How can Healthcare Service Engagement be supported for Service Users with Complex Healthcare Needs?

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Dedicated to all of my friends and family

Abstract

By 2033 the number of elderly people in England and Wales is expected to exceed 16.4 million. The consequent increase in prevalence of chronic illness and demand on the health and social care services are major causes of concern for healthcare practitioners and policy-makers alike. In response, calls for greater service user autonomy, involvement, and self-care all indicate a shift away from existing paternalistic models of care to a model where service users knowledgably and competently manage their own healthcare and wellbeing. To equip healthcare professionals implement these fundamental changes, this thesis aims to capture, analyse, and articulate the process of healthcare service engagement.

To investigate how healthcare services can be better designed to support healthcare engagement for service users with complex needs, this thesis conducts an empirical ethnographic study of a UK-based falls prevention service. Mixed methods were used to collect data from a wide range of sources, including twenty semi-structured interviews with healthcare professionals and service users, ninety-two surveys, referral forms, assessments, and healthcare promotional materials. The data were coded, conceptualised, and categorised to produce a grounded theory of healthcare service engagement represented in a specifically designed model.

Key findings show that healthcare service engagement in the context of the chronically ill elderly needs to be understood as an interconnected, emergent, non-linear, and situated process. It recommends that engagement should be supported in a more user-centric and personalised manner, assessing and responding to service users' engagement needs as they emerge concurrently with the service's pathway, integrating assessment practices within a wider healthcare context, and simplifying the existing multidisciplinary and multi-phase falls prevention pathway. Resulting from this thesis, healthcare professionals can more accurately,

completely, and confidently reflect on the complex process of healthcare service engagement; better equipping the community for challenges it will face in the future.

Declaration

I declare that this thesis is my own work and has not been submitted in substantially the same form for the award of a higher degree elsewhere. To the best of my knowledge it does not contain any materials previously published or written by another person except where due reference is made in the text.

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Rebecca Pearce

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Chapter 1. Introduction: Thesis Aims and Scope of Study

1.1 Introduction

This thesis studies how healthcare services can be better designed to support healthcare engagement for service users with complex needs. It investigates the broad spectrum of influences that affect service users' engagement as they navigate their way through a complex multi-service context. In particular, it explores the nature of healthcare service engagement among elderly, chronically ill service users who were assessed and treated through a community-based falls prevention service. The falls prevention service was employed as a suitable access point to better understand service users' varied engagement needs, as those accessing this service typically exhibit a number of other health conditions. Semi-structured interviews and surveys provided the main source of data in the form of experiential insights of the engagement process. These insights were obtained from service users and healthcare professionals, most of whom use or are employed by the falls prevention service[1].

This chapter is organised in the following way. The first section (1.2) introduces the context within which this study is situated and describes the changing healthcare landscape from paternal to user-centric and autonomous forms of healthcare. It describes a move towards preventative healthcare as a response to our ageing population, which is characterised by an increased need for healthcare service provision. The next section (1.3) describes how our ageing

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[1] A small number of participants were also recruited who were not users of the falls prevention service.

population and increased requirements placed upon healthcare services calls for service users to become more engaged and actively involved in their health. Following this is a description of previous work (1.4) on healthcare engagement involving elderly chronically ill service users, and some of the key issues that were identified by these studies. The next section (1.5) makes a case for studying healthcare service engagement, presents the main research questions, and introduces the area of falls prevention as a key access point to study elderly chronically ill service users who exemplify complex engagement needs. The final sections introduce the research questions (1.6); provide a synthesis of the research process (1.7); research motivations (1.8) and a brief overview of all of the chapters contained within this thesis (1.9).

1.2 A Changing Healthcare Landscape

In recent years, the importance of healthcare service engagement has increased considerably as a mechanism for driving service users to care for themselves. This necessity for more engaged service users is motivated by significant demographic changes, namely our ageing population, which brings with it a prevalence of long-term (chronic) health concerns. *'The number of people aged 65 years and over in England and Wales is projected to increase by 65 percent in the next 25 years'* (Age UK 2013:13). This demographic change is accompanied by complex challenges for healthcare professionals, service users and policy makers alike, in that elderly service users generally use more health and social care services as their physical and mental health deteriorate (Lehnert et al. 2011). This increased and varied use of healthcare services therefore creates an opportunity to better understand the role of healthcare engagement and the extent to which it is able to facilitate more appropriate use of healthcare resources (Coulter 2011). Elderly service users also tend to experience an aggregation of

chronic illnesses rather than suffering from one illness in isolation, which consequently leads to complex care requirements that span across healthcare services (Bayliss et al. 2007). *'Unfortunately, most people do not have access to the information, tools, and other resources they need to play this new role effectively'* (Reid et al. 2005:19). Therefore, in an attempt to address the increased demand for healthcare services and engagement with these services by our ageing population, there has been a shift in the healthcare rhetoric from paternalistic and prescriptive forms of healthcare toward more preventative healthcare measures.

Driving these preventative measures are notions of patient centeredness (Mead and Bower 2000), personalisation (Lloyd 2010) and healthcare service engagement (Coulter 2002). Preventative care is not only reliant on treatments and services but relies largely upon the involvement and self-care practices of service users. Self-care practices enacted by service users encapsulate a wide range of health-promoting activities and *'is the most prevalent form of healthcare'* (Coulter 2011:83). It therefore stands to reason that an increased need for healthcare services is accompanied by an emphasis upon self-care behaviours. However, understanding how to adequately support elderly chronically ill service users' engagement with self-care behaviours remains poorly understood. For example, in their systematic review, Lehnert et al. (2011:388) point out that *'despite the widespread recognition that multiple chronic conditions pose an extensive health and healthcare problem, research is not very extensive'*.

It is thought that enabling service users to become more involved in the self-management of their care requires a 'patient-centred' approach by healthcare professionals and services. Patient-centred care is often used synonymously with patient-focused care and personalised care; however they refer to the same issues, namely the ability of services to respond to the individual preferences, needs and values of service users (Institute of Medicine 2001). Changes in rhetoric that encapsulate notions of 'patient centredness' are not only motivated by a necessity

for more self-reliant and active service users, but are also brought about by the changing expectations of the public, who now expect relevant health information, involvement, and the autonomy to make choices about their healthcare.

Changes in the healthcare landscape may be observed by a shift away from dependency on the decisions made by healthcare professionals, to service user autonomy. For example, Coulter (2012:6) informs us that *'since the publication of the 'NHS Plan (2000), patient and public involvement has become part of the everyday rhetoric in the NHS'*. This new approach of public involvement relies on the recognition that service users are self-governing beings in their own right, and are capable of making important decisions about their health. Healthcare service engagement has therefore been increasingly employed as a mechanism to support service users in being more proactive towards their health (Forbat et al. 2009).

Motivational interviewing, the improvement of health literacy, the provision of personalised health information, telephone counselling and helplines, have all been found to enhance healthcare engagement and thus support service user involvement (Coulter 2012:83). The role of the healthcare professional is also thought to be a central component of healthcare service engagement; for example, coproduction is increasingly being used to describe the mutual contributions made by both service users and healthcare professionals. Coproduction sees the role of health professionals shift from 'healer' to a role that facilitates and empowers service users by enabling them to contribute effectively towards their own healthcare. *'To be truly transformative, co-production requires a relocation of power towards service users'* therefore representing a potential relationship that reflects changing public expectations and attitudes (Realpe and Wallace 2010:3). In keeping with this service user-centric view, Coulter (2011:14) points out that healthcare professionals must *'ensure that the care delivery is responsive to patients' physical, emotional and social needs, that interactions with staff are*

informative, empathetic and empowering, and that patients' values and preferences are taken into account is the essence of patient centeredness'. In this regard, the role of healthcare delivery, and the relationship between healthcare professionals and service users within it, are thought to be important and may be regarded *'as a meeting of two experts, each with their respective knowledge and skills'* (Realpe and Wallace 2010:3). Other examples of this change in responsibility from healthcare providers to service users can be seen across government literature and healthcare policy. For example, the Department of Health (DH) guidelines, *'Your Health, Your Way: A Guide to Long Term Conditions and Self Care'* (2012) and *'Self Care: A Real Choice'* (2005), both treat service users' autonomy towards their health and wellbeing as central components of modern healthcare.

