted condition. The tipping point

of an admission can be the opportunity to reduce immediate obvious risks, but also to begin to diagnose the silent triggers and hidden risks that may have led to this admission. This study provides a conceptual framework for OTs to articulate their contribution to a comprehensive 'admission diagnosis' at a tipping point of frailty and suggest strategies to reduce future risk factors for the older person on discharge.

The intermediate care Occupational Therapist had an imperative to reduce immediate risks to prevent harm. She understood the link between reduction of effort and the reduction of risk. However, she also reflected on the variance in levels of risk assessment between health and social care professionals in the home environment. The acceptance of a level of risk by the older person and carer had been challenged when new carers came into the home after an acute admission. This caused stress to the older person and a reduction in independence, for example by not being 'allowed' to go upstairs by the new carers. How to empower an older person who has become frail to embrace the associated risks, whilst remaining in control of their chosen activities is a challenging balance, both for the older person and professionals.

An OT's understanding of the effect of the changing states of frailty on occupations may inform their recommendation of future equipment or strategies which could enable the older person to 'stay in control' and reduce future effort and associated risk. This is dependent on the older person being willing to 'future-proof' when there may be little apparent current need. Such early intervention was not evident in this study. However, there appears to be considerable scope to work within alternative sectors such as housing, third sector or community groups, to be proactive in a collaborative approach with older people who are not (yet) frail.

The community care Occupational Therapist adopted a collaborative and co-produced style with the older person in their home. To decide how to minimise risk factors, she actively encouraged family members to 'allow' the older person to try activities themselves. This approach enabled the person to be more in control of choosing how and when to undertake activities. If 'effort' has to be rationed in a frail condition then this choice is important to consider. Minimising risk whilst enabling the person to stay empowered in the decisions they chose



to make. In the current care and support systems for older people it is often the opposite, with time-limited visits by health and social care practitioners to complete 'essential' tasks.

This study suggests that allowing choice as to which occupations are important, and prioritising these, may need to be considered for someone who is frail. Minimising future harm by reducing identified risk factors will always be a driver of OT practice. However, if older people are given the choice of how and when to spend effort and time, a co-produced approach can be adopted by all health and care professionals. OTs can use their expertise to suggest the methods to adopt in order to make everyday occupations achievable.

This study adds a depth of understanding about how OTs can contribute to the assessment of the risks of frailty. Their focus on daily occupation can reveal hidden risks not immediately apparent. They can also be aware of the link between effort and a frail condition, and how habituation is vital to consider when suggesting an adaptive strategy to reduce risk. The context in which an OT works is likely to affect their approach to minimising risk. In this study the OTs described how they contributed both in the hospital and community settings to investigating, predicting and embracing the risks that can be associated with frailty.

## **9.5 The Frailty 'Windows of Opportunity'**

Across the trajectory of frailty there are windows of opportunity for OTs to influence the state of occupational imbalance experienced by an older person. To explore the points at which an OT intervention could be most effective, the levels of frailty, the transitions between these levels and the size of the window itself is discussed.

### **9.5.1 Levels of frailty**

As previously described, frailty has been framed as a dynamic condition between a state of balance for non-frail older people, imbalance for pre-frail older people (Lang et al., 2009) and loss of balance when the tipping point of frailty is reached. In this study the community care environment provided the OT with the opportunity to intervene with a range of all frailty levels. The community care Occupational Therapist described a rehabilitative approach



with improvements in functioning in addition to supporting older people with the gradual transition to an end stage, palliative condition. A referral into the intermediate care service indicated a transition beyond the non-frail or pre-frail levels of frailty. The 'balance' of frailty had reached a tipping point, requiring a reactive immediate response from the active recovery service in order to facilitate the older person to remain at home. The admission to secondary care in itself was 'a tipping point' or a state of imbalance where the Occupational Therapist recognised the level of crisis both for the individual and their family.

The recognition of these dynamic levels of frailty is important to consider across practice contexts. The balance of frailty framework provides a framework to articulate where and when OT practice can influence the frailty states of imbalance for older people. Figure 9 illustrates how the levels of frailty and imbalance could 'map' across contexts.

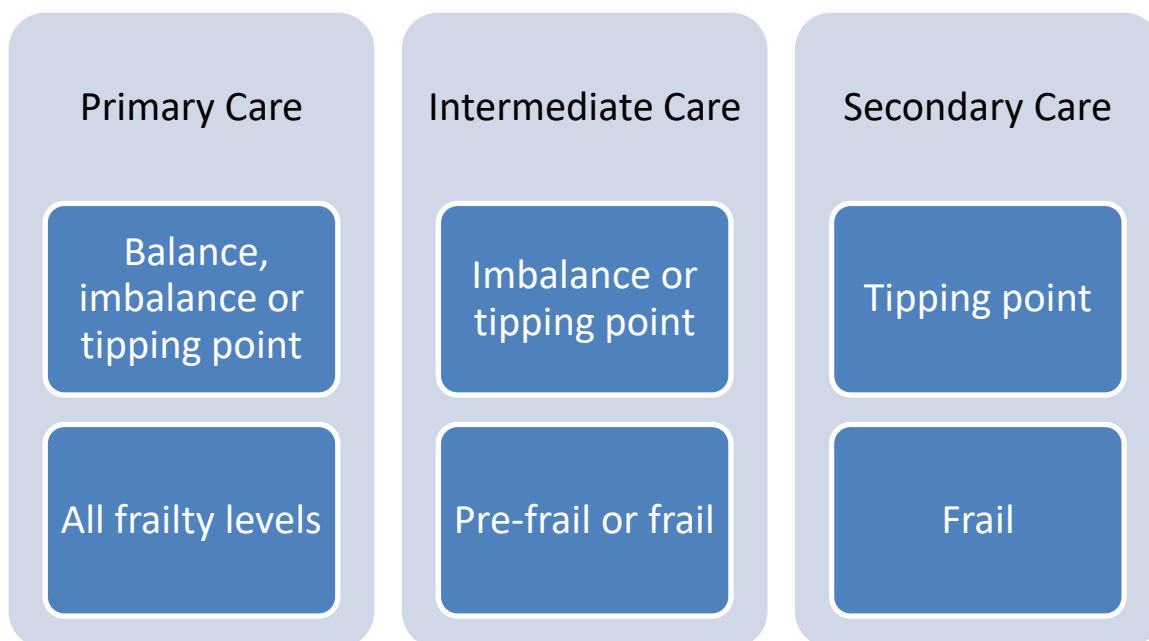


Figure 9. Mapped levels of frailty across settings

The variable levels of frailty provide a range of opportunities for OT intervention. Gill et al. (2004) conducted a longitudinal study (n=754) of older people aged 70+ years over a period of 54 months, whose levels of frailty were assessed at 18 month intervals using the modified five criteria initially operationalized by Fried et al. (2001). The levels of frailty were categorised as

non-frail, pre-frail and frail. Their findings suggested that over time as the cohort aged the proportion of participants who were frail increased and those that were pre-frail or non-frail decreased. 56.7% of participants were assessed to have had at least one transition between two of the three frailty states. The transitions to greater states of frailty were more common with the probability of transitioning from being frail to non-frail being very low.

Gill et al. (2004) suggest that the dynamic nature of frailty provides ample opportunity for prevention and remediation, although they do not specify at which level this could be most effective. This study does not address the potential causes (stressors or triggers) of the transition from one level to another. However, from my study there appear to be multiple transitional phases where a proactive approach could affect the transitional rate across frailty levels.

In this research study the case study OTs did not measure frailty using formal measures. However, they observed that the condition of frailty had phases and that their intervention may affect the rate or adjustment to an increased frailty level. The ability to reduce disability in community living frail older people using a nurse-led, MDT prevention of care approach (Daniels et al., 2011) was evaluated by Metzelthin et al. (2013). This approach was found not to be effective in reducing frailty-associated levels of disability. Challenges within this study included the selection process resulting in high levels of frailty in the cohort group, along with a lack of clarity about the study intervention and normal care processes. It is possible that the selection criteria of this study excluded pre-frail older people who may have benefited from the MDT approach. It is apparent that the timing of, and approach to, interventions to prevent the rate of deterioration of frailty are significant current challenges for both researchers and practitioners.

If formal frailty measurement tools are used as the indicator of frailty, it may be possible that such tools are identifying older people 'too late' to significantly affect the trajectory. If the first indicators of frailty are silent, then a proactive population-based approach to identify the early levels of frailty and offer support is required for non-frail older people. In a reactive health care system that intervenes during an obvious period of transition, the earlier stages of pre-

frailty may be a missed opportunity, potentially being the most effective in preventing or slowing the trajectory. The ability of OTs to detect socially or cognitively silent triggers would be a valuable contribution to the early identification of a frail condition. However, these opportunities are currently being missed as OTs are primarily reacting to higher levels of frailty.

An admission to an acute or intermediate care service could indicate that a level of frailty already exists and the person has moved beyond the non-frail or pre-frail phases. Prior knowledge of this could be known or unknown to current healthcare systems, but referral into these services provides an opportunity to explore the underlying indicators for the transitional long-term condition of frailty. Outside the healthcare system, OTs could be positioned to maximise the likelihood of identifying an older person in a 'pre-frail' state, for example through alignment with housing associations, third sector organisations and community projects. As long as OTs are associated with health care they are likely to be part of a reactive service that is alerted to a change or transition in level of frailty.

The ability of OTs to affect the rate of transition from one level of frailty to another level begins with identification and assessment of this level followed by selected interventions. There are windows of opportunity both in hospital and community settings to contribute to this assessment, and an emphasis on silent psychosocial factors can be a specific addition to a purely medically-driven, formal approach. This assessment within a 'balance of frailty' framework can highlight potential areas of vulnerability, but also suggest methods to potentially reverse or slow decline. Additionally and importantly, the framework can be utilised to articulate the role of OTs with older people across the levels of frailty. Turner and Alsop (2015) highlighted the importance of making the OT core skills of occupational knowledge and theory of meaningful activities visible. An understanding of the triggers of frailty, embracing risk, how and when to reduce effort and a consideration of habituation all contribute to knowledge of this condition and provide an articulation of the OT contribution.

The ability to build on OTs' knowledge of occupational balance across the 'balance of frailty' framework identifies the importance of when occupations are disrupted. As OTs specialise in 'occupation' they bring a unique perspective to

the diagnosis of a level of frailty that may not be detected by other health care professionals.

### 9.5.2 Transitions of frailty

Gill et al. (2004) described transitions from one level of frailty to another as occurring in 56.7% of his study population (see Section 9.4.1). The 'balance of frailty' framework developed from this OT case study research identified three stages of imbalance (see section 8.1) where OTs recognised that older people may transition across any of these phases. This dynamic process of moving between the states of balance and imbalance in a frail condition is important to consider in future practice.

Transitional theory enables us to explore the importance of the transitional and dynamic nature of the frailty trajectory. In developmental transitional theory, Van Gennep (1960) suggested three stages of separation, transition and acceptance from childhood through adolescence to manhood. The transition phase was described as a 'liminal zone' where 'life was in limbo'. Drawing on this theory, Bridges (1986) described three transitional stages of 'letting go', 'a neutral zone' and 'new beginnings'. The neutral zone which equates to Van Gennep's middle transitional phase is associated with disorientation due to loss and change when moving from one stage to another. Figure 10 suggests and illustrates the potential 'liminal states' that could be considered between the experienced levels of a frail condition.