Increased focus on preventive and service user-centric forms of care can be identified throughout the NHS. For example, screening for cervical, breast, bowel and testicular cancer has become routine as Public Health England raises awareness eliciting participation in programmes with successful radio campaigns[2]. Public Health England has a wide range of useful information on a dedicated website in relation to spotting the signs (of cancer), managing the risks, and accessing screening and treatment for a range of forms of the condition. There also exists a wide range of active living and healthy eating strategies, which are generally commissioned and implemented by local councils in community settings. For example, the 'Active Living Referral Scheme' is a community-based intervention commissioned by Wigan Council (UK), which offers information, support and a wide range of exercise classes to help with weight control, active living and general health and wellbeing. The 'Change for Life' government strategy, which was introduced in 2009, provides a range of simple, preventative

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[2] For example see the 'Be Clear on Cancer' campaign.

measures delivering the message that we must *'eat well, move more, [to] live longer'.*

In response to the growing number of chronically ill service users, local interventions were introduced whereby service users are encouraged and supported to actively manage their chronic health conditions. For example, the Expert Patient Programme was commissioned by the National Healthcare Service (NHS) and aimed to improve the confidence and quality of life of service users and enhance their ability to self-manage their chronic condition(s). The programme is facilitated by lay people who themselves have chronic illnesses, and who support other service users in dealing with issues such as pain and depression, in addition to promoting relaxation and exercise. The fact that lay people facilitate the service is a further testament to the increasing value being placed upon the experience of service users, their self-care skills, and knowledge. This type of programme is one of several initiatives that view the service user as a capable and autonomous individual with at least some capacity to manage their own healthcare. Further evidence of the NHS's drive towards chronic illness preventative strategies is observed in Public Health England's proposal of a five-step plan in November 2013 which aims to allow *'[Clinical Commissioning Groups] CCGs the opportunity to reallocate resources away from acute services and invest in out-of-hospital services including prevention'* (Public Health England 2013:3). This strategy is particularly focused on those who are at risk of developing or who already have long-term health conditions, as it responds to the growing numbers of elderly people and their prevalence of chronic disease. In addition to changes in the types of services that are offered to chronically ill service users, there is also increased acknowledgement that *'successful management of chronic illness depends on the active behavioural involvement of patients'* (Michie et. al 2003:197). Therefore, despite improvements in healthcare service provision to prevent and respond to chronic illness, the success of these interventions relies largely upon service users' engagement as a key driver behind

their self-care behaviour. However, understanding the barriers that affect service users' engagement as they interact across healthcare services remains understudied and would therefore benefit from further enquiry.

To summarise, there are observable changes in the UK's healthcare landscape, which exist as a result of significant increases in service users aged 65 and over, and which place greater pressures on services to manage chronic illness. This is accompanied by higher expectations from service users, who express greater need for information, and a desire for choice and autonomy. The Department of Health produced a number of guidelines, which recognise the influence of these changes, incorporating them into a range of strategies. These strategies employ rhetoric involving healthcare service engagement, patient centeredness and involvement, and prevention and self-care as commonplace approaches to care. However, there still exists a disparity between what we see in policy and what is actually delivered in practice. For example, Coulter (2002:1) points out that *'the harsh realities of budgetary pressure, staff shortages and other managerial imperatives tend to displace good intentions about informing and involving patients'*. Although there is acknowledgement that service user involvement is valuable in helping to improve their care and healthcare services,[3] the lessons learnt aren't always disseminated well into practice, so they might receive increased benefits. Our current lack of understanding of the engagement needs of service users in a chronic care context may therefore be observed in significant organisational problems and poor health outcomes (Lehnert et al. 2011).

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[3] For example see 'Experience Based Design' (Bate and Robert 2006).

1.3 A Case for Healthcare Service Engagement

As a result of this changing healthcare landscape, healthcare engagement is often depicted as a possible antidote to the increased pressure on healthcare services. Healthcare service engagement tends to describe the extent to which service users connect both with the aims of healthcare services, and the extent to which service users are engaged with and perform self-care behaviours. Healthcare service engagement is often discussed alongside that of patient involvement and also encapsulates other notions of a patient-centred approach whereby *'information and involvement is at the heart'* (Coulter 2002:3). Healthcare service engagement may therefore represent a useful concept, which helps us to understand the relationship between service users and healthcare services. Other definitions of healthcare engagement include: the *'actions individuals must take to obtain the greatest benefit from healthcare* (Gruman et al. 2010:351); engagement as a form of adherence (Bosch-Capblanch et al. 2009); a working partnership (Forbat et al. 2009); a means to produce specific healthcare outcomes and a process that occurs over time (Simpson 2004). A common theme combining all of these definitions is that healthcare service engagement seems to act as a facilitating link between the service user and the service. It is therefore unsurprising that the concept of healthcare engagement has been widely adopted as a means through which service users may manage their health actively and autonomously, while alleviating pressure from healthcare services as a result of their active participation.

In demonstrating the growing importance placed upon healthcare engagement, Barello et al. (2012:1) point out that *'patients' engagement in healthcare is at the forefront of policy and research practice, and is now widely recognised as a critical ingredient for high-quality healthcare systems'.* Therefore, the increasing significance attributed to healthcare engagement goes beyond a mere optional extra of healthcare service design, but stands as an

integral foundation upon which high quality services may be organised. For example, Coulter (2010) informs us that when patients are more engaged with self-managing their healthcare, healthcare services are used more appropriately. This of course, has significant implications for cost, thus giving the NHS a chance of sustaining its services far into the future. The premise upon which this assumption is based, is that, if patients are more engaged with their healthcare, this will enable them to seek out information and services that are appropriate to their specific needs. This may involve a proper recognition of the information relating to their illness, treatment options, and ways in which they may manage their own care. For example, Forbat et al. (2009:84) indicate that 'engagement involves a collaboration which demands understanding rather than purely an information seeking process'. Therefore, it is crucial for patients to fully understand the implications of healthcare information, so that they may make informed healthcare decisions, which lead them to appropriate healthcare services, thus promoting their appropriate use.

As engaged service users are able to access appropriate care and treatment more effectively than those who are not engaged, it is more likely that these service users will prevent unnecessary suffering and illness for themselves (DH 2005). An ability to seek out healthcare information enables engaged patients to prevent illnesses from worsening and thus their health deteriorating unnecessarily (DH 2009b). Engaged service users are more likely to feel empowered and in control of their healthcare, as they have the skills and knowledge to contribute meaningfully towards their own healthcare decisions that affect them directly. Services users who are engaged tend to develop a better understanding of their illness, their healthcare requirements, and how these may be effectively managed. This growing knowledge allows them to become more confident in knowing what they need, and how they might access the relevant information. For example, *'considerable evidence suggests that patient engagement can improve [service users'] experience and satisfaction and also can be effective clinically and*

economically' (Coulter et al. 2008:5). As a result, engaged service users are more likely to take responsibility for their healthcare, as they feel informed and equipped to do so.

1.4 Previous Work on Healthcare Service Engagement

This thesis starts from the acknowledgement that there has been limited research into how engagement occurs among chronically ill elderly service users with complex and multiple illnesses (Bayliss et al. 2007). As we shall see, our population of elderly service users is suffering from multiple chronic illnesses, all of which require the use of different healthcare services. As such, there are few studies that account for the diverse barriers that service users encounter everyday while attempting to access and navigate their way across services to address their self-care needs. Furthermore, it is not yet fully documented how healthcare engagement is affected when symptoms from one chronic illness influence the care of other illnesses (Bayliss et al. 2007). A testament to this lack of understanding can be seen in the experiences of elderly service users with multiple chronic illnesses, as they tend to encounter substandard and uncoordinated care, which invariably leads to poor health outcomes (Lehnert et al. 2011). For example, elderly people tend to experience *'challenging organisational problems (accessibility; coordination problems, consultation time); polypharmacy; increased use of emergency facilities; difficulty in applying guidelines; and fragmented ineffective care'* (Fortin et al. 2007:1016).

Complex groups such as the elderly with long-term health conditions, represents a major challenge for the design of healthcare services within the NHS. This thesis argues how understanding the day-to-day experiences of elderly,

chronically ill service users represents a first step in accounting for the multifaceted ways in which healthcare engagement is affected by a wide number of factors. As we have seen, there is increasing expectation for service users to engage more fully, and take more responsibility for their healthcare (Thompson 2007). However, *'the system and culture of care does little to strengthen their ability to perform these roles, sometimes actively undermining it'* (Coulter 2011:8). It is therefore not surprising that, *'despite signals that individuals should participate more actively in their health care, the public's behaviour appears not to have kept pace with the demands of these advances'* in healthcare ideology, which sees the service users' role as active; but, however, does little to support it (Gruman et al. 2010:1).