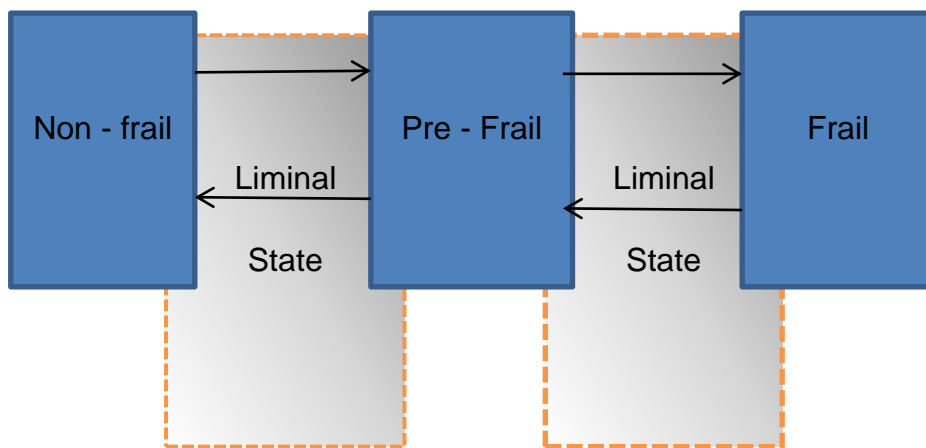


Figure 10. The liminal states in frailty

The OTs in this study recognised the disorientation and chaos of a liminal zone. The intermediate care Occupational Therapist associated the immediate period post discharge with the first stages of ‘shock’ and adjustment that followed an acute admission. Her intervention was a ‘safety first’ response with an emphasis on the provision of care, as the person was not yet ready to set rehabilitation goals.

In this immediate post-discharge period of disorientation and chaos the intermediate care Occupational Therapist suggested that the older person has not transitioned from the tipping point and is still in a liminal state (Figure 11) where the restoration of balance has not started. The intermediate care Occupational Therapist felt her ‘therapy skills’ were being wasted as people were not ready. This rapid response to a crisis is clearly vital to prevent further deterioration. However therapeutic intervention appears difficult to provide in this post-acute window when the older person may still be in this transitional liminal state.

A characteristic of frailty is ‘diminished reserves’ (Rodriguez-Manas et al., 2013), with an inability to return to a previous level of functioning and a lack of resilience due to physiological changes (Morley et al., 2013). If there has been an increased or changed level of frailty in association with ‘diminished reserves’ this could be synonymous with the disorientation of a liminal state. A prior level of frailty may also affect the recovery from liminal state, with an older person needing time to recover and not being ‘ready’. Their balance of frailty may take longer to restore if they are already frail prior to and following a tipping point.

Targeting frail older people who are in the immediate post-acute period of a tipping point, still in a liminal state, is arguably not the best use of OT rehabilitation and re-enablement skills. Once an older person has begun to emerge from a liminal state, restoring the balance may be more achievable and realistic. This study found that the assessment skills of OTs in an acute transitional phase are still highly relevant, for example in admission avoidance, A&E and acute ward contexts. Reducing the initial increased effort of daily occupations may reduce risk. However, preventing deconditioning whilst in a liminal state needs careful consideration with MDT members and family or carers. The community care Occupational Therapist observed that family support at home had a significant effect on recovery and emergence from a liminal state following a frail older person's discharge from hospital.

The community care Occupational Therapist and one of the stakeholders recounted examples of older peoples' reflections on this period after discharge. These included anxiety and fear about future admissions and future avoidance of health professionals. The intermediate care Occupational Therapist expressed a desire for continuity in recovery across transitional phases, and a frustration that she had to 'hand-on' to other services. The therapeutic relationship of a key worker across transitional phases was important in the community setting, and the Occupational Therapist was able to have a more proactive approach when the liminal state was less apparent and transition to a 'new beginning' (Bridges, 1986) had begun. Continuity of intervention across the transitional phases of frailty would be the ideal scenario in order to make an accurate assessment of occupational deterioration, "baseline function", or whether the older person was still in a 'liminal state'.

Currently each case study Occupational Therapist works in their service 'silo' within an integrated acute and community trust. This also means that the single integrated organisation has the potential to facilitate continuity across liminal states through a 'follow the patient' model if there is transition from one setting to another. This would only be possible with a reversal of resources from acute to community care and a more certain 'flow' between acute and community care. An interim solution would be wider rotations of staff between hospital and community services, 'mixed' working patterns across contexts and improved flow of information into and out of secondary care. The discharge to assess

(NHS England, 2016a) model of care encourages trust in community colleagues to continue the assessment process, with efficient handover of information. This should minimise the chaos and disruption experienced when the older person is potentially in a liminal state having transitioned to a higher level of frailty.

If the level of frailty results in an admission to acute care, this is likely to be associated with loss of relationships, loss of normal habits and routine, and a sense of disorientation. This liminal state is important to consider when carrying out assessments or making decisions in an acute admission, since any cognitively silent triggers may be no longer hidden and any socially silent triggers may well be exposed. This tipping point is a period of extreme vulnerability for an older person who has become frail, but presents a window of opportunity for OTs to investigate and assess the risk factors that led to admission in order to anticipate what equipment, advice or strategies are required once discharged.

An admission to secondary care could be conceived as entering a 'liminal zone'. For an older person already in a transitional 'liminal frailty state', this level could be exaggerated or appear worse in this 'liminal zone'. The hospital Occupational Therapist clearly described a dramatic and sudden drop in occupational performance in acute care. The discharge to assess model (NHS England, 2016) advocates any long term decisions or in-depth assessments occur out of the acute setting i.e. do not occur in a liminal zone. It is important for OTs to consider the transitional processes into and out of an acute setting along with the dynamic transitional nature of a frail condition. Figure 11 suggests this interplay between the liminal states of frailty and the liminal zone of an unfamiliar acute/residential care setting.

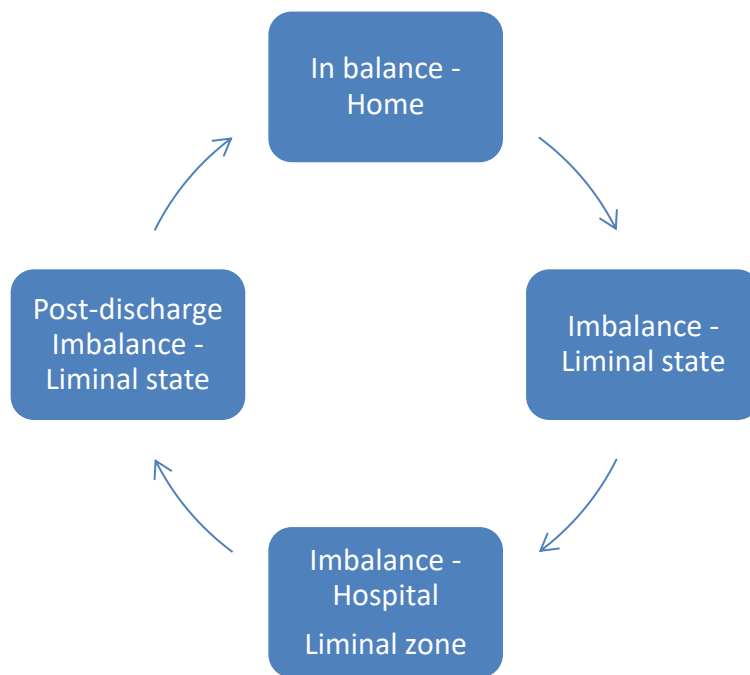


Figure 11. Liminal states and zones of hospital and home

Provencher et al. (2009, 2013) explored the differences in performance of frail older people between home and hospital settings. From this study the transition and disorientation of liminal state within a liminal zone can contribute to the understanding of a reduction in performance out of the home setting for frail older people. The exploration of transitional theory within the concept of frailty is an important extension of the current literature and with potential application to OT practice. Facilitating the smooth transition from hospital to home and co-ordination of discharge processes is an area of established OT practice in secondary care, yet this is perhaps challenged by ‘discharge to assess’ principles.

This study suggests that the silent triggers that may have led to an admission can result in a reduced level of occupational performance. This is emphasised by the liminal state of a frail condition combined with the chaos of the transitional liminal zone of an acute setting. Knowledge and consideration of potential liminal states in secondary care are essential for OTs in their assessment of a frail older person. The assessment of any associated frailty risk factors are more accurately carried out away from the liminal zone of an acute setting. An intermediate post-acute service can conduct this risk assessment in the familiar home environment, where risks can be most accurately assessed with the older person. The power dynamic that is in favour



of the professional clinician in hospital (Moats, 2007) combined with the liminal state experienced in acute care requires careful consideration when discharge destination decisions are made.

### 9.5.3 Size of the window

Across the OT cases there were different windows of opportunity for intervention, dependent on factors such as the health and 'readiness' of the older person and the timing of, and time available for, therapy within each service. Figure 10 (Section 9.4.1) described the potential variance across the settings between the levels of frailty and the states of imbalance. In primary care there was a 'larger' window. More time was available for the OT intervention which was a combination of reactive and proactive activities. Even though the OT intervention was over weeks or months it was still a 'limited' number of interventions, constrained by operational pressures within the service. Managing the service demand with available resources is only likely to become increasingly problematic with the demographic increase in older people in the 21<sup>st</sup> century, so making best use of OT skills and knowledge for older people who may become frail is essential.

In the intermediate care service the window of time was smaller, with a limit of four weeks. The service was, by its nature, reactive to a crisis or post-acute discharge, following a "safety first" approach. Here, the tension between active therapy and care provision was apparent. The intermediate care Occupational Therapist reported that the balance of frailty in effect was only beginning to be restored towards the end of the four week service time limit. Bridges' (1986) description of danger signs in the neutral (middle) stage of transition included high anxiety and low motivation as described by both community case study OTs in this post-acute period when older people had been discharged from hospital or experienced an acute crisis at home.

The window of opportunity in secondary care could be hours or days. The service was reactive to a tipping point being reached and had an emphasis on the detection of silent triggers, prediction of care and equipment needs and organising a smooth transition home.

Currently primary care is the largest window with the least OT resource. Young (2015) and The King's Fund (2014) both advocated a proactive and preventative approach centred round the needs of frail older people. The prevention of care approach with community dwelling frail older people (Daniels et al., 2011) evaluated by Metzelthin et al. (2013) did not however find any evidence that a primary care, nurse-led and MDT intervention approach was effective in reducing levels of disability. The most effective model of primary care based round the needs of frail older people appears to remain unclear.

The critical evaluation of this study (Daniels et al., 2011) identified the intervention as being potentially targeted too late in the frailty process. In this large scale study, GPs and the lead nurse reported that a large number of participants were, in their view, not eligible for the prevention of care approach as they had minimal disruption to activities of daily living. Exploring the silent triggers of frailty that may not be detected by current formal measurement tools could identify pre-frail older people who could benefit from a proactive and preventative approach during this larger window of time. In this study, OTs demonstrated that they had the skills and approach to detect subtle changes indicating the start of a frailty trajectory or a phase of imbalance.

More extensive utilisation of OTs in primary care for older people who may become frail requires further research. OTs' expertise in occupation may enable them to detect early signs of occupational disruption when a proactive approach to preventing or slow the rate of decline is possible. Caring for a partner and/or bereavement is an example when an older person may well be 'tipped' into a frail or liminal state. The resulting period of disorientation, during which occupational disruption could occur, presents a window of opportunity for selective and sensitive intervention. An approach in community-based care to 'follow up' recently bereaved older people by an Occupational Therapist to assess whether occupational balance has been disrupted is an important area for future research.

For frail older people, the majority of intermediate and secondary care health services that have an associated OT resource are currently focussed on providing an urgent and reactive care response. There is a small window of time to respond to greater levels of frailty. In this study the intermediate and

secondary care OT practice focussed on assessment of obvious or subtle triggers, establishment and reduction of immediate environmental risk factors, and prediction of care and support needs for this acute period. This small window of opportunity is vital for the reduction of harm and prevention of future admission to acute or residential care. However, the amount of 'active rehabilitation' described by these two OT case studies was minimal. In both contexts, the size of the window appeared to influence the emphasis on assessment, with non-registered staff under an Occupational Therapists' direction practicing and progressing daily living activities within the window of time available. The MDT members in both of these time-limited services referred back to the Occupational Therapist for advice on progression of an intervention programme or non-standard equipment requirements.