Existing engagement literature tends to have a clear preoccupation with trying to define the barriers to engagement with the intention of both measuring and overcoming it (Coulter 2012; Baumann and Dang 2012; Forbat et al. 2009 and Gruman et al. 2010). The difficulty with much of the current empirical research is that authors tend to focus on the use of one service or one chronic illness, without alluding to the fact that the participants may also be receiving care from a range of other services. This gives the impression that the data collected is almost clinical as it represents healthcare engagement in very simplistic and isolated terms, rather than reflecting its inherent complexity. This existing focus therefore presents an opportunity to better understand the nature of engagement among service users with complex healthcare needs, which span across several healthcare services. The same is true of authors who have set out to measure healthcare engagement with the intention of pinpointing the barriers, which are a hindrance to the emergence of engagement (Hibbard et al. 2004). As with the above example, Hibbard et al. (2004) do not fully account for the wide number of factors that influence healthcare service engagement, and so it is difficult to see how something that has yet to be fully accounted for can be successfully defined and measured. This therefore creates an opportunity to conceptualise the nature

of engagement among service users with complex healthcare needs, as a means of identifying how it occurs and all of the factors that affect it.

1.5 Filling the Research Breach: The Case of Falls Prevention Services

Considering the changing healthcare landscape both in terms of the increased centrality of healthcare engagement and our ageing population, this thesis explores, and accounts for, the complex interconnections between factors that influence engagement within an ageing and chronically ill demographic. This research illustrates how further inquiry into the process of healthcare engagement is necessary to bridge the gap between the expectations placed upon services users, and their competencies, resources and conditions in fulfilling this active new role. The key objectives of this research are as follows:

➢ To describe current conceptualisations and uses of the concept of healthcare engagement by conducting an exploratory review of existing literature.

➢ To conduct a piece of qualitative primary research that reveals the nature and process of healthcare service engagement, as experienced by service users and healthcare professionals. This includes the collection and analysis of a wide range of supplementary healthcare materials including healthcare assessments, self-care artefacts and health promotion resources.

➢ To develop theoretical underpinnings that accurately represent the process of healthcare service engagement making it communicable to different audiences.

As a means of observing the everyday barriers faced by elderly, chronically ill service users, a specialised falls prevention service was identified as an appropriate case study. Falls prevention also represents an essential access point, through which interconnected barriers to healthcare service engagement across services were observed. This is because service users who pose a significant risk of falling also tend to experience other underlying health conditions, which require care from other services. While focusing on engagement within the falls prevention service, the research also accounts for interactions that occur as part of a wider healthcare context and the influence this has upon healthcare engagement. The role of healthcare professionals, service users, healthcare policy and the organisational structure of the falls prevention service and their interconnections were also considered to be of important factors of healthcare service engagement.

By accounting for the interconnected factors that affect healthcare service engagement, it has been possible to broaden our understanding of where the major challenges lie for healthcare service design. This study subsequently developed a number of key recommendations for service design, which aim to support healthcare service engagement and its associated self-care behaviours. Below is the main research question that is posed by this study, followed by three supplementary research questions.

1.6 Research Question

'How can healthcare services be better designed to support healthcare engagement for service users with complex needs?'

1. What is the nature of healthcare service engagement for service users with complex healthcare needs?

2. How can healthcare service engagement be conceptualised for service users

with complex healthcare needs?

3. What are the design recommendations for the future development of healthcare service engagement for service users with complex healthcare needs?

1.7 Research Process

The methodological framework employed throughout this study is that of interpretivism, in which one is concerned with the socially constructed worlds of both service users and healthcare professionals and the ways in which engagement is produced or not as a result of their interactions. As a sociologist with a long-term interest in people, systems and the ways in which meaning is generated and reproduced within them, positivist approaches were not employed as they assume that meaning is discovered rather than generated throughout the life course of the research. Therefore, the methodological approach employed within this research sees myself, the researcher, as an active participant whose presence cannot be objectively dismissed but instead has important implications for the data that have been produced. As an active participant in the construction of knowledge, my experience as a sociologist, and a willingness to embrace systemic complexity, have had important implications for this research. The unwillingness to oversimplify the complex and interconnected factors that affect healthcare service engagement becomes apparent through one's discussions about their coevolving relationships.

1.8 Personal Motivation

As a result of working as a carer in the community, and specifically with elderly, disabled service users with chronic illness, it is clear that this role has significantly influenced my preoccupation with this particular topic. During my time in this role, I was witness to daily occurrences where service users found themselves disenfranchised and often lacking the skills, knowledge, motivation and self-efficacy to autonomously interact with healthcare services. As a carer, the role often required me to act as mediator between service users and health and social care services, translating information to support service users' access to care. It soon became apparent that there seemed to exist a complex range of everyday barriers, which made healthcare service engagement particularly difficult for this demographic, and also prohibited them from accessing a range of important resources.

As well as having a personal interest in providing a voice for what is normally a marginalised group within society, there is also evidence to indicate that groups of elderly people tend to be excluded from research with little justification (Bayer and Tadd 2000). In their research, Bayer and Tadd (2000:993) looked at 225 studies whose authors had submitted their research protocol to an ethics committee, and revealed that *'of the 155 studies that were of relevance to elderly people, over half had an upper age limit that was unjustified'*. Providing a voice for a growing cohort of individuals, who will require increased use of healthcare services, is therefore crucial to develop adequate services, in addition to challenging the apparent assumption that elderly people should automatically be excluded from research.

1.9 Thesis Structure

The thesis is comprised of eight chapters. Each chapter addresses different aspects of the above research questions, and all are designed to accumulatively develop a case for the Healthcare Service Engagement model, as it recognises the complex interconnections between factors of engagement. Below is a brief summary of the content in each chapter:

1.9.1 Chapter 2: Engagement in Healthcare Services: A Review of Literature.

This chapter presents a comprehensive review of literature, and is comprised of three main sections, namely; healthcare engagement, chronic care and ageing, and falls prevention literature. Although each section relates to the other and will be discussed accordingly, the sections also represent a field of study in their own right, hence the separation. The first section explores the current understanding of healthcare engagement, how it is defined, and ways in which scholars have used it in defining and measuring health outcomes. The second section provides a contextual understanding of ageing and chronic illness, outlining the sense of urgency, which currently resides over the NHS in terms of managing the inherently complex healthcare needs of our ageing population. This section also explores some of the reported barriers, which service users invariably experience when trying to engage with healthcare services and self-care behaviours. The final section of the literature review introduces literature from the field of falls prevention, which also provides the context within which this research is situated. This section describes some of the reasons why elderly service users are more likely to fall, sustain serious injury and why they find it particularly difficult to engage with falls prevention services.

1.9.2 **Chapter 3: Methodology and Research Design**

This chapter provides the reader with a comprehensive understanding of both the philosophical and theoretical underpinnings of this research and its design. It presents the perspective that the falls prevention service represents a fruitful sample group, which boasts a range of extreme cases. It also describes how this sample group enabled me to account for some of the interconnected factors which influence healthcare service engagement. As this research involved the NHS and its service users, it was necessary to obtain full ethical approval from the Research Ethics Committee (REC) and so this process is also described in this chapter. Other key issues of research are also discussed, such as that of reliability, validity and the extent to which the findings of this research may be generalised to other services. This chapter introduces the development of an analytical tool called the 'Healthcare Service Engagement Model', which is outlined and developed throughout the thesis, as a means of deconstructing and understanding the various influences that influence healthcare engagement.

1.9.3 Chapter 4: An Overview of the Service

This chapter provides an overview of the falls prevention service, detailing how service users are referred, assessed, diagnosed and treated. This chapter also discusses the specific aims of both the service and of the healthcare professionals involved in falls prevention. The aim of having this overview preceding the following chapter on findings is to provide readers with a contextual understanding of the service itself, before they are presented with more detailed accounts from the participants.

1.9.4 Chapter 5: Findings: Chronic Illness, Ageing, Self-Care, and Healthcare Service Engagement

This chapter provides a platform for the participants' experiences of engagement to be voiced and is presented in a number of different themes of

engagement. The chapter includes accounts from falls prevention service users, non-service users, and falls prevention healthcare professionals. These first-hand experiences offer the reader a valuable understanding of the everyday barriers that all parties face in promoting, supporting and enacting healthcare engagement. As the findings exemplify, there exists a vast array of interconnected factors, that influence one's ability to engage with healthcare services and self-care behaviours. Some of the factors that are discussed include the ways in which chronic illness is experienced by service users, their declining mental health, and their desire for independence. It also details the important role that healthcare professionals play in supporting engagement, and the ways in which empathy, trust, belief and sensitivity play an important role within their engagement work.

1.9.5 Chapter 6: Theoretical Frameworks

This chapter emerged as part of a grounded process, as the complex relationships found in the data created the need for a comprehensive theoretical framework, which accurately models the process of healthcare service engagement. This chapter therefore describes the factors of engagement, which emerged during the data collection process and were described in the previous findings chapter. Using these emerging factors of engagement, this chapter sought further conceptual clarification of key findings and discusses the types of features that a new theoretical framework should have to reflect the process of engagement in this complex healthcare system. Some of these factors include service users' health status; the role of social support; previous experiences with healthcare services; and access to knowledge and resources. The chapter concludes with a table of key factors, which were identified as integral to the engagement process. These factors are then used to directly to inform the Healthcare Service Engagement model which is introduced in the following chapter.