A smaller window of opportunity requires an approach that responds quickly to a high level of complexity. This collective case study has added to the understanding of the complexity of the levels and transitions within a frail condition. This understanding can be applied to windows of opportunity for OTs within the primary, intermediate and secondary care contexts.

OTs can contribute to multi-dimensional psycho-social assessment, as advocated by Gobbens et al. (2010). In urgent care services the timing of assessment in this window is made clear by a crisis or sudden transition to a greater level of frailty. However, in a community care setting, the transition to a level of crisis may be less clear if the triggers are silent and undetected. In this study, the primary care OT received referrals from GPs, district nurses, intermediate care services and community physiotherapists. There was still a level of crisis triggering their involvement. A proactive approach for older people who are 'at risk' of frailty does not currently exist in this integrated trust that focuses on healthcare. This may only be possible if OTs are in future aligned more closely to non-health, voluntary, housing or social services.

The future utilisation of OT resources in relation to frail older people needs to align with the greatest impact. In a community setting, the most effective approach to reduce the rate of transition to greater levels of frailty remains unclear. Most studies utilise frailty measurement tools that detect when a frailty process has commenced. There is a potentially an approach based around

occupational disruption that could indicate more accurately the early stages of frailty when intervention could be more effective.

Such early identification of pre-frailty is difficult if older people remain outside health and social care services. The most obvious opportunity is primary care that follows a 'life course' approach. Transitional processes such as bereavement, a house move or deterioration in a physical or mental health condition are all potential windows of opportunity for intervention to 'restore' balance by this disruption. The 'balance of frailty' model framework assists practitioners to recognise a level of frailty in order to plan their intervention. OTs can describe with clarity their role at each stage as described in these study findings.

### **9.6 Strengths and Limitations**

There are a number of strengths and limitations associated with this study. Having access to a large integrated acute and community trust enabled me to conduct the study on a single site which provided care in three different settings. This enabled me to explore linkages and inter-relationships between services or pathways of care, for example between the acute ward and discharge to the active recovery setting, and also offered valuable insights into intermediate care which is a relatively new concept.

This was a small scale study involving three settings and one case study in each setting. This limits the generalisability of the findings. Increasing the number of case studies, for example by conducting one in another intermediate care setting and other acute settings would have added greater breadth to the study and conducting case studies across more than one service would have increased generalisability and resulted in more widely applicable findings. Neither of these options were feasible within the time constraints of the doctoral programme.

My role as a single researcher brought consistency and continuity to the study and the involvement of my supervisors brought rigour to the research process. As a lone researcher with the trust position of professional lead I had to be aware of this 'insider' and 'power' dynamic when conducting the study. I

acknowledge that my positional power may have influenced the responses of the Occupational Therapists and MDT participants.

My familiarity with the study context was a potential source of bias. However, this was countered by the consultation processes I followed for selection and recruitment to the study and my approach to the interviews. To avoid bias and substantiation of any preconceptions, I followed Yin's (2009) recommendation to test tolerance for contrary findings. This was achieved in two ways. Firstly through the regular supervisory discussions which challenged the assumptions that I brought to the project and encouraged me to critically reflect on the research processes. Secondly by the ongoing member checking activities that I employed and the conference presentations where I shared my developing findings with a wider clinical and academic audience.

Interviews were used as the only method to capture data from stakeholders, the OTs and their MDT members. This provided a comprehensive range of views, albeit from a single type of data. Other data sources including observation of practice or case note analysis may have provided further insights and offered opportunity to triangulate a greater range of information. The case studies did not include the perspectives of frail older people and this was a study limitation. Interviewing people who were recipients of OT may have added a different and valuable dimension to the case studies and strengthened the study.

The stakeholder interviews I conducted in part one of the study are a strength of the study. The insights provided through these interviews served to challenge my thinking and broaden my perspectives which effectively counteracted my concerns that I was 'too close' to the study setting and the participants.

The stakeholder interviews also enabled me to include a user perspective in the study which enabled me to address one of the weaknesses of the study, namely the fact that I did not formerly engage with and benefit from the insights of patient and public involvement (PPI) which could have contributed to aspects of study design and delivery. The 'lay representative' I interviewed had a breadth of experience stemming from her previous role as a lay member of a trust wide group which was set up to implement the National Service framework

for older people standards, and her membership of a consumer group for older people. Her involvement contributed to the quality of data in stage one of the study and, as part of that dataset, informed collection and analysis of data in stage two of the study.

The OTs were purposefully selected on the basis of their OT practice as part of a clinical team at that time. The three OTs who provided the cases were of the same grade across the study and all were very experienced. This may have resulted in greater comparability between their responses because they all had similar levels of experience. However, their breadth of clinical experience contributed to the richness of data in a way that would have been unlikely with less experienced therapists.

### **9.7 Reflective thoughts**

The undertaking of this research study has been a prolonged period of study providing the opportunity for an increased depth of understanding about the condition of frailty and the role for OTs with older people who have this condition. There has also been continuous personal development, both as a researcher and within my professional role and career path. This research journey has 'meshed' this clinical academic perspective, where on a daily basis I have applied my thinking and learning from this research study to my role as professional lead Occupational Therapist and manager of acute and community services.

The acquisition of research skills to complete this level of academic study has required the tuition, guidance and support of the academic teaching institution and my research supervisory team. Application of the 'taught' elements and the reality and discipline of working alone have required years of discipline and self-motivation. The most challenging aspect as a relatively inexperienced researcher was gauging the level of analysis required. I frequently thought I had achieved the required depth only to receive feedback that further work was required: this applied both to the critical analysis of the literature and the cross-case analysis of the findings.

I have gradually come to understand and realise the requirements of doctorate level, and I have had to demonstrate resilience to keep responding to feedback

and not become disheartened with the time the study has taken. Case Study methodology is challenging due to the amount of data generated and I found it overwhelming on occasions. The stakeholder interviews provided an opportunity to 'practice' interview techniques prior to the Occupational Therapist and MDT interviews. On reflection, it may have been useful to observe a more experienced researcher at the beginning of this study. The interviews varied in length with the OTs' being the most detailed. The therapy assistants in the active recovery team appeared to be 'challenged' by questions about the role and impact of OT. This may have been due to the 'generic' nature of their role across nursing, physiotherapy and occupational therapy competency based tasks.

Technical issues occurred on two occasions. The first stakeholder interview was very quiet, so I purchased a digital recording device that improved the sound quality. During the second OT case study interview there was a partial recording failure. This interview was repeated with the acknowledgement that the interview would not be exactly the same. Notes were made immediately after the recording failure to ensure that content and meanings were not lost. I have learnt skills of literature searching, critical analysis, coding, thematic analysis and improved written communication, through practice and supervisory feedback. The depth of analysis and construction of the 'balance of frailty' conceptual framework has been the outcome of this iterative process. The personal balance of studying, working full time and family life has been possible due to support from supervisors, colleagues and friends over the past eight years.

A significant factor has been the potential to apply and test out my thinking about frailty through the study period. This opportunity to be a 'clinical academic' has been beneficial to the progress of this study. I have been able to share my work with colleagues, provide feedback to teams and have presented at both a local and national level. My role as professional lead Occupational Therapist has changed within the last year, and I now manage a range of acute and community services (including therapy) so the potential to 'influence' has in fact widened. The relevance and importance of how services are provided for older people have increased over the study period, and I have had numerous opportunities to utilise my knowledge in service redesign. Examples include



rotations between acute and community settings and an internal review of the role of therapy in the acute setting.

The way in which I have perceived, understood and articulated the condition of frailty has subtly changed over the course of the doctorate. For example I described 'frail older people' during the course of my study, but now refer to them as 'older people who have become frail'. Due to increased knowledge of the transitional nature of the condition I now consider 'older people who have become frail' more accurate. This reflects my perception that frailty is not a label but a changing condition that is experienced at different levels.

The word 'frailty' is embedded in the architecture of healthcare language. Although there are arguments expressed for and against the 'frailty' word/concept (Oliver, 2017), in the absence of alternative terms, the word appears widely accepted as a marker of action required and a vulnerable state for an older person. However, older people may not like or identify with the term and I need to be cognisant of this when I am applying the 'balance of frailty' framework in future practice.

The stakeholders I conducted interviews with articulated the potential role of OT with older people. Conducting this study and presenting the findings on numerous local and national levels (Appendix 2) has provided the platform on which I could work towards realising that potential by promoting and describing the OT role with older people. Early presentations were titled 'The hidden art of OT with frail older people' which alluded to the 'hidden factors' of a frail condition (Silent triggers developed later) aligned with the 'hidden role and skills' of OT. The 'balance of frailty' framework I developed reflected my changing perceptions and provided a structure within which I could introduce ideas around the dynamic phases of a frail condition and stimulate professional discussions about the role of OT in terms of those dynamic phases. In particular, how OTs can use their knowledge of occupational disruption to detect and treat the condition of frailty. This assessment of the 'art of the everyday' aligns with OTs' unique understanding and focus on meaningful occupations and offers a powerful diagnostic tool to detect the early stages of frailty through identifying silent triggers.



This research journey has developed my presentation skills and the confidence to articulate my findings. Immersing myself in this subject has motivated me to share this knowledge. An example of my motivation to share current thinking and knowledge was as a board member on the English Board of the College of Occupational Therapists (June 2017). Comments were invited on a document on the OT role in risk management I shared my 'embracing risk' theme and this was subsequently adopted by the Royal College of Occupational Therapists, 'Embracing risk; enabling choice' (RCOT, 2018). This was acknowledged retrospectively by RCOT. My enthusiasm to 'share' could be perceived as naïve in not gaining advanced formal recognition for my work.

Friends, family and colleagues ask continually about my progress and my study 'became me' by association. It has shaped the person I am by the experience I have gained. There have been low points when I have doubted my capabilities. However, I am tenacious and motivated to achieve this academic level. This study has been unique in its design comparing OT practice between acute and community settings with older people who have become frail. It has produced a model of understanding frailty and describing the OT role. My findings have addressed gaps in current research and I am extremely proud of this achievement.

## **9.8 Chapter Summary**

In this research study the role of occupational therapists had both assessment and intervention components in acute and community contexts with older people who have become frail. OTs had a unique occupational lens that was applicable across all the transitions and levels of frailty. They paid particular attention to socially and cognitive silent factors that can be vital in recognising the condition and potentially preventing admission to acute care. Occupational therapists can identify and diagnose when the level of frailty has changed. By adopting a compensatory and adaptive approach they can contribute to the management of this condition. The balance of frailty framework constructed from the themes of this collective case study provides a structure to identify transitions of frailty and be able to describe how the role of OT is applicable within each phase.

When OTs are employed in a reactive health care system they are highly likely to be responding to an existing or deteriorating level of frailty. If they are to be part of a proactive societal response to frailty and prevent or slow the deteriorating trajectory of this long-term condition, OTs may need to align their intervention to public health or primary care sectors. This could include housing, third sector organisations or community projects. There are potential models of OT intervention relevant to primary care where a proactive response to predicted triggers could also reduce the rate of decline, facilitate active ageing, empower older people in their life choices and reduce future burden on healthcare systems.

## **Chapter 10 - Conclusion and Recommendations**

### **10.1 Introduction**

This chapter concludes the thesis. In the first section I detail the original contributions to professional knowledge that this thesis offers and I then move onto provide concluding comments. In the final section, I present the recommendations for occupational therapy practice, education and further research that arise from the thesis.