1.9.6 Chapter 7: Towards a New Healthcare Service Engagement Model

This chapter introduces and describes the Healthcare Service Engagement Model, which is developed to conceptualise the process of healthcare engagement; develop recommendations to support engagement, and also provides healthcare professionals with a reflective tool to inform their practice. The chapter is presented in three main parts, and is comprised of an introduction and breakdown of the model; step-by-step guidance describing how others should use the model, and a reflection of some of the models' strengths and weaknesses. The first section describes how the model was developed to reflect both factors that emerged from the data, and key theoretical insights that were discussed in the previous theoretical framework chapter. Following a comprehensive description of the model, section two describes how healthcare professionals may employ the Healthcare Service Engagement Model in everyday practice to better understand how and where engagement may be more effectively supported. The last section reflects on some the features of the model, outlines its strengths and weaknesses, and the extent to which it is an appropriate response to the research questions.

1.9.7 **Chapter 8: Recommendations and Conclusion**

This chapter describes the various ways in which the research questions posed at the start of this study have been answered throughout the thesis. It describes how each research question revealed a number of key findings that enabled me to ascertain how healthcare service engagement may be better supported in complex healthcare systems. Some of the key findings are translated into specific design recommendations, which have implications for both policy and practice. The design recommendations suggest that engagement should be supported in a more user-centric and personalised manner, while assessing and responding to service users' engagement needs as they emerge concurrently with the service's pathway. They also suggest that assessment practices should be

integrated within a wider healthcare context, and that the existing multidisciplinary and multiphase falls prevention pathway should be simplified.

Chapter 2. Engagement in Healthcare Services: A Review of Literature

2.1 Introduction

Dramatic demographic changes in the UK will result in a much older population by 2033, with those aged 65 and over expected to increase by 65% to more than 16.4 million (Age UK: Agenda for Later Life 2013:13). Closely correlated with an ageing population are instances of chronic illness, which are also expected to surge (Department of Health 2012). These demographic changes bring with them concerns pertaining to public expenditure (Department of Health 2010); healthcare sustainability (National College of Medicine) and challenging organisational problems (Fortin et al. 2007). Healthcare engagement is increasingly considered essential to high quality healthcare services, therefore signifying engagement as an integral component of healthcare and a means through which service users may access care more appropriately (Coulter 2002). Barello et al. (2014:5) point out that:

> *"The increasing attention to patient engagement and related topics is clearly shown by the growing number of publications from 2002 to 2012 thus suggesting that empowering patients to take an active role and be engaged in their care has been internationally identified as a key factor in the drives to improve service delivery and quality."*

This review of literature therefore examines the case for healthcare service engagement, as a means of bridging the gap between elderly service users and their frequent requirement for healthcare services. Given that this study is situated within a UK context, the literature in this review is also mostly derived from UK based studies. This chapter is organised into three main sections. The first section introduces the notion of healthcare engagement and some of the ways in which it is currently defined and studied. It describes a preoccupation with the outcomes of engagement and highlights an opportunity to better understand the dynamics of the healthcare engagement process. It also describes the essential role of healthcare literacy and the ways in which it contributes towards the development of engagement. The second section reviews healthcare engagement in the context of chronic care, describing the nature of chronic illness; changes in healthcare policy and interventions, which advocate engagement; barriers to engagement; and limitations in existing approaches. The third section introduces falls prevention services, as an area of healthcare through which engagement amidst chronically ill service users may be observed. In this section the nature of falls prevention; barriers to engagement with falls prevention services; needs of service users; and the role played by healthcare professionals are discussed.

2.2 Part One: What is Healthcare Engagement?

Within this thesis, the term 'service user' is employed rather than 'patient' as a means of describing individuals who access and use healthcare services in a multitude of ways. This may involve being direct recipients of care, treatment, advice and skills from healthcare professionals or independently accessing healthcare resources. The term 'patient', and the sense of authority it grants healthcare professionals, carries with it an air of paternalism, which is thought to be disempowering to service users (Coulter 2002). This is because it encapsulates

connotations about healthcare professionals' authority and control, thus signifying service users' lack of it.

The term citizen was considered as way of describing those who access healthcare services; however it was thought to be inappropriate, particularly within an elderly chronic care context. This is because *'as citizens we may be concerned about abstract notions of what constitutes a 'good' service, for example: affordability; efficiency; and value for money; universality; equity and fairness; safety and quality; health protection and disease prevention'* (Coulter 2011:5). However, as a service user, one is more likely to consider the individual experience of one's care and treatment rather than the efficiency of the healthcare system more generally.

As elderly chronically ill service users frequently transition between patient and non-patient status one is able to encapsulate the frequently changing status of these individuals, regardless of whether they are currently receiving specific care or treatment. The term service user seems particularly appropriate for this study, as it focuses on chronically ill individuals who access healthcare in the community over extended periods of time. Therefore, when they aren't receiving direct treatment from healthcare professionals, they may continue to use healthcare services by: accessing online information and other healthcare literature; make enquiries; book appointments; self-care with resources and skills provided by the service; and make multiple healthcare choices. Furthermore, the term citizen doesn't account for individuals who may be using healthcare services; however have not yet been granted their full UK citizenship.

The following sections explore some of the ways in which healthcare engagement is defined, and conclude with the definition, which is used for this study. Barello (2012:3) points out that *'engagement is a fragmented concept without a unique definition'*, thus providing an opportunity to explore different contributions of the term to account for some of its key concepts. The following

definitions perceive healthcare engagement in a range of contrasting ways, explaining why they have been selected. They include engagement as *literal action* (Gruman et al. 2010); *adherence* (Bosch-Capblanch et al. 2009); *a working partnership* (Forbat et al. 2009); *engagement as an outcome* and *engagement as a process* (Simpson et al 2009). Contrasting definitions of engagement were employed as a means of understanding their conceptual underpinnings and the ways in which engagement may be defined differently in different contexts. For example, in their systematic review of conceptualisations of healthcare engagement, Barello et al. (2014:7) point out that in *'nursing and caring research engagement is conceptualized as patient's self-awareness; in mental health research engagement is conceptualized as clinical alliance, and in public health and health service management research engagement is conceptualized as citizens' empowerment'*. By recognising the methodological distinctions between definitions, one may develop a richer and broader understanding of how definitions of engagement may be employed within this study. The following definitions are compared with Coulter's (1995; 2002; 2011; 2012) perspective of healthcare engagement, as she stands as a prominent scholar in healthcare engagement research.

2.2.1 Engagement as Literal Action (Gruman et al. 2010).

Gruman et al. (2010:351) define engagement as the *'actions individuals must take to obtain the greatest benefit from the healthcare services available to them'*. For example, if a person with diabetes acts upon health advice to take a specific amount of insulin at a specific time and in a particular way, then this individual's literal action is likely to sustain or improve their health status. However, one would also need to consider other influences of health behaviour such as whether there is insulin available, and if the person has acquired adequate skills to administer the insulin accordingly. Gruman et al.'s (2010) definition draws our attention to a feature, which is arguably prevalent in most forms of engagement,

and which requires the individual concerned to act in some way. An important factor, which relates to this action-oriented definition, is self-efficacy.[4] Promoting the self-efficacy of service users is seen as helping them to believe that they can take literal action and carry out specific self-care behaviours successfully. Another way in which literal action may be supported is by reducing the amount of comprehension and action required for service users to perform self-care behaviours. For example, to reduce the amount of service engagement required by the service user, whilst ensuring that they receive beneficial health outcomes. This may involve prescribing a particular medication, which is low maintenance in terms of when and how it may be taken.

Although literal action is an important element of healthcare engagement, Coulter (2011:10) conversely suggests that *the act of engagement can be both transitive and intransitive, active or passive, done by or done to'*. If we take into account the nature of most healthcare activities, action is often required; for example to engage with prescribed medical practices a diabetes service user must take a blood reading and administer insulin. Taking action in this way is a requisite of this type of engagement, and may exemplify that the service user is to some extent engaged with the skills and knowledge required to perform these self-care behaviours. On the other hand, and as Coulter (2002) points out, engagement can also be *'passive'* and *'done to'*; for example a service user may passively receive information about their treatment or general healthcare information. Moreover, a service user may receive healthcare information, which they may not immediately act upon; however they may nonetheless understand and accept this information as being valid and applicable to their personal circumstances; therefore their lack of immediate action is not to say that they are not engaged.