### **10.2 Contribution to knowledge**

The original contribution of this research is the unique and insightful perspective it provides on the role that occupational therapists can have in the diagnosis, identification and treatment of a frailty condition. The case study approach incorporated multiple perspectives from OTs and the multi-disciplinary team members that work alongside them. Few studies examining OT practice have used a case study approach and the findings from my study offer detailed and comprehensive insights into OT with frail older people.

In particular, my study provides important insights into the OT role in hospital and intermediate care settings. As the literature review identified, the hospital based OT role has largely been understood in terms of discharge. My study expands our understanding of that role, specifically in terms of the intervention work that hospital based OTs undertake with frail older people.

Intermediate care is a relatively new and evolving concept. It has not been widely adopted by services across the country and there is a limited amount of evidence related to this type of provision. My study is the first to examine the role of the OT in intermediate care using this methodology.

This study contributes to our understanding of frailty because of the unique 'occupational lens' that OT brings to health and social care provision. Using that lens, occupational therapists assess and analyse the performance of every-day activities or occupations which are vital to enable older people to remain as autonomous and independent as possible. Their analysis of occupations enables elements that are problematic to be diagnosed and solutions identified that can increase safety, independence and achievement.

Those solutions should recognise the importance of existing compensatory habitual routines to ensure that risks are not increased. This 'occupational lens' moves our understanding of frailty from a checklist of reducing functional abilities to one that is more holistic and comprehensive and one that acknowledges the importance of environmental context in a way that has not previously been articulated.

The 'balance of frailty' framework broadens our conceptualisation of frailty and contributes to professional knowledge in three main ways. Firstly it describes the initial stage of frailty where the signs and symptoms indicate an older person is transitioning to a more vulnerable state. Secondly, how a crisis can transition someone to a tipping point, and the value of proactive approaches that predict or manage the situation to reduce functional deterioration. Thirdly, in relation to recovery from a crisis, how, from a professional perspective, risks can be embraced so that an older person is able to recover and achieve the occupations that are meaningful to them. It therefore provides an overall framework that articulates where, when and how OT practice can contribute to the care and support of frail older people across health and social care contexts.

### **10.3 Conclusion of the Study**

The ambition of study within a professional doctorate is to bridge the academic and clinical settings through the learning and development of the researcher who is embedded in practice. This study has added a unique OT perspective to frailty and generated new insights and knowledge that can support the work of clinical OT practitioners. That knowledge is highly applicable for practitioners seeking to better articulate and promote their role and skills. Through these means OTs are best placed to benefit the people they work with as they become older and ensure that they receive the care, support and therapy to age well and as actively as they wish to be.

The recommendations from the findings cover three areas:

- Occupational Therapy Practice
- Education
- Future Research.

#### **10.4 Recommendations for occupational therapy practice**

OTs can contribute to the diagnosis, assessment and intervention with older people who have become frail in both community and hospital settings. The practice recommendations are:

- In hospital the assessment skills of OTs are most valuable in acute assessment settings. OT resources for frail older people should therefore be located or transferred to acute assessment units such as Accident and Emergency, medical assessment units or 'frailty units'. This early assessment facilitates timely discharge from the acute setting, enabling patient flow and 'discharge to assess' models of practice.
- The diagnostic and assessment skills of OTs contribute to the identification of frailty in acute and community settings. Services which aim to avoid admission to acute care should recognise and maximise these skills. Examples include OTs working in crisis intervention teams and with paramedics.
- OTs can diagnose, monitor and provide interventions for older people in primary care and community settings. This may prevent or slow the decline of the frail condition. OTs should be employed in future population-based primary care prevention service models. Examples include OTs based in general practice, primary care networks or social care 'contact' centres.
- OT intervention to maintain people at home and improve occupational independence or performance may be most effective after the initial period of recovery from an acute crisis.
- Patterns of OT working that provide improved continuity for an older person should be considered in future service design. Examples include rotational posts, job descriptions to include both acute and community working and review of seven day working patterns.

- Future design of services for older people who may become frail should incorporate the role and skills of OTs. New roles or role redesign should be considered with commissioners. Suggested examples are primary care OT case managers or out of hours urgent care centres.
- There needs to be a long term strategic shift or increase of OT resources from the acute to community setting where the majority of frail older people are being supported. Alternative models of OT practice could be piloted in an integrated care trust that is conducive to reallocation and redesign of roles.

### **10.5 Recommendations for education**

The findings from this study suggest recommendations for future educational requirements and provision. Incorporation of the 'balance of frailty' conceptual framework into a range of educational material/syllabuses would be beneficial in order to identify and recognise the signs/symptoms and stages of a frail condition. OTs in this study showed an aptitude and willingness for training and educating others including medical, nursing and non-registered staff. The future educational recommendations are:

- Knowledge and understanding of the condition of frailty should be incorporated into the undergraduate curriculum for OT and integrated AHP and nursing programmes.
- The 'balance of frailty' conceptual framework may explain and articulate the dynamic nature of a frail condition and interventions across the phases. OTs can articulate their unique understanding of occupation as a 'frailty diagnostic tool' in order to educate other health and social care professionals about frailty and the OT role.
- The 'balance of frailty' phases may align with other long-term conditions. Insight into hidden and transitional factors could be mapped across and translated in the teaching of other long-term conditions, for example diabetes or mental health.

- OTs can educate and work with providers of potential digital care solutions in order to detect changes in habitual behaviour in the home (silent triggers of the pre-frail or precarious phase).

### **10.5 Recommendations for further research**

- This was a small-scale study conducted in a single location and its generalisability is therefore limited. Further work exploring and testing the 'balance of frailty' framework with a wider group of OT practitioners and with other groups of health professionals is indicated to establish its usefulness and applicability in other contexts.
- This study did not involve older people as study participants. Further work exploring the older person's perspective on the 'balance of frailty' would contribute to establishing the usefulness of the framework and inform further development.
- The 'balance of frailty' framework may be applicable to the management of other long-term conditions. Further work is needed to investigate this possibility and establish the transferability of the framework.
- This study indicated that OT has a key role to play in reducing the rate of decline across levels of frailty. Further work is required to quantify that contribution and determine what the interventions are most effective.

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## Appendix 1. Literature review - Methodological Matrix

No.	Author	Title	Country	Evidence Type	Study Population	Aim of Study	Method and Outcome Measures
1	Atwal et al. (2011)	Risks with older adults in acute care setting : UK occupational therapists' and physiotherapists' perceptions of risks associated with discharge and professional practice	UK	Qualitative study	Occupational Therapists and Physiotherapists	To ascertain a greater understanding of professionals perception of risk in an acute care setting.	12 Semi-structured interviews with 7 OTs and 5 PTs using questions related to a validated vignette
2	Cumming, R. G., et al. (2007)	Improving vision to Prevent Falls in Frail Older people : A Randomized Trial	Australia	Randomised Controlled Trial	616 older people over 70.	To determine efficacy of vision and eye examinations with subsequent treatment to prevent falls and fractures in frail older people (including OT)	Initial questionnaire then randomised to control and intervention groups.  Intervention group received vision and eye examinations  Of this cohort (309) 24 were referred for OT home visit.
3	Daniels, R., et al. (2008)	Frailty in Older Age : Concepts and Relevance for Occupational and Physical Therapy (OT and PT)	Netherlands	Expert Opinion	Frail Older People	To review frailty literature and discuss implications for OTs and PTs	Review of literature
4	Daniels, R., et al. (2011) (links to Metzelthin, 2012)	A disability prevention programme for community-dwelling frail older persons	Netherlands	Literature review and expert consultation	MDT (GP, Nurse, OT and PT) programme development for frail older people living in the community	To describe and justify a programme to prevent disability for frail older people	Literature Reviews and expert meeting
5	De Almeida Mello, J., et al. (2012)	Interventions to delay institutionalization of frail older persons : design of a longitudinal study in the home care setting	Belgium	Longitudinal quantitative evaluation	Frail Older People	To identify which types of projects have the most effect in delaying institutional care for frail older people	Use of 3 validated instruments completed at baseline, 6 months and end of project.
6	De Almeida Mello,	Exploring Home	Belgium	Longitudinal	Over 65, frail older people	To delay full time institutional care for	Standardised assessments of

	J.et al. (2016)	Care Interventions for Frail Older people in Belgium : A Comparative Effectiveness Study		comparative cohort study	and at risk of full time care	frail older people	levels of impairment completed at baseline and every 6 months. Data from national database used to establish a comparison group.
7	De Coninck, L., et al. (2017)	Home and Community-Based Occupational Therapy Improves Functioning in Frail Older People : A Systematic Review	Belgium	Systematic Review	Community dwelling physically frail older people	To assess the effectiveness of OT to improve the performance in daily living activities of community-dwelling frail older people	Systematic review and meta-analysis
8	Fisher , A. G., Atler, K., and Potts, A. (2007)	Effectiveness of occupational therapy with frail community living older adults.	Sweden	Mixed method study	8 frail older adults, over 65 (74-90)	To examine the effectiveness of a short term home based OT intervention guided by the OT Intervention Process model to improve Activities of Daily Living	1. Retrospective examination of participant clinical records – content analysis 2. Initial assessment using Assessment of Motor and Process Skills (AMPS) 3. Four treatment sessions over 2-4 weeks. 4. Repeated AMPS at end of study.
9	Gitlin, L. N., et al. (2008)	Variation in response to a home intervention to support daily function by age, race, sex and education	USA	Randomised Controlled Trial – as above	as above	as above	as above
10	Gitlin, L. N., et al (2006)	A randomised trial of a multicomponent home intervention to reduce functional difficulties in older adults	USA	Randomised Controlled Trial	319 older people over 70 years	To test the efficacy of OT and PT intervention to reduce functional difficulties, fear of falling, home hazards and adaptive coping strategies	Intervention group received 5 OT interventions over 6 months (4x90 mins visits and 1 telephone call and 1 PT sessions (90mins)
11	Horowitz, B. P. (2002)	Occupational Therapy Home Assessments	USA	Expert Opinion	'Oldest-old' people living at home (not defined)	To assess the literature and case examples to illustrate the benefit of OT home assessments	literature review and use of 2 case studies of clients receiving a home assessment
12	Horowitz, B. P. and Chang, P. J. (2004)	Promoting Well-Being and Engagement through	USA	Randomised control trial	28 people (60 or over), 5 64 or younger. 9 65-74 and 10 75-84.	To implement and report effectiveness of the well elderly programme for a cohort of older people with a range of chronic	28 people randomised to treatment group or usual care. Intervention group met weekly for 90 mins and offer of once a

		Occupational Therapy Lifestyle Redesign				illnesses.	month individual session including home visit. OT did pre and post standardised assessments
13	Metzelthin, S. F. et al (2012)  See Article 15.	A nurse-led interdisciplinary primary care approach to prevent disability among community-dwelling frail older people: A large scale process evaluation	Netherlands	Mixed method study	194 older people over 70	To evaluate a multi-disciplinary primary care approach using individualized assessment and interventions.  To gain insight into the healthcare professionals and frail older people's experiences.	1. Log books and evaluation forms collected from the participants  2. 13 semi-structured interviews with frail older people  3 Professionals also participated in 12 interviews and 4 focus groups.
14	Moats, G. (2007)	Discharge destination-making, enabling occupations and client-centred practice	Canada	Qualitative Study	Occupational Therapists	To explore the relationship between models of decision making by OTs and professional issues of enabling occupation and client-centred practice	Semi-structured interviews with 10 OTs
15	Mountain, G. and Pighills, A. (2002)	Pre-discharge home visits with older people: time to review practice	UK	Expert Opinion	Frail older people	To present a case to reconsider the practice of under-taking pre-discharge home visits with frail older people as part of a decision regarding a return home from acute hospital care	Review of literature
16	Nikolaus, T., Beck, M. (2003)	Preventing falls in community-dwelling frail older people using a home intervention team (HIT): results from the randomised falls - HIT trials.	Germany	Randomised Controlled Trial	Frail Older People	Evaluate the effect of a home intervention by an MDT to reduce falls in older people's homes	Intervention group received diagnostic home visit and home intervention from OT and MDT member, Follow up at 3 and 12 months  Outcome measures were number of falls, type of home modifications and compliance with these after 12 months..
17	Provencher, V. et al. (2013)	Cooking task assessment in frail older adults: who performed better at home and in the clinic?	Canada	Quantitative study	37 frail older people who were over 65 with no cognitive impairment.  Frailty was identified if 3 or more of Fried et al (2001) 5 criteria were met.	To determine the proportion of frail older people who demonstrate statistical differences between the performance in home and clinic environment of a cooking task	Assessment of physical function including grip strength.  Assessment of cognitive and psychological functioning function using standardised assessments



							Assessment of performance of a cooking task using the Assessment of Motor and Process skills Test (AMPS)
18	Provencher, V., Demers, L., and Gelinias, I (2009)	Home and clinical assessments of instrumental activities of daily living: what could explain the difference between settings in frail older adults if any?	Canada	Literature Review	Search of studies that compared assessment of activities of daily living (ADL) of frail older people in clinical and adults settings	To determine if the differences exist between performance in home and clinical assessments of ADL for frail older adults	Literature Review of 10 identified studies
19	Provencher, V., Demers, L., and Gelinias, I.(2012)	Frailty : A concept under-utilised by occupational therapists	Netherlands	Expert Opinion	Frail older people	To demonstrate the usefulness of the frailty concept for OTs	Literature review
20	Roland, K. P., et al.(2011)	Exploring Frailty :community Physical and Occupational Therapists' Perspectives	Canada	Qualitative Study	11 therapists, 7 physical therapists, 4 OTs	To explore therapists perception of frailty and develop a definition of how they view and manage frailty	1. semi-structured interviews 2. Completion of a repertory grid which summarised the answers given by participants.
21	Rowles, G. (2000)	Habituation and Being in Place	USA	Mixed method study	Frail older people living in a rural community	To explore the implications for OTs of habitual use of the environment by frail older people.	Interviews, participant observation, activity diaries and aerial photography over 3 year period
22	Russell, C et al. (2002)	Independence as a practice issue :The safety clause	Australia	Qualitative Study	Occupational Therapists	To identify OTs implicit and explicit understandings of independence as a value concept and practice issue with frail elderly clients	Semi- structured interviews with 12 OTs
23	Ryburn, B., Wells, Y., and Foreman, P. (2009)	Enabling independence : restorative approaches to home care provision for frail older adults	Australia	Literature Review	Frail Older People who receive home care	To provide an overview of the effectiveness of single and in-house component interventions including OT in home care provision	Literature review of single component restorative interventions and in-house multi-component restorative home care programmes
24	Soderback, I. (2008)	Hospital discharge among frail elderly people: a pilot study in Sweden	Sweden	Mixed method study	9 older people over 75 years individuals who had recently been discharged from hospital to their home	To evaluate the viability of an assessment tool to measure patient experience of the discharge process.	1.Semi-structured interview 2. Results transferred to data record sheet 3. Follow up Interview with interviewers
25	Stewart, S., et al. (2005)	Are occupational therapists more effective than social	UK	Randomised Controlled Trial	321 older adults aged 65 and over and 113 carers	To compare the effectiveness of OT led assessments of older people and service costs with that of SW led	1. Referrals to each service screened and baseline dependency assessment and



		workers when assessing frail older people? Results of CAMELOT, a randomised controlled trial				assessments	assessment of carers 'difficulties.  2. These referrals then randomised to 2 groups receiving either OT (home assessment) or SW (phone call) standard assessments  3. Follow up data collected at home at 4 and 8 months by researcher
26	Wilson, L. et al. (2011)	Do occupational therapy pre-discharge visits affect the longer term outcomes of the discharge process?	UK	Case notes review	Notes of 7 older adults retrospectively analysed	To determine if pre-discharge home visits enable an older person to remain at home and if re-admission to hospital is avoided 2 years after discharge	Medical notes retrieved, data collection from the notes using a non-standardised tool

### Appendix 1 – Table 2 – Thematic matrix

No.	Article		Theme 1	Theme 2	Theme 3
	Author	Title	The OT understanding and perception of the concept of frailty	OT Assessments	OT Interventions
1	Atwal, A., McIntyre, A and Wiggett, C. (2011)	Risks with older adults in acute care setting : UK occupational therapists' and physiotherapists' perceptions of risks associated with discharge and professional practice.		Perception of risk has an impact on discharge decision making. Therapists used negative terminology which aligned their anxieties with patients who had reduced mental capacity and levels of functioning. An MDT approach and pathway provided a managed approach to risk reduction where patient views were considered.	
2	Cumming, R. G., et al. (2007)	Improving vision to Prevent Falls in Frail Older people : A Randomized Trial			A range of vision related interventions including an OT home visit for those meeting poor vision criteria. The OT intervention involved a) home modifications to improve visibility and lighting and b) mobility training and provision of aids. The intervention resulted in increased numbers of falls and fractures but no sub analysis of the outcomes for the OT intervention.
3	Daniels, R., et al. (2008)	Frailty in Older Age : Concepts and Relevance for Occupational and Physical Therapy (OT)	Outlined that identification of frailty has multi-factorial elements where a range of perspectives from an MDT was required. Recommended a move away from a biomedical approach using diagnostic tools that could potentially miss important factors.		
4	Daniels, R., et al. (2011) (links to Metzeltin, 2012)	A disability prevention programme for community-dwelling frail older persons			Reviewed a range of community programmes where the OT role contributed to an MDT multi-component intervention to prevent disability. The OT elements included behavioural change to support self-management within a

					client centred approach.
5	De Almeida Mello, J., et al. (2012)	Interventions to delay institutionalization of frail older persons : design of a longitudinal study in the home care setting			Preparatory study to evaluate potential interventions and projects which may delay admission to institutional care for frail older people. OT was an intervention or a component of care considered within the projects
6	De Almeida Mello, J.et al. (2016)	Exploring Home Care Interventions for Frail Older people in Belgium : A Comparative Effectiveness Study			A comparison of different types of intervention found that those which included OT only as well those using case management and rehabilitation approaches were effective in delaying institutionalisation for older people with mild and moderate levels of frailty. This resulted in people being able to remain at home over 12 months
7	De Coninck, L., et al. (2017)	Home and Community-Based Occupational Therapy Improves Functioning in Frail Older People : A Systematic Review			Systematic Review of 11 RCTs that provided tentative evidence that client-centred OT intervention improves functional activities, social participation and mobility.  Fear of falling was a secondary measure that showed positive trends in fear of falling but not statistically significant. Some evidence of reduced number of falls (2/5 studies)  Considerable variability between studies making comparability difficult.
8	Fisher , A. G., Atler, K., and Potts, A. (2007)	Effectiveness of occupational therapy with frail community living older adults			OT interventions resulted in overall improvement in motor but not process abilities in daily activities. Achievement of, or progress towards client centred goals was significant. Compensatory techniques resulted in reduction of effort which led to improved

					function for frail older people
9	Gitlin, L. N., et al. (2008)	Variation in response to a home intervention to support daily function by age, race, sex and education			Same trial as no.10 Individualised programmes benefited the people who were at identified as at most risk. These were identified as women, people over 80 and those less well educated
10	Gitlin, L. N., et al (2006)	A randomised trial of a multicomponent home intervention to reduce functional difficulties in older adults			OT as part of OT/PT approach involving home modification, problem solving strategies, energy conservation and falls management resulted in improved functioning, quality of life and reduced falls in older people transitioning to greater levels of frailty. Benefits gained for up to 12 months
11	Horowitz, B. P. (2002)	Occupational Therapy Home Assessments		Review of evidence linked importance habituation in performance of every-day tasks within frailty condition. Learning new techniques requires emotional and physical effort, family relationships identified to support improved capabilities	
12	Horowitz, B. P. and Chang, P. J. (2004)	Promoting Well-Being and Engagement through Occupational Therapy Lifestyle Redesign			Small pilot study provided well-elderly programme to cohort that included but exclusively frail older people. Some favourable results in role functioning and pain reduction but no statistical differences between intervention and control groups in. Programmes for well elderly do not necessarily adapt to frail elderly cohort
13	Metzelthin, S. F. et al (2012)	A nurse-led interdisciplinary primary care approach to prevent disability among community-dwelling frail older people: A large			Following GP and nurse triage a structured primary care programme delivered preventative, individualised programme by OT and PT. The screening of frailty levels was critical and may have

		scale process evaluation			missed lower levels that may have benefitted from the programme
14	Moats, G. (2007)	Discharge destination-making, enabling occupations and client-centred practice		OTs demonstrated a protectionist stance, unwilling to accept high levels of risk in relation to discharge particularly with cognitive impairment. The power dynamic in hospital favoured the professional however OTs often made recommendations over decisions potentially illustrating a lack of professional confidence	
15	Mountain, G. and Pighills, A. (2002)	Pre-discharge home visits with older people: time to review practice		There is a lack of evidence to indicate the effectiveness of pre-discharge home visits. These visits are resource intensive, can cause distress to older people and their carers and are a poor indicator of future requirements. An alternative model of intermediate care services is proposed	
16	Nikolaus, T and Beck, M. (2003)	Preventing falls in community –dwelling frail older people using a home intervention team (HIT):results from the randomised falls - HIT trials			RCT used triage role of OT within MDT assessment and intervention, the team was most effective (highest reduction of falls ) with frail older people who had increased falls prior to trial
17	Provencher, V. et al. (2013)	Cooking task assessment in frail older adults: who performed better at home and in the clinic?		Higher motor and process skills demonstrated in a familiar home setting. An assessment in a clinic environment only may lead to over-prescription of assistive devices and levels of support	
18	Provencher, V., Demers, L., and Gelinas, I (2009)	Home and clinical assessments of instrumental activities of daily living: what could explain the difference between settings in frail older adults if any?		Identified a limited number of studies that showed frail older people performed better in a range of tasks in the home environment. Cognitive deficits resulted in a diminished ability to adapt to unfamiliar surroundings	
19	Provencher, V., Demers, L., and Gelinas, I.(2012)	Frailty : A concept under-utilised by	Identified that minor stressors may shift an older person from a non-		

		occupational therapists	frail to frail state, they are less able to adapt to these stressors and early detection of this vulnerability can focus interventions at the beginning of a frailty condition		
20	Roland, K. P., et al.(2011)	Exploring Frailty: Community Physical and Occupational Therapists' Perspectives.	OTs identified characteristics of frailty into physical components - falls, poor functional endurance and inability to complete daily activities and psychosocial components – isolation, bereavement and impaired decision making.		Review of evidence linked importance habituation in performance of every-day tasks within frailty condition. Learning new techniques requires emotional and physical effort, family relationships can support improved capabilities
21	Rowles, G. (2000)	Habituation and Being in Place	Older people make gradual adjustments to the imperceptible changes in their environment that occur over time. These changes in habituation enable them to maintain independent living.		
22	Russell, C et al. (2002)	Independence as a Practice Issue in Occupational Therapy :The Safety Clause		Reviewed how OTs reconciles the concept of independence, patient autonomy and safety in assessments. They had espoused ideals to enable independence however their anxiety about safety issues led to retention of professional control. ignoring clients wishes	
23	Ryburn, B., Wells, Y., and Foreman, P. (2009)	Enabling independence : restorative approaches to home care provision for frail older adults			A restorative approach involving OT intervention can provide timely interventions, education and assistive technologies that can encourage frail older people to be independent – cost saving on reducing home care
24	Soderback, I. (2008)	Hospital discharge among frail elderly people: a pilot study in Sweden		Potential viable tool to measure satisfaction with OT discharge interventions including environmental adaptations, improved access and prescription of assistive devices. Participants less satisfied with levels of	

				rehabilitation and social support	
25	Stewart, S., et al. (2005)	Are occupational therapists more effective than social workers when assessing frail older people? Results of CAMELOT, a randomised controlled trial		Similar outcomes between professional groups were reported however some OT outcomes were affected by delays in recommended adaptations. Both fast track systems were recommended for higher frailty levels and lower OT level assessments were also identified as beneficial	
26	Wilson, L. et al. (2011)	Do occupational therapy pre-discharge visits affect the longer term outcomes of the discharge process?		A review of medical notes 2 years after pre-discharge home visit indicated poor adherence to recommendations for assistive devices and support services	None of the surviving study participants had not been admitted to residential care.