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[4] Self efficacy is the *'subjective assessment of one's ability to cope with a given situation; sense of personal power'* (Online Dictionary 2014)

2.2.2 Engagement as Adherence (Bosch Capblanch et al. 2009)

Engagement has been traditionally synonymised with adherence, and with following the advice and procedures, which have been prescribed by healthcare professionals (Bosch-Capblanch et al. 2009). In their study, Bosch-Capblanch et al. (2009) examine the use of healthcare contracts, which are agreements between service users and healthcare professionals. These healthcare contracts describe specific self-care behaviours, which service users are expected to adhere to. It is important to note that this particular study quite literally replaces the term engagement with adherence, which draws specifically on the action-taking element of engagement. Their study evaluates the extent to which healthcare contracts positively influence service user's health, and evaluates whether service users adhere to them. Although this is a useful approach for this particular study, it is quite a definitive and absolute way of viewing engagement. For example, it fails to encapsulate the notion of service users as informed and autonomous beings, who are able to knowingly decide to which information they will adhere. One might argue instead that service users engage at different levels, at different times, and thus cannot be dismissed as lacking engagement should they choose not to adhere to a specific healthcare instruction. In fact, non-adherence may actually demonstrate that a service user is indeed engaged, and has chosen not to adhere as a result of discovering conflicting healthcare information. Furthermore, the term 'adherence' is loaded with paternalistic connotations, thus representing the service user as a non-autonomous and passive recipient of healthcare. Conversely, one may suggest that service users are active participants who are involved and consulted at every stage of their healthcare journey, even if this means that they make an active decision not to 'adhere'.

2.2.3 Engagement as a Working Partnership (Forbat et al. 2009)

Forbat et al. (2009) aimed to improve cancer services by engaging in collaborative practice with cancer service users who had previously received

treatment and care from the service. They suggest that engagement *'is a working partnership with service-users having them inform (i) service redesign/improvement, (ii) policy, (iii) research and (iv) their own care/treatment'*. This definition of engagement acknowledges the crucial role played by service users, and their ability to contribute to towards the design of healthcare service, based on their personal experiences. This first-hand knowledge is extremely valuable and holds the potential to improve the experiences of future service users. The utilization of service users in improving healthcare services has become increasingly realised in recent years, although the idea dates back much further. For example, Thompson (2006:1297) points out that *'the belief in patient participation, as a desirable goal of health policy, has long standing antecedents at a broad level'* (WHO, 1978). However, as a consequence of changing demographics, promoting active participation has become an increasing priority within UK healthcare policy (for example see *The NHS Improvement Plan 2004; Your Health Your Way 2009 and Caring for our Future 2012*).

2.2.4 Engagement as an Outcome

In modern healthcare, there is a clear preoccupation with results and outcomes as exemplified by a range of government initiatives such as Evidence Based Practice (Sackett 1996) and Pay-For-Performance (Doran et al. 2006). Healthcare engagement is therefore frequently characterized as a means through which healthcare outcomes may be achieved. For example, Barello et al. (2014:5) point out that *'the current academic debate seems to reveal a stronger interest in the clinical and organisational outcomes of patient engagement (may be due to the need for legitimizing it as a healthcare priority)'*. It is understandable that healthcare providers may be preoccupied with the end result of a healthcare intervention. For example, a smoker who no longer smokes, an obese individual who successfully lost weight, or a diabetes patient who improved their blood

sugar results all represent end goal achievements for healthcare service engagement. A paper by Villagra (2004:24) focuses explicitly on healthcare outcomes and suggests that *'large-scale deployment, rapid patient engagement, and repeated interactions between patients and nurses could be important attributes for attaining measurable improvements in quality and cost reduction'*. From this perspective, engagement is viewed as a driver for increasing efficiency and reducing costs rather than being valued as an informative process in its own right. One might argue that this definition of engagement is more suited towards the needs and aspirations of healthcare commissioners, rather than the healthcare experiences of service users, thus acknowledging the political underpinnings of different definitions.

2.2.5 Engagement as a Process (Simpson et al 2009)

Despite the above focus on healthcare engagement outcomes, there is evidence to suggest that engagement has a clear temporal dimension, and that it is advantageous to consider the various components that affect the engagement process over time. In fact, Simpson (2004:99) points out that *'less future attention be paid to outcome evaluations and more to questions of process - how treatment works and how it can be improved'*. Components such as the initial referral and diagnosis, health education, care and support provided, medication prescribed and follow-up consultations all influence service users engagement and may therefore be valuable sources of better understanding the process. For example, the way in which healthcare information is expressed to service users during consultations holds the potential to influence their level of engagement thereafter (Simpson et al. 2009; Schillinger et al. 2003 & Viederman 2002).

Simpson (2004) conceptualises healthcare engagement as an incremental and on-going process. In his study, Simpson suggests that drug treatment interventions are comprised of stages, within which service users require different types of support to remain engaged. Simpson (ibid:100) identifies a range of

factors that need to be considered to retain service users engagement, namely their: *'individual needs, motivation factors and social pressures with treatment attributes, such as policy and practices, accessibility, services offered, counsellor assignment, therapeutic relations, and patient satisfaction'*. This list outlines individual (needs, motivation, patient satisfaction); organisational (accessibility, services offered, policy and practices); and broad environmental factors such as the social pressures with the specific treatment being offered. By employing Simpson's (2004) definition of engagement, one is able to consider a range of components, which may contribute towards a service users ability and inclination to engage with a healthcare intervention.

2.2.6 Defining Engagement

Some authors adopt a view of engagement, which is inextricably linked with their methodology. For example, Bosch-Capblanch et al. (2009) sought to specifically measure patient adherence in terms of agreed healthcare activities; therefore their view of engagement is strongly related to adherence. For example, they point out that *'adherence is still rooted in a medical model, in which patients are expected to do what healthcare practitioners tell them'* (Bosch-Capblanch et al. 2009:4). This view is useful to an extent, as many forms of engagement require some kind of literal action (Gruman et al. 2010), which may be perceived as adherence; however the term represents a very narrow and absolute view, which fails to take into account both the complexity of engagement and also the personal circumstances that may prohibit such adherence. Engagement may also be understood as a partnership between service users and healthcare professionals where they cooperatively contribute towards service design, and the improvement of policy, research and service users individual care and treatment (Forbat et al. 2009). Whether one places emphasis on the process or outcome of engagement is arguably intrinsically connected with their methodological outlook and political agenda. For example, one might argue that a service user-centric approach may

be more inclined to focus on the nature of service users' personal experiences, and the process through which their engagement is supported. Conversely, a preoccupation with the outcome of engagement may be more geared towards providing evidence of the success of particular interventions.

For the purpose of this study, it is useful to consider healthcare engagement as a complex amalgamation of the above definitions. One might argue that different types of engagement occur at different points in time, and may also occur simultaneously and subsequent to each other. For example, one may initially engage with healthcare information in a passive manner (Coulter 2011), without the need to take any specific action. However, this is not to say that they do not comprehend and accept the healthcare information. The information obtained may prompt the service user to take literal action (Gruman et al. 2010) by contacting an appropriate healthcare professional to commence a working partnership (Forbat et al. 2009). The type of information received by the service user may act as a catalyst for other types of engagement, for example to contact healthcare services, of which they were previously unaware, which may be appropriate for their needs. There is evidence to suggest that engagement is a process that occurs over time Simpson (2004), however this is not to say that the outcome of engagement is not an important form of classification. For example, it is crucial for healthcare commissioners to assess data pertaining to how many service users achieved the aims of particular healthcare interventions.

There may be instances where a working partnership between service users and healthcare professionals is integral in order for engagement to take place, for example, to set health goals collaboratively with the expert advice of healthcare professionals. However there may also be instances whereby it is possible for a service user to engage with healthcare information independently, without this type of intervention. In fact, this type of independent healthcare engagement has become increasingly prevalent with the use of e-health platforms (for example see

NHS Choices). It might therefore be argued that there is a distinctive relationship between these various definitions of healthcare engagement, and that there is a rationale to consider how most of these perspectives may be appropriate under different circumstances.

Some initial considerations which emerged from the above definitions of engagement include the types of 'literal action' that are conducive to engagement and how might these actions be promoted and supported by the design of healthcare services? Also, what is the nature of a 'working partnership' between healthcare professionals and service users, and how might insights gained from this interaction *'inform, redesign and improve'* (Forbat et al. 2009) the process of healthcare service engagement? Finally what are the benefits of conceptualising healthcare engagement as a 'process' or 'outcome' and if it is better defined as a process, what does this process look like? Now that some of the conceptual underpinnings of engagement have been discussed, the following section introduces what is described to be a central component of engagement (see Coulter 2011; Manning and Dickens 2006; and Baker 2006), namely healthcare literacy.

2.2.7 Healthcare Literacy

A central component of healthcare engagement is that of healthcare literacy (Coulter 2011). In order for service users to make decisions, take action and be involved in an active partnership with healthcare professionals (engaging), it is first of all necessary for them to possess healthcare literacy skills. Smith et al. (2009:1806) point out that *'greater involvement in decision making, places increasing demands on a patients literacy skills, in order to understand complex health information and articulate their preferences'.* These skills enable service users to effectively navigate through and understand the huge array of health information and services, which are available to them. That said health literacy is not simply about reading and understanding healthcare information. Instead,

'health literacy skills are needed for dialogue and discussion, reading health information, interpreting charts, making decisions about participating in research studies, [and] using medical tools for personal or familial health care' (Nielsen-Bohlman et al. 2004:31). Unsurprisingly then, *'data from many developed nations show a relationship between low literacy levels and declining use of health information and services'* (Nutbeam 2008:2072). This is even more alarming when one considers that *'in developed countries, over half of the population have reading and comprehension difficulties',* which creates understandable barriers for those attempting to read and understand healthcare information (Manning and Dickens 2006:448).

The World Health Organisation (WHO) suggests that '*Health Literacy has been defined as the cognitive and social skills, which determine the motivation and ability of individuals to gain access to, understand, and use information in ways which promote and maintain good health'*. An important emphasis here is upon the individual, and the specific skills, which enable him or her to effectively, connect with healthcare information and services. Similarly, whilst describing definitions provided by Health People (2010) and the Institute of Medicine (IOM),[5] Baker (2006:878) points out that '*these definitions present health literacy as a set of individual capacities that allow the person to acquire and use new information'*. In this vein, the responsibility seems to lie quite firmly with the individual service user and their individual abilities, whether these are cognitive or social. Furthermore, Nutbeam (2008:2073) points out that the *'conceptualization of health literacy as a set of capacities also implies that health literacy is partly knowledge based, and may be developed through educational intervention'*. Although service users' individual capabilities are important, they do not completely determine their healthcare literacy. For example, overemphasis

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[5] Healthcare literacy as *'the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions'* (Baker 2006:878).

on the service user's individual ability may detract ones attention from healthcare services important role in facilitating service users to develop their healthcare literacy skills. This may involve providing healthcare information, which may be easily accessed and understood by a lay person.

'*Other definitions of health literacy have taken a broader stance, seeing health literacy as an important factor for everyone and emphasizing activation, empowerment and citizen aspects*' (Patient Information Forum 2014). The term activation is often synonymised with adherence and engagement, describing patients who are 'activated' and thus more likely to act on healthcare information (Hibbard et al. 2004). Smith et al. (2009:1806) discuss the narrow functional sense in which healthcare literacy is often viewed, and suggest that '*if health literacy is conceptualized more broadly as social skills, that enable patients to negotiate with health professionals, then existing instruments are not appropriate*'. The important process of negotiation, which involves effective communication between healthcare professionals and service users has been noted by several other authors.

Manning & Dickens (2006) point out that there are five ways in which services can support service users with low health literacy skills. For example, by determining two to three key messages that are important to service users and presenting these first. Healthcare professionals should ensure that information is clear, concise and direct; employ the use of diagrams or analogies to simplify messages, and actively engage service users by asking them questions and encouraging them to respond (Manning & Dickens 2006:450). Similarly Viederman (2002) points to the importance of developing a collaborative bond between the consultant and service user in the consultancy process. He suggests that attention should be paid to the service users' personality and worldview, to create a '*mutually creative endeavour*,' which helps to facilitate the implementation of a treatment plan (Viederman 2002:93). Other scholars who

focus on engagement in the consultation process include Thompson (2006); Simpson et al. (2009) and Schillinger et al. (2003). Part two (2.3) of this literature review introduces a group of individuals who find healthcare engagement particularly challenging, namely elderly service users who suffer with chronic illness.

2.3 Part Two: Engagement and the Chronically Ill Elderly

There exist many groups of people who find healthcare service engagement particularly difficult. Individuals with underdeveloped literacy skills, who potentially come from lower socio-economic areas, tend to find accessing, reading, comprehending and therefore acting upon health information problematic. Ellins and Coulter (2005:3) point out in their telephone survey that *'lower levels of knowledge, confidence and skills for self-management were observed among respondents who were elderly, from lower social grades, and who had finished their education by the age of 16'*. Service users who suffer with chronic illnesses do not tend to reach advanced levels of self-care, as their symptoms and complex care routines tend to create multifaceted barriers, that hinder healthcare engagement (Bayliss et al. 2007). For example, Ellins and Coulter (2005:3) found that individuals with depression, chronic pain and digestive problems were less likely to feel able to self-care. Elderly people who experience natural health decline, for example reduced mobility, sight, hearing and often a decline in mental ability also find it very difficult to process complex healthcare information. As age is related to an increased prevalence of chronic illness, elderly individuals not only experience the effects of natural health decline but also tend to suffer with interrelated long-term illnesses. Moreover, as they age

and retire, they tend to become less integrated within society, which can contribute towards a decrease in confidence and self-efficacy (Yardley et al 2007).

From the groups who are more likely to experience difficulties with healthcare engagement, elderly individuals with chronic illnesses were identified, as they tend to exemplify particularly complex care needs and thus multifaceted engagement needs (Fortin et al. 2007). Elderly chronically ill service users often require much more frequent and disproportionate use of healthcare services, and as a result of their multi-service needs also often experience poor health outcomes (Lehnert et al. 2011). There exists growing concerns amidst expanding international literature that current healthcare systems do not adequately meet the needs of those with complex chronic care needs (Schoen et al. 2008). Elderly service users with chronic conditions therefore represent a group of individuals who face significant barriers, which have yet to be properly addressed, reducing their ability to fully engage in healthcare services (Baumann and Dang 2012). This is because those with chronic illnesses often exemplify *'challenging organisational problems (accessibility; coordination problems, consultation time); polypharmacy; increased use of emergency facilities; difficulty in applying guidelines; and fragmented ineffective care'* (Fortin et al. 2007:1016). An examination of the role of engagement in the chronic care sector is therefore important, as it holds the potential to contribute towards a field, which is currently inundated with problems. Furthermore, chronic care also represents an area of healthcare, which is currently at the heart of NHS reforms, thus creating important opportunities to contribute towards the development of healthcare engagement in this inherently complex context.[6]

This section of the review explores some of the ways in which chronic care has been approached by governing bodies, such as the Department of Health, the

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[6] For example see Ham et al. (2011:4) The King's Fund *'Where Next for the NHS reforms: The Case for Integrated care'*.

NHS and other academics who seek to advance the care offered to those with long term conditions (Coulter 2002; 2011 and 2012). It explores some of the ways in which engagement may be further developed by identifying some of the shortcomings of existing strategies, and describes the barriers which elderly chronically ill service users encounter in their attempt to engage with healthcare services. This section also presents some of the ways in which healthcare engagement in the context of chronic illness has been modelled and measured in an attempt to identify how it might be better supported.

Chronic care specifically deals with conditions, that are continuous or reoccurring. The term *'Chronic is derived from the Greek, khronos meaning time'* (Priester et al. 2005:5). The Department of Health (2010:4) suggests that *'a long term condition is one that cannot currently be cured but can be controlled with the use of medication and/or other therapies'*. Examples of chronic conditions include diabetes, cancer, hypertension, epilepsy, kidney disease, asthma, Parkinson's disease, cardiomyopathy, Crohns disease, multiple sclerosis, ulcerative colitis and rheumatoid arthritis. In addition, *'conditions that result in disability, such as injuries and socio-environmental conditions (limited food and healthcare resources, poverty) also fall into this category'* (Baumann and Dang 2012:33). The need for more effective and financially viable chronic care services has been greatly exacerbated by our already aging demographic. The rapidly increasingly number of elderly people brings with it concerns regarding how our National Health Service will manage to cope with their complex, and often long term healthcare requirements (Ham 2009). The Department of Work and Pensions (2010) inform us that *'more than ten million people in the UK today can expect to live to see their 100th birthday - 17 per cent of the population'*. Furthermore, Age UK: Agenda for Later Life (2013:13) point out that:

> *'the number of people aged 65 years and over in England and*
> *Wales is projected to increase by 65 percent in the next 25 years*

to more than 16.4 million in 2033, and the number of over 85 in the UK to double in the next 20 years and nearly treble in the next 30.'

The National College of Medicine estimates that chronic care costs amount to seven out of every ten pounds spent by the NHS. They point out that *'the system we currently have is no longer financially sustainable'* as a result of these souring costs (National College of Medicine). For example, the Department of Health (2010:4) point out that by the year 2022 *'public expenditure on long term care will rise by 94% to £1billion'*. The *'Reforming Care and Support'* white paper (2012) helps to contextualise these growing concerns as it aims to develop a new healthcare system which will *'focus on people's wellbeing and support them to stay independent for as long as possible...[and] give people more control over their care'* (DH 2012). When one considers the colossal costs such huge numbers of elderly chronically ill represent, it is not surprising that a key focus of many major reforms is supporting independence and promoting the self-management of these conditions.