## Appendix 2 – Table of Presentations

<b>Title of presentation</b>	<b>Date</b>	<b>Audience</b>
The 'hidden art' of Occupational Therapy with Frail Older People	December 2014	OT Professional Forum (Internal)
The 'hidden art' of Occupational Therapy with Frail Older People	December 2014	SHOUT- Sheffield Hallam University OT CPD Event
The impact of Occupational Therapy with Older People	February 2016	Primary Care Team
Exploring the impact of Occupational Therapy with Frail Older People	Spring 2016	Sheffield Hallam University – Spring Symposium
Exploring the impact of Occupational Therapy for older people who become frail	May 2016	3 Minute Thesis – Sheffield Hallam University
Exploring the 'hidden art' of Occupational Therapy with Frail Older People	June 2016	College of OT National Conference
Exploring the 'hidden art of Occupational Therapy with Frail Older People	July 2016	Medicine OT team (Internal)
The 'balance of frailty' model – a concept for OT practice	June 2017	College of OT National Conference
Exploring the 'hidden art of Occupational Therapy with Frail Older People	July 2017	Community Rehabilitation Team
Defining 'Frailty' as an evidence based approach	February 2017	Academic and Clinical Older People's Research Forum
Exploring the 'hidden art of Occupational Therapy with Frail Older People	July 2017	Community Rehabilitation Service
The 'balance of frailty' model – opportunities for technological solutions	June 2018	Sheffield Hallam University Technology Conference



## Appendix 3 - Approvals

# Sheffield Teaching Hospitals

NHS Foundation Trust

20th May 2014

Laura Evans  
Head of Occupational Therapy  
Therapy Services Headquarters,  
G Floor  
RHH

Dear Ms Evans,

### Project Authorisation NHS Permission for Research to Commence

<b>STH ref:</b>	STH18146	
<b>NIHR CSP ref:</b>	Not applicable	
<b>REC ref:</b>	Not applicable	
<b>MHRA ref:</b>	Not applicable	Not applicable
<b>Study title:</b>	Where can Occupational Therapy skills have the most impact on the lives of frail elderly people? A collective case study approach in Primary, Intermediate and Secondary Care.	
<b>Chief Investigator:</b>	L Evans, Sheffield Teaching Hospitals	
<b>Principal Investigator:</b>	L Evans, Sheffield Teaching Hospitals	
<b>Sponsor:</b>	Sheffield Teaching Hospitals	
<b>Funder:</b>	Not applicable	
<b>NIHR TARGET FPFV RECRUITMENT DATE</b>	Not applicable	

#### MANDATORY REPORTING OF RECRUITMENT

The Clinical Research Office is obliged to report study set up and recruitment performance for the Trust to NIHR and to report research activity for all studies to Trust Board. In order to meet these reporting requirements please be advised that it is now a **mandatory** condition of STH project authorisation that recruitment to *all* research studies\* at STH is reported into EDGE (the Accrual Collation and Reporting Database). It is essential that recruitment is entered into EDGE **real-time** to enable directorates to accurately monitor performance. Please see item 2 of the 'Conditions of R&D Authorisation' for further details.

Please be informed that failure to report recruitment to EDGE may result in loss or delay in funding to the Trust and to the Directorate.

\*Information regarding EDGE eligibility for reporting is detailed in the 'Conditions of R&D Authorisation'



Chairman: Tony Pedder OBE Chief Executive: Sir Andrew Cash OBE



GT/RDSC  
20 March 2014

Tel no: 0114 225 4047  
E-mail: g.taylor@shu.ac.uk

Mrs LJ Evans  
15 Mylor Road  
Ecclesall  
Sheffield  
S11 7PF

Dear Mrs Evans

**Application for Approval of Research Project and Supervisory Team**

Your application for approval of research programme was considered by the Chair of the Research Degrees Sub-Committee on 19 March 2014 and I am pleased to inform you that it was approved. Please find attached rapporteurs' comments for your information.

The next stage for you will be the Approval of the Examiners and Doctorate Project Report title for Award of the Doctorate in Professional Studies. These details should be proposed on form DPS3 by your Director of Studies, and submitted to the Graduate Studies Team at least 4 months in advance of submission of your doctoral project report. In your case we would expect to receive a DPS3 no later than 30 April 2018, you will no doubt wish to discuss this with your Director of Studies. Your registration details are also attached.

If you have any queries, please contact Student Systems and Records (Research Degrees) based at City Campus, using the contact details above.

Yours sincerely



Secretary  
Research Degrees Sub-Committee

cc Director of Studies  
Head of Programme Area (Research Degrees)  
Research Administrator

Enc

## **Appendix 4 – Stakeholder Study Information Sheet**

### **Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust**

#### *Participant Information Sheet – Stakeholder Interview*

I am inviting you to take part in a research study. Before you decide whether to take part it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Take time to decide whether or not you wish to take part. Do feel free to contact me if there is anything that is not clear or if you would like more information. Contact details are at the end of this sheet.

#### **Why are you doing the study?**

I am the Head of Occupational Therapy at Sheffield Teaching Hospital Foundation Trust (STHFT). I am responsible for the professional practice and development of the Occupational Therapists who are employed by STHFT. I wish to explore the current practice and role of Occupational Therapists who assess and treat frail elderly people in the range of settings within the trust. Frail elderly people are frequently admitted to the hospital and receive a range of community services, there is an increasing demand on this range of services and I wish to explore the current and potential future role Occupational Therapists along this care pathway. From this study I will make recommendations so that Occupational Therapy skills are utilised to have the most benefit for frail elderly people and the organisation.

#### **Why have I been asked to participate?**

You have been asked to participate as I have identified you as a key stakeholder in the care of older people and the profession of Occupational Therapy. I am interested to explore your opinion and perception of the impact and benefit of Occupational Therapy with frail elderly people. The information I gain will then inform the next stage of my study when I will select Occupational Therapists and members of their MDT to interview in 3 different services within my trust, this is to reflect the range of services that the frail elderly person may require and is available within the trust. These services are primary care, intermediate care and secondary care. The main focus of the study is to explore with Occupational Therapists in the 3 settings how, where and when their skills can have most impact and benefit for frail elderly people. The MDT will contribute to exploring these questions.

#### **Do I have to be involved in the study?**

No – whether you take part or not is entirely up to you. If you would prefer not to take part, you do not have to give any reason, I will not mind. If you choose to take part you can still leave the study at any time. I will initially contact you by e mail or telephone to explain the study and send you relevant information. If you require any further information to assist in your decision to participate please contact me using the details within this information sheet.

### **What will taking part involve?**

If you are willing to take part, please inform me (Laura Evans) and I will contact you to conduct an interview with you at a time and location that is convenient for you.

I anticipate that the interview will take approximately 30 minutes and will be guided by an interview schedule. I will ask you about your opinions and perceptions on the role and skills of Occupational Therapists with frail elderly people within the context in which you work. I will also ask you about your views on how, where and when Occupational Therapy skills could have the most impact in the future.

I will digitally record our interview. This will help me concentrate on what you are saying and avoid having to take notes while you are talking. The recordings will then be partially transcribed to capture the main points from the interview, any names or information that makes you identifiable will be removed. I will check that the recording and the written transcript are the same and then will erase the recording.

### **What happens after the interview?**

I will transcribe the interviews to capture the main points from the interview. I will then analyse your answers to identify themes to incorporate into the interviews of the participants in Stage 2 of my study.

### **What are the possible disadvantages and risks of taking part?**

I do not anticipate that there are any risks in taking part. You will not be under any pressure to answer questions or talk about topics that you prefer not to discuss and you can choose to stop the interview at any point.

### **What are the possible benefits of taking part?**

The benefits are that you will be participating to a research project (as part of my Doctoral Study) which will contribute to local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people.

### **What if something goes wrong?**

It is extremely unlikely that anything will go wrong as a result of taking part in this research. However if you wish to complain, or have any concerns about the way you have been approached or treated during the course of this project or if you have any queries or questions please contact the Director of Studies or the Clinical Director of Professional Services.

**Principal investigator:**

Laura Evans, Head of Occupational Therapy

[Laura.evans@sth.nhs.uk](mailto:Laura.evans@sth.nhs.uk) or 0114 2712766

**Director of Studies:**

Dr Russell Ashmore, Senior Lecturer (Mental health Nursing)

R.J.Ashmore@shu.ac.uk or 0114-225 5489

Clinical Director of Professional Services

Mark Cobb

[Mark.cobb@sth.nhs.uk](mailto:Mark.cobb@sth.nhs.uk) or 0114 2713327

If you would rather contact an independent person, you can contact:

Peter Allmark (Chair Faculty Research Ethics Committee) [p.allmark@shu.ac.uk](mailto:p.allmark@shu.ac.uk) or 0114 225 5727

**Will my taking part in this research be kept confidential?**

The recordings and notes from any discussion you take part in will be held in a safe place and only the research team will have access. The information from the recordings will be typed onto a computer, which will have a password. Where possible the names of all the people who have taken part will be removed, so individuals will not be recognised.

The results of the study will be written up in the form of a project report and other written documents and circulated to relevant local and national organisations and presented at conferences. Reports and presentations will include quotes from the interviews but these will be anonymous and not linked to a particular participant. You will be informed of the results of the project if you wish in the form of a summary report. The project will also be submitted for publication in academic and health care journals.

The only personal data we keep for longer than this will be your signed consent form. We have to keep this for seven years from the end of the project so I will keep it separately in a secure file for this length of time.

### **What will happen to the results of the research?**

What we learn from this study will contribute to the local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people in the trust by the recommendations that come from this research study. The learning will be distributed outside of the trust to our commissioners, the professional body and other interested parties.

### **Who is organising and funding the research?**

The study will form a major part of my doctoral thesis as part of a Doctorate of Professional Studies at Sheffield Hallam University. This doctorate course has been funded by the Directorate of Professional Services at Sheffield Teaching Hospital Foundation Trust in which I am employed. The director of studies and research support team are employed by Sheffield Hallam University and Sheffield University

### **Who has reviewed this study?**

This research has been reviewed and approved by the Sheffield Hallam University, Health and Wellbeing Research Ethics Committee and the Research Department of Sheffield Teaching Hospital Foundation Trust.

### **What if I have questions or concerns after reading this sheet?**

Please feel free to contact me if there is anything you need answered. I will be happy to talk to you.

Laura Evans

Head of Occupational Therapy  
Therapy Services HQ,  
G Floor,  
Royal Hallamshire Hospital,  
Glossop Road.  
Sheffield  
S10 2JA  
Tel: 0114 2712766

**Appendix 5 Stakeholder Consent Form**

**Participant consent form: Stakeholder Interviews**

Study title:	<b>Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust</b>
Chief investigator	Laura Evans
Telephone number	0114-2712766

Participant name

	<b>Please read the following statements and put your initials in the box to show that you have read and understood them and that you agree with them</b>	<b>Please initial each box</b>
1	I confirm that I have read and understood the information sheet dated ..... for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="text"/>
2	I understand that my involvement in this study is voluntary and that I am free to withdraw at any time.	<input type="text"/>
3	I understand that the interview will be recorded and transcribed.	<input type="text"/>
4	I agree to take part in this study	<input type="text"/>

**To be filled in by the participant**

I agree to take part in the above study

Your name

Date

Signature

**To be filled in by the person obtaining consent**

I confirm that I have explained the nature, purposes and possible effects of this research study to the person whose name is printed above.

Name of investigator

Date

Signature

**Filing instructions**

- 1 copy to the participant
- 1 original in the Project or Site file



## Appendix 6 Stakeholder Interview Schedule

### Interview Guide for Stakeholder interviews April 2014 – Laura Evans

#### Study Title

*Exploration of the role of Occupational Therapists with older people who have become frail within a single integrated healthcare trust?*

#### Questions

1. Can you tell me about your current role?
2. How do you define and conceptualise frailty?
3. What do you think are the current and future challenges in the provision of healthcare for frail older people?
4. Can you tell me about your experiences of working with Occupational Therapists in this field?
5. What are your observations of their practice in the speciality of the care of frail older people?
6. Where and how do you think that the skills of Occupational Therapists could have the most impact in hospital and the community care for frail older people?
7. What is important to consider in providing an integrated service around the needs of frail older people?
8. Are there any recommendations you would make to Occupational Therapists working in this speciality?
9. Have you any further comments to inform this study?

## **Appendix 7 – OT Study Information Sheet**

### **Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust**

#### **Participant Information Sheet**

##### **Interview with the Occupational Therapist**

I am inviting you to take part in a research study. Before you decide whether to take part it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Take time to decide whether or not you wish to take part. Do feel free to contact me if there is anything that is not clear or if you would like more information. Contact details are at the end of this sheet.

##### **Why am I doing the study?**

I am the Head of Occupational Therapy at Sheffield Teaching Hospital Foundation Trust (STHFT). I am responsible for the professional practice and development of the Occupational Therapists who are employed by STHFT. I wish to explore the current practice and role of Occupational Therapists who assess and treat frail elderly people in the range of settings within the trust. Frail elderly people are frequently admitted to the hospital and receive a range of community services, there is an increasing demand on this range of services and I wish to explore the current and potential future role Occupational Therapists along this care pathway. From this study I will make recommendations so that Occupational Therapy skills are utilised to have the most benefit for frail elderly people and the organisation.

##### **Why have I been asked to participate?**

You have been asked to participate as I am interested to explore your opinion and perception on the impact of Occupational Therapy with frail elderly people in the setting that you work. I have selected you to interview as an Occupational Therapist who works in one of three different services within the trust, this is to reflect the range of services that the frail elderly person may require and is available within the trust. These services are primary care,

intermediate care and secondary care. Your experience, knowledge and professional opinion is key to this study and the outcome of this study.

### **Do I have to be involved in the study?**

No – whether you take part or not is entirely up to you. If you would prefer not to take part, you do not have to give any reason, I will not mind. If you choose to take part you can still leave the study at any time. I will initially contact you by e mail or telephone to explain the study and send you the relevant information. If you require any further information to assist in your decision to participate please contact me using the details within this information sheet.

### **What will taking part involve?**

If you are willing to take part, please inform me and I will contact you to conduct an interview with you at a time and location that is convenient for you.

I anticipate that the interview will take approximately one hour and will be guided by an interview schedule. We will ask you about your opinions and perceptions on the role and skills of Occupational Therapists with frail elderly people within the context in which you work. I will also ask you about your views on where Occupational Therapy skills may have the most impact in the future.

Each interview will be digitally recorded. This will help me concentrate on what you are saying and avoid having to take notes while you are talking. The recordings will then be transcribed (written out), but any names or information that makes you identifiable will be removed. I will check that the recording and the written transcript are the same and then will erase the recording.

I will also be interviewing members of your MDT who have contact with you and have insight into the impact the role of Occupational Therapists could have with frail older people. This will be a maximum of 4 people and can be suggested by you and your service manager. I wish to interview the most relevant members of your MDT.

### **What happens after the interview?**

I will transcribe the interviews and then will analyse the content of the interviews to identify any common themes, this information will be anonymous and a software package called NVivo will be used to code and organise this information.

**What are the possible disadvantages and risks of taking part?**

I do not anticipate that there are any risks in taking part. You will not be under any pressure to answer questions or talk about topics that you prefer not to discuss and you can choose to stop the interview at any point.

**What are the possible benefits of taking part?**

The benefits are that you will be participating to a research project (as part of my Doctoral Study) which will contribute to local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people.

**What if something goes wrong?**

It is extremely unlikely that anything will go wrong as a result of taking part in this research. However if you wish to complain, or have any concerns about the way you have been approached or treated during the course of this project or if you have any queries or questions please contact the Director of Studies or the Clinical Director of Professional Services.

Principal investigator:

Laura Evans, Head of Occupational Therapy

[Laura.evans@sth.nhs.uk](mailto:Laura.evans@sth.nhs.uk) or 0114 2712766

Director of Studies:

Dr Russell Ashmore, Senior Lecturer (Mental Health Nursing)

R.J.Ashmore@shu.ac.uk or 0114-225 5489

Clinical Director of Professional Services

Mark Cobb

[Mark.cobb@sth.nhs.uk](mailto:Mark.cobb@sth.nhs.uk) or 0114 2713327

If you would rather contact an independent person, you can contact:

Peter Allmark (Chair Faculty Research Ethics Committee) [p.allmark@shu.ac.uk](mailto:p.allmark@shu.ac.uk)  
or 0114 225 5727

### **Will my taking part in this research be kept confidential?**

The recordings and notes from any discussion you take part in will be held in a safe place and only myself and my research supervisory team will have access. The information from the recordings will be typed onto a computer, which will have a password. Where possible the names of all the people who have taken part will be removed, so individuals will not be recognised.

The results of the study will be written up in the form of a project report and other written documents and circulated to relevant local and national organisations and presented at conferences. Reports and presentations will include quotes from the interviews but these will be anonymous and not linked to a particular participant. You will be informed of the results of the project if you wish in the form of a summary report. The project will also be submitted for publication in academic and health care journals.

The only personal data we keep for longer than this will be your signed consent form. We have to keep this for seven years from the end of the project so I will keep it separately in a secure file for this length of time.

### **What will happen to the results of the research?**

What I learn from this study will contribute to the local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people in the trust by the recommendations that come from this research study. The learning will be distributed outside of the trust to our commissioners, the professional body and other interested parties.

### **Who is organising and funding the research?**

The study will form a major part of my doctoral thesis as part of a Doctorate of Professional Studies at Sheffield Hallam University. This doctorate course has been funded by the Directorate of Professional Services at Sheffield Teaching

Hospital Foundation Trust in which I am employed. The Director of Studies and the research supervisory team are employed by Sheffield Hallam University and Sheffield University

**Who has reviewed this study?**

This research has been reviewed and approved by the Sheffield Hallam University, Health and Wellbeing Research Ethics Committee and the Research Department of Sheffield Teaching Hospital Foundation Trust.

**What if I have questions or concerns after reading this sheet?**

Please feel free to contact me if there is anything you need answered. I will be happy to talk to you.

Laura Evans

Head of Occupational Therapy  
Therapy Services HQ,  
G Floor,  
Royal Hallamshire Hospital,  
Glossop Road.  
Sheffield  
S10 2JA  
Tel: 0114 2712766

**Appendix 8. Participant Consent Form: OT Case Study**

Study title:	<b>Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust</b>
Chief investigator	Laura Evans
Telephone number	0114-2712766

Participant name	<input style="width: 80%;" type="text"/>
------------------	--

	<b>Please read the following statements and put your initials in the box to show that you have read and understood them and that you agree with them</b>	<b>Please initial each box</b>
1	I confirm that I have read and understood the information sheet dated ..... for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="text"/>
2	I understand that my involvement in this study is voluntary and that I am free to withdraw at any time.	<input type="text"/>
3	I understand that the interview will be recorded and transcribed.	<input type="text"/>
4	I agree to take part in this study	<input type="text"/>

<b>To be filled in by the participant</b>		
I agree to take part in the above study		
Your name	Date	Signature
<input type="text"/>	<input type="text"/>	<input type="text"/>

**To be filled in by the person obtaining consent**

I confirm that I have explained the nature, purposes and possible effects of this research study to the person whose name is printed above.

Name of investigator

Date

Signature

**Filing instructions**

- 1 copy to the participant
- 1 original in the Project or Site file



## **Appendix 9 – Interview Schedule**

### **Interview Guide for OT Case Study 1 November 21<sup>st</sup> 2014 – Laura Evans** **Study Title**

*To explore where Occupational Therapy skills could have the most impact for frail older people within a single integrated healthcare trust?*

1. Can you tell me about your current role?
2. In your role do you see frail older people?
3. Can you describe what the concept of frailty means to you as an OT?
4. How do you identify that a person is frail?
5. What are the factors that you think may lead an older person to become frail?
6. What do you consider are the challenges for a frail older person in today's society?
7. What are your observations of healthcare for frail older people?
8. Can you tell me about your role as an OT with frail older people in Primary Care?
9. Is your approach different with someone who is frail?
10. What is important to consider in your assessment and treatment of a frail older person?
11. What are the skills that an OT requires or utilises in the assessment and treatment of a frail older person?
12. Does working in Primary Care present opportunities or challenges in for OT with frail older people?
13. What impact can an OT role have for a frail older person in Primary Care?
14. How does this compare with working in hospital?
15. As STH is now an integrated trust what are the factors to consider for care of frail older people?
16. Where do you think that OT can have most impact for frail older people?
17. Are there any recommendations you would make for OT practice in the future care of frail older people?

## **Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust**

### **Participant Information Sheet**

#### **Interview with Multi- Disciplinary Team (MDT) Member**

I am inviting you to take part in a research study. Before you decide whether to take part it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Take time to decide whether or not you wish to take part. Do feel free to contact me if there is anything that is not clear or if you would like more information. Contact details are at the end of this sheet.

#### **Why are you doing the study?**

I am the Head of Occupational Therapy at Sheffield Teaching Hospital Foundation Trust (STHFT). I am responsible for the professional practice and development of the Occupational Therapists who are employed by STHFT. I wish to explore the current practice and role of Occupational Therapists who assess and treat frail elderly people in the range of settings within the trust. Frail elderly people are frequently admitted to the hospital and receive a range of community services, there is an increasing demand on this range of services and I wish to explore the current and potential future role Occupational Therapists along this care pathway. From this study I will make recommendations so that Occupational Therapy skills are utilised to have the most benefit for frail elderly people and the organisation.

#### **Why have I been asked to participate?**

You have been asked to participate as I am interested to explore your opinion and perception of the role and skills of Occupational Therapists with frail elderly people. I have selected Occupational Therapists and members of their MDT to interview in 3 different services within the trust, this is to reflect the range of services that the frail elderly person may require and is available within the

trust. These services are primary care, intermediate care and secondary care. You have been selected as a MDT member who has contact with an Occupational Therapist within your setting and is familiar with the role and intervention of Occupational Therapists with frail elderly people.

### **Do I have to be involved in the study?**

No – whether you take part or not is entirely up to you. If you would prefer not to take part, you do not have to give any reason, I will not mind. If you choose to take part you can still leave the study at any time. I will initially contact you by e mail or telephone to explain the study and send you the relevant information. If you require any further information to assist in your decision to participate please contact me using the details within this information sheet.

### **What will taking part involve?**

If you are willing to take part, please inform me and I will contact you to conduct an interview with you at a time and location that is convenient for you.

I anticipate that the interview will take approximately 30-40 minutes and will be guided by an interview schedule. I will ask you about your opinions and perceptions on the role and skills of Occupational Therapists with frail elderly people within the context in which you work. I will also ask you about your views on where Occupational Therapy skills may have the most impact in the future.

Each interview will be digitally recorded. This will help me concentrate on what you are saying and avoid having to take notes while you are talking. The recordings will then be transcribed (written out), but any names or information that makes you identifiable will be removed. I will check that the recording and the written transcript are the same and then will erase the recording.