2.3.1 Self-Care in Chronically Ill Elderly

It is increasingly recognised that self-care is a crucial component of effective healthcare, and represents one of the key targets of engagement. For example, Coulter (2002:51) points out that healthcare is primarily provided by service users suggesting that *'lay people provide a far greater quantity of healthcare than do healthcare professionals'*. Given that elderly chronically ill service users utilize healthcare services more frequently than other groups, their self-care needs are often numerous and accumulate as their health worsens. Therefore, when they are not properly engaged with their self-care needs, it is impossible for them to benefit fully from healthcare services. Self-care is defined by *'the actions people take for themselves'* in an attempt to stay fit and healthy both physically and mentally (DH 2005:1). The Department of Health (2005:1) point out that self-

care involves the *'prevention of illness or accidents; care for minor ailments or long term conditions'* and includes the general responsibility which service users have regarding their own health and wellbeing. Existing healthcare strategies aim to *'support and strengthen patients' determinations of their health care needs and self-care efforts with a view to obtaining maximum value and improved health outcomes'* (Coulter 2012:81). Therefore, to support those with chronic illnesses to self-care, the 'Self-Care Toolkit' (2009) was developed and represents just one of the many government tools to promote self-care. The Self-Care Toolkit offers information from acceptance of one's condition, planning goals, relaxation and exercise to monitoring progress, teamwork and general advice detailing how to manage all aspects of long-term illnesses. Coulter (2011:102) points out that *'there is evidence that self management can be effective, but more research is needed on the best ways to support people with long term conditions and how to translate the learning from these studies into the mainstream of clinical practice'.* As Coulter (2011) suggests, there is an opportunity to explore how those with chronic illnesses may be better supported to self-care, given that their self-care needs are varied and accumulate over long periods of time.

'Your Health, Your Way' describes some of the self-care behaviours, which a service user may demonstrate as part of their active healthcare role. For example, they should *'understand; actively participate; follow; monitor; manage; adopt and [have] confidence'* to meet their healthcare needs (DH 2009:6). The whole notion of self-care is loaded with assumptions about who should be responsible for healthcare, with the service users being viewed as increasingly accountable for their own health, thus contributing towards the view that paternalistic forms of healthcare are diminishing (Coulter 2002). However, the increased emphasis on self-care raises questions regarding how possible it is for elderly chronically ill service users to assume this role, and the extent to which their self-care endeavours are adequately supported by healthcare services and healthcare professionals. This positive move towards service user autonomy also places

service users in a position of blame, should their self-care efforts be ineffective, thus leaving them in a potentially vulnerable position. The increasing rhetoric around self-care activities also indicates that expectations for self-care are becoming increasingly prevalent within healthcare policy. The following section explores some of the changing rhetoric around self-care and demonstrates an observable shift in the UK's healthcare landscape. General changes in healthcare policy are initially discussed, followed by policies and guidelines that refer specifically to chronically ill service users.

2.3.2 Changing Healthcare Policy and Self-Care

Traditionally, the National Health Service has adopted a paternalistic approach to caring for its users, in that healthcare professionals are represented as the source of all medical knowledge, which service users must passively accept. The responsibility of a service user's care and treatment would lie solely in practitioners' hands, which promoted great dependability and a lack of accountability on the service user's part. This approach creates significant problems for service users, as it fails to recognise them as active decision makers, who are to a great extent responsible for their own health. One might also argue that service users increasingly expect to be more involved in decisions about their health, which often requires the support of healthcare professionals and healthcare services (DH 2005). However, service users are accustomed to being dealt with in this paternal manner, which fails to promote their active participation. Coulter (2011:5) points out that *'the increasing gap between public expectations and the supply of services had led governments to consider new ways to ensure that limited resources are used efficiently and equitably'*. This assertion helps to explain the noticeably changing rhetoric surrounding the shifting role of service users. For example, the 'NHS Improvement Plan' (2004:35) suggests that the NHS *'needs to enable people to take greater control of their own treatment'*, pointing out that this *'can lead to fewer hospital admissions'*. Taking control and

managing one's healthcare is becoming increasingly commonplace within healthcare reforms, with healthcare engagement playing a crucial role in order for service users to express this new sense of control.

Coulter (2011:6) points out that '*in the 21st century the patient is a decision maker, care manager and co-producer of health, an evaluator, a potential change agent, a taxpayer and an active citizen whose voice must be heard by decision-makers.*' Therefore where once the responsibility fell upon practitioners to inform, organise, prescribe, treat, monitor and enforce adherence, there is now a clear expectation that service users adopt a lead role in fulfilling at least some of these healthcare responsibilities. In agreement with this view, the Department of Health (2005:2) point out that '*society is changing. People want more information, choice and control over their lives and this is no different for health.*' Perceptions of the role of service users have therefore shifted from passive and compliant to active participants with a thirst for healthcare knowledge, as a means to articulate greater control and choice.

The NHS Plan (2000:88) represents a significant turning point for patient involvement in healthcare, assuring us that '*patients will have far greater information about how they can look after their own health and about their local health services*'. Coulter (2011:6) points out that '*since the publication of the NHS plan, patient and public involvement (PPI) has become part of everyday rhetoric*'. The NHS Plan sought to bridge the gap between professional and service user knowledge ensuring that clinical information, for example those published by the National Institute of Clinical Excellence (NICE), would be available in service user friendly formats. It also pledged that '*patients will be helped to navigate the maze of health information through the development of NHS Direct online, Digital TV and NHS Direct information points in key public places*' (NHS Plan 2000:88). In the same vein as the NHS Plan (2000), 'The NHS Improvement Plan: Putting People at the Heart of Public Services' (2004:4)

stated that it would offer more choice and freedom of care suggesting that '*more care for long-term conditions will be provided closer to home or in the home itself*'.

Although the above visions for healthcare reform seemed promising, Hunter (2003) alerts us to a significant problem in its implementation, namely that the NHS Plan 2000 initiatives were created by the Department of Health, to be later implemented by the NHS, which consists of a range of organisations over whom they have no control. For example, '*their realization [of these objectives] actually depended on the activities of other bodies, especially local authorities, but these bodies were not engaged in the production of the targets and saw them as directed at the NHS rather than at them*' (Hunter 2003:19). In support of this assertion, Coulter (2011:6) suggests that '*everyone knows that they have a responsibility to encourage it7, but few have deconstructed it, critically assessing its specific relevance and application to their particular service*'. Therefore, a central criticism here is that specific bodies such as the council, who play a key role in implementing the NHS Plan 2000, have yet to receive definitive instruction, making them accountable for its success. That said, the salient focus upon self-care and service user involvement, which the NHS Plan 2000 evoked, remains to be one of its most successful and influential achievements. Other successful contributions include predictive modelling tools, which help to identify service users who are in need of support; investment in IT; innovative initiatives such as virtual wards and personal care plans (Ham 2009:198).

'*Self Care – A Real Choice*' was produced by the Department of Health (2005:1) and reinforces the idea of self-care as an integral '*building block*' in facilitating those with chronic health conditions. Its aim was to provide guidance regarding the practical steps, which can be taken by healthcare providers to support chronically ill service users. The notable shift in service user

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[7] NHS Plan 2000 initiatives.

responsibility has been further documented across a number of Department of Health guidelines. For example *'Your Health, Your Way: A Guide to Long Term Conditions and Self Care'* (DH 2009) aims to create a dialogue between healthcare professionals and service users regarding chronic illness. It reiterates the importance of self-care and methodically lists all of the ways in which practitioners can support service users to be key players in their own healthcare management. The Department of Health (2009:5) define self-care as *'an integral part of daily life and is all about individuals taking responsibility for their own health and well-being with support from the people involved in their care'*. In exemplifying some of the benefits of self-care, the Department of Health (2009a:5) point out that one may *'live longer; have less pain; anxiety; depression and fatigue; have a better quality of life and be more active and independent'* if they perform regular self-care activities. The basic premise which underlies these potential benefits is that if service users take responsibility for their own health, they are more likely to play more of an active role in it, and thus healthcare advice and practices may be adopted more widely. In line with this assumption, Coulter (2011:2) points out that a paternalistic approach *'encourages patients to believe that professionals have all the answers and that they themselves lack relevant knowledge and skills, and hence have no legitimate role to play in decisions about their healthcare'*. Instead, this shift sees the role of healthcare services and practitioners morph from the driver of health care, to a more supportive role, with the patient resuming the lead role in their own healthcare story. Assuming the lead role in ones' healthcare becomes problematic of course when one considers the effects of age and chronic illness, which are introduced later on.