### **What happens after the interview?**

I will transcribe the interviews and then will analyse the content of the interviews to identify any common themes, this information will be anonymous and a software package called NVivo will be used to code and organise this information.

### **What are the possible disadvantages and risks of taking part?**

I do not anticipate that there are any risks in taking part. You will not be under any pressure to answer questions or talk about topics that you prefer not to discuss and you can choose to stop the interview at any point.

**What are the possible benefits of taking part?**

The benefits are that you will be participating to a research project (as part of my Doctoral Study) which will contribute to local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people.

**What if something goes wrong?**

It is extremely unlikely that anything will go wrong as a result of taking part in this research. However if you wish to complain, or have any concerns about the way you have been approached or treated during the course of this project or if you have any queries or questions please contact the Director of Studies or the Clinical Director of Professional Services.

**Principal investigator:**

Laura Evans, Head of Occupational Therapy

[Laura.evans@sth.nhs.uk](mailto:Laura.evans@sth.nhs.uk) or 0114 2712766

**Director of Studies:**

Dr Russell Ashmore, Senior Lecturer (Mental health Nursing)

R.J.Ashmore@shu.ac.uk or 0114-225 5489

**Clinical Director of Professional Services**

Mark Cobb

[Mark.cobb@sth.nhs.uk](mailto:Mark.cobb@sth.nhs.uk) or 0114 2713327

If you would rather contact an independent person, you can contact:

Peter Allmark (Chair Faculty Research Ethics Committee) [p.allmark@shu.ac.uk](mailto:p.allmark@shu.ac.uk)  
or 0114 225 5727

**Will my taking part in this research be kept confidential?**

The recordings and notes from any discussion you take part in will be held in a safe place and only myself and the supervisory team will have access. The information from the recordings will be typed onto a computer, which will have a

password. Where possible the names of all the people who have taken part will be removed, so individuals will not be recognised.

The results of the study will be written up in the form of a project report and other written documents and circulated to relevant local and national organisations and presented at conferences. Reports and presentations will include quotes from the interviews but these will be anonymous and not linked to a particular participant. You will be informed of the results of the project if you wish in the form of a summary report. The project will also be submitted for publication in academic and health care journals.

The only personal data we keep for longer than this will be your signed consent form. I have to keep this for seven years from the end of the project so I will keep it separately in a secure file for this length of time.

### **What will happen to the results of the research?**

What I learn from this study will contribute to the local evidence of Occupational Therapy practice in the trust and 'shape' the future of the services to frail elderly people in the trust by the recommendations that come from this research study. The learning will be distributed outside of the trust to our commissioners, the professional body and other interested parties.

### **Who is organising and funding the research?**

The study will form a major part of my doctoral thesis as part of a Doctorate of Professional Studies at Sheffield Hallam University. This doctorate course has been funded by the Directorate of Professional Services at Sheffield Teaching Hospital Foundation Trust in which I am employed. The Director of Studies and research supervisory team are employed by Sheffield Hallam University and Sheffield University

### **Who has reviewed this study?**

This research has been reviewed and approved by the Sheffield Hallam University, Health and Wellbeing Research Ethics Committee and the Research Department of Sheffield Teaching Hospital Foundation Trust.

### **What if I have questions or concerns after reading this sheet?**

Please feel free to contact me if there is anything you need answered. I will be happy to talk to you.

Laura Evans  
Head of Occupational Therapy  
Therapy Services HQ,  
G Floor,  
Royal Hallamshire Hospital,  
Glossop Road.  
Sheffield  
S10 2JA  
Tel: 0114 2712766

**Appendix 11 MDT Consent Form**

**Participant consent form: MDT Interviews**

Study title:	<b>Exploration of the Occupational Therapy Role with Frail Elderly People in an Integrated Healthcare Trust</b>
Chief investigator	Laura Evans
Telephone number	0114-2712766

Participant name

	<b>Please read the following statements and put your initials in the box to show that you have read and understood them and that you agree with them</b>	<b>Please initial each box</b>
1	I confirm that I have read and understood the information sheet dated ..... for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	<input type="text"/>
2	I understand that my involvement in this study is voluntary and that I am free to withdraw at any time.	<input type="text"/>
3	I understand that the interview will be recorded and transcribed.	<input type="text"/>
4	I agree to take part in this study	<input type="text"/>

**To be filled in by the participant**

I agree to take part in the above study

Your name  Date  Signature

**To be filled in by the person obtaining consent**

I confirm that I have explained the nature, purposes and possible effects of this research study to the person whose name is printed above.

Name of investigator

Date

Signature

**Filing instructions**

- 1 copy to the participant
- 1 original in the Project or Site file



## **Appendix 12 MDT Interview Schedule**

### **Study Title**

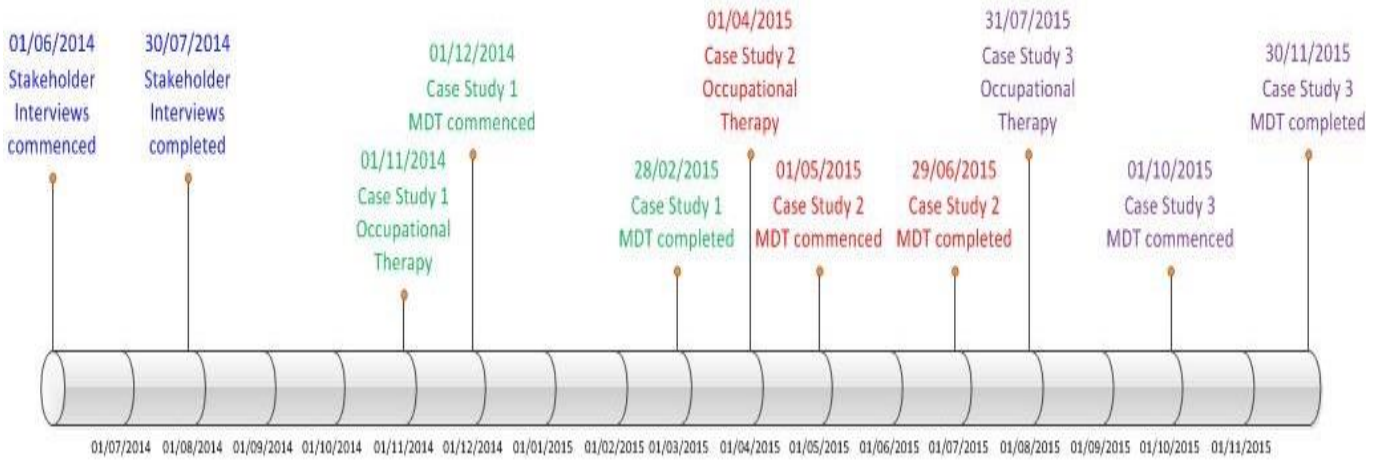
*Exploration of the role of Occupational Therapists with older people who have become frail within a single integrated healthcare trust?*

### **Interview Guide for MDT Questions for Case Study 1,2 and 3 – Laura Evans**

1. What are your observations of the OT role with frail older people?
2. What skills do you think an OT uses with frail older people?
3. What is the impact of OT intervention for the frail older person?
4. What would be the effect of no OT service?
5. How does working in primary care/intermediate care or secondary care help or hinder an OT?
6. Any further comments?

## Appendix 13 Timeline of all interviews

### Interview timeline



01/06/2014

30/11/2015

## Appendix 14 Sample of coding and notes

I suppose it's an adaptive approach to treatment isn't it really in this client group in **particular**. It's about restoring function, if you can, but it's more about that kind of adaptive approach of analysing the activity and working out if it can be done differently, to be safer or to be performed successfully or less effortfully, you know, because I think that **effort** is a word I use more now than I have done in any other practice, because I think it is. Yes, the person can do the task, the toilet transfer, but it's effortful. And when something's effortful it's less smooth, it's **vulnerable** isn't it, to not always being successful. And then there might be a fall or there **might** be a mishap, or the person will not feel very confident in doing **it**.

**Comment [L1]:** Responding to needs of the person by analysing and adapting approach – Tailoring approach

**Comment [L2]:** Awareness of effort needed and link function and increased risk

**Comment [L3]:** Link between effort and vulnerability

**Comment [L4]:** Anxious about the future and how the person will feel

**Comment [L5]:** NOTES This paragraph is reflecting an adaptive approach to reduce effort and therefore risk and vulnerability and potential lack of confidence for the person will feel

### **It makes the choice not to do it.**

Makes the choice not to do it, like making a meal, like dealing with the microwave. So that's about that **confidence** building, that OT. It's about really, it's providing that opportunity, facilitating that **opportunity** to practise a task with confident, which will enable you then to do it **independently**, and also then to **generalise** hopefully some other areas of your life. And I suppose that's really what would be the impact of OT for me would be that getting in **earlier** possibly to just make those suggestions, to just practise something maybe in a **different** way, or modify it. Say if it's a kitchen task, so that it was safer and a lot more fluid, and not as **exhausting**. The use of a perching stool or **equipment**, but it would facilitate them feeling that they could do that, and they were **competent**. It's that competency in a task isn't **it**?

**Comment [L6]:** Ownership of OT role to empower, build confidence

**Comment [L7]:** Providing the time/space to practice

**Comment [L8]:** Empowering independence

**Comment [L9]:** Generalisability of facilitated skills and confidence

**Comment [L10]:** Opportunity for early intervention, practice, improving safety- getting in early

**Comment [L11]:** Facilitation of doing things differently

**Comment [L12]:** Effort, fatigue and fluidity of movement

**Comment [L13]:** Problem solving solution focussed

**Comment [L14]:** Achievement

**Yeah.**

**Comment [L15]:** NOTES [redacted] is describing an empowering approach to build confidence and independence for the person but also wants to intervene earlier for the benefit and sense of

Then I think that would be where the **impact** is really. And that would really be about measuring the patient's **confidence** in the task, and then self-rating it wouldn't it? Because that would then lead to them feeling like they could cook a meal for **somebody** if they were coming round, and that would then enhance their **mood** and so on and so forth.

**Comment [L16]:** Desire to be most effective for the person

**Comment [L17]:** The person would be the best judge of impact and change

**Comment [L18]:** Empowered, confidence

**Comment [L19]:** Link to mood, sense of achievement

**Comment [L19]:** Link to mood, sense of achievement

**And I think sometimes it's about where you put your efforts isn't it, it's those choices, and enabling choices to say actually I'm going to put my efforts here, but actually I'm going to leave that and I'm going to actually have some help with that because that's fine, because it allows me to do.**

## Appendix 15 – Case Study 3 OT, codes and initial themes

Code	Grouping of codes	Initial Theme
Assessment	Crisis point for person	
Discharge planning	Crisis point for family	
Time pressures	Chance to investigate	
Planning	Short time to assess	
Complexity of frailty	Short time to discharge	Acute Context
Vulnerability of person	Add onto A&E assessment	
Label of frailty	Unfamiliar setting for person	
Crisis point	Effect of setting - performance	
Deteriorating picture	Risks of acute setting	
Empowerment of older person		
Digging for detail	Picture of deterioration	
Jigsaw of information	Vulnerability of condition	
Home, home, home	Triggers of admission	
Collaboration with family	Lack of resilience	Perception of Frailty
Problem spotting, solving	Multifactorial condition	
Signposting	Negative label of frailty	
Communication	Minimisation of risks	
Observation	Transitional stages/levels	
Handing over to community		
Listening	Interested in the detail	
MDT working	Jigsaw of person's life	
Ward occupations	Communication with person	
Resilience	Communication with family	OT Practice
Stoicism of older person	Communication with MDT	
Accuracy of Assessment	Signposting for discharge	
Managing Risk	Brief intervention for home	

Education of others

Meaningful goals

Appendix 16 Developed Thematic Map