2.3.3 Limitations in Healthcare Policy

It is important at this point to outline some of the ways in which current healthcare policy manifests inherent barriers for engagement for those with chronic illnesses. For example, Wagner et al. (2001:64) point out that the needs

of chronically ill service users and modern healthcare delivery are mismatched in that *'healthcare delivery systems are largely designed for acute illness'*. For example, current healthcare systems tend to respond to acute conditions as and when they arise. This is as opposed to anticipating and preventing interrelated conditions, which are likely to present themselves as a consequence of long-term illnesses. Acute illnesses often have a sudden onset, a relatively clear treatment trajectory and end point. Conversely, a *'condition is considered chronic if it has persistent or recurring health consequences lasting for a substantial period of time (variously identified as at least three months, six months, or longer), is not self-limiting, waxes and wanes in terms of severity and typically cannot be cured'* (Priester et al. 2005:5). Therefore in addition to chronic illnesses having no end point and thus no smooth entry and exit cue to and from healthcare services, they also tend to progressively develop over time, and therefore represent a moving target in terms of their management. The long-term and fluctuating nature of chronic illness therefore raises the question of how healthcare interventions may be designed to respond to this level of complexity?

Furthermore, chronic conditions also differ from acute conditions in that they tend to have multiple causes and so the care required to alleviate symptoms is far more complex and requires the ongoing coordination of healthcare services. Priester et al. (2005:5) point out that the current healthcare model *'is also not broad enough to account for and aid understanding of the types of human distress experienced by people with chronic conditions'*. The acute care model places less significance on the implications that lifestyle, family and environmental influences have upon ones health and thus does not account for the complex nature of chronic illnesses (for example see Bayliss et al. 2007). In recent years *'policy-makers are striving to shift the balance of care away from reliance on hospitals and complex technologies towards community-based care, but their efforts are meeting with little success'* (Coulter 2011:1). Therefore despite changes in healthcare policy, evidence suggests that an aspiration of integrated

care, which promotes engagement for elderly chronically ill service users, has yet to be fully realised. This therefore presents a significant opportunity to account for the individual experiences of chronically ill service users, as a means of better understanding the broad influences that affect their health, wellbeing and have important implications for their engagement. The following section describes many of the reasons why it is particularly difficult to engage elderly chronically ill service users with healthcare services.

2.3.4 Chronically Ill Elderly: Barriers to Engagement

It is possible to understand the barriers to engagement in terms of five distinct and yet interconnected categories, namely: *'physical; psychological; cognitive; economic; and social and cultural'* Baumann and Dang (2012:34). Physical factors include but are not limited to pain and obesity (Rantakokko et al. 2013), both of which can cause immobility, which further impedes mobility. Loss in hearing and vision can physically disable an elderly individual, making it quite difficult for them to engage with healthcare information and also influences their confidence and self-efficacy to self-care and engage.

Conditions such as depression are more common in individuals with chronic health problems and thus represent a psychological barrier, which hinders healthcare engagement (NICE 2009) *'Mental health problems that affect people in later life include depression, anxiety, delirium, dementia, schizophrenia, bipolar disorder and alcohol and drug misuse'* (DH 2009:1). It is also important to note that psychological conditions go underreported, for example *'only a minority of patients attending primary care mention psychological problems as their presenting complaint'* (National Collaborating Centre for Mental Health 2010:17). Therefore, one might argue that the influence of psychological conditions upon engagement cannot be fully known, as service users are less likely to report them. Decreased social contact and a lack of mental stimulation contribute towards cognitive diseases such as Alzheimer's, which have multifactorial determinants

such as ones environment, diet, and lifestyle. Alzheimer's becomes more prevalent with age, for example, *'after age 65, the risk of Alzheimer's doubles every five years. After age 85, the risk reaches nearly 50 per cent'* (Alzheimer's Association [online]).

Ones social-economic position also acts as a significant barrier to manage chronic health conditions, as those in a lower socio-economic bracket are less likely to be able to afford the resources and support, which are necessary to sustain self-care. This is despite support from the NHS, as low-income individuals are more likely to live in poorer accommodation and consume poorer quality foods for example. Social and cultural barriers may be exemplified by the amount of support that carers, friends and family members offer and the extent to which this influences their ability to self-care.

As elderly people use a disproportionate amount of healthcare resources, they are most in need of developing a healthcare literate status. For example, *'poor reading skills among older populations has tremendous importance because of this groups high prevalence of chronic disease and their need to understand health-related information'* (Baker et al. 2000:368). Furthermore, literacy skills, it has been suggested, have a close correlation with age, as *'reading is a complex cognitive process that requires adequate vision, concentration, word recognition, working memory, and information processing'* (Baker et al. 2000:368). Elderly chronically ill services users are therefore particularly disadvantaged in their role as aspiring self-carers, as they may be unable to read or comprehend healthcare information that relates specifically to their self-care needs. This is not an easy problem to address, as *'many people with inadequate literacy tend to hide their problem by adopting a lifestyle that avoids situations, which could expose their lack of understanding or require additional skills they do not possess'* (Manning & Dickens 2006:448). Therefore, the initial step of exposing elderly service users lack of literacy skills may be considered in some cases to be a particularly

sensitive process.   This raises the question the adequacy of how healthcare services and professionals currently address the sensitive barriers to healthcare engagement, which may easily leave service users feeling vulnerable.   For example, to what extent do healthcare professionals recognise and address barriers to engagement, which may be intentionally concealed by service users?

2.3.5 Multi-Morbidities and Engagement

'Barriers to self-management for persons with multiple diseases have not been well studied' (Bayliss et al. 2007:396).   The lack of understanding of how engagement occurs amidst service users with multi-morbidities is exemplified by a *'decreased quality of life, longer hospital stays, more postoperative complications, a higher cost of care, and higher mortality'* (Fortin et al. 2007:1016). Service users who suffer with one chronic health condition invariably experience interconnected chronic conditions, for example, around two thirds of diabetes service users also have hypertension (American Diabetes Association). Incidence of multiple chronic conditions amongst the elderly is on a continual and inevitable rise as the population ages.   For example, *'by 2034 the number of people aged 85 and over is projected to be 2.5 times larger than in 2009, reaching 3.5 million and accounting for 5% of the population'* (DH 2012:7).   There is a clear correlation between ageing and the prevalence of chronic health conditions, for example, 58% of people over the age of 60 are reported to have at least one chronic condition, with 25% of the same age bracket experiencing multi-morbidity and so have multiple chronic conditions (DH 2012:7).   There is also evidence to suggest that the experience of service users with multi-morbidities is different to that of managing one chronic condition in terms of the influence, which multiple chronic conditions have upon each other and consequently, the service user.

In this vein, Bayliss et al. (2007:16) point out that *'self-management interventions geared towards single diseases may fail to address the priorities of*

persons with multiple medical conditions'. In their study, Bayliss el al. (2007) interviewed 16 service users who suffer on average from at least 4 different chronic illnesses. As little is known about the relationship between chronic illnesses in terms of the barriers they present to service users and their **influence** ones ability to self-care, the authors employed the use of a free listing method. This research method involved asking the service users to list everything that comes to mind within a particular domain, for example 'list everything that you can think of that affects your ability to manage your medical conditions?' (Bayliss et al. 2007:17). By using this method the authors were able to itentify a range influences from the perspective of the service user as opposed to making assumptions about what they believe the barriers might be. Bayliss et al. (2007) found that fourteen out of the sixteen participants reported that the symptoms from one chronic condition **influenced** on their ability to self-care for another. For example, one of the participants reported an inability to partake in exercise due to their asthema, as they were very short of breath. Similarly, several other participants reported that phsychological conditions such as depression would often exacerbate conditions (Bayliss et al. 2007:17). Better understanding the **influence** of the symtpoms of service users multiple chronic illnesses arguably represents an important step towards better supporting their engagement. This insight brings to the fore, an opportunity to better understand the interconnections between different influences that effect service users' engagement. For example, this section discussed that healthcare services are often ill-equipped to respond appropriately to service users varied and complex healthcare needs (multi-morbidities). There is therefore an opportunity to better understand how elderly chronically ill services users experience multiple health conditions, and how this **influences** their engagement across healthcare services. The following section describes a number of engagement interventions, which aim to address some of the complexities that are exemplified by this group of service users.

2.3.6 Engagement Interventions

In an attempt to support healthcare engagement, Baumann and Dang (2012:33) point out that '*it is imperative that nurse practitioners are aware of the barriers patients with chronic illnesses face when learning to manage their own diseases and treatment'.* Empowering and supporting elderly service users with chronic illness to self-manage their health and fully engage with healthcare services, information and practices represents a scenario, which could reduce healthcare costs, better allocate and utilize existing resources, improve service users quality of life and functioning (WHO 2005). However, until we can fully account for and deconstruct the everyday barriers to healthcare service engagement and self-care practices, which this particular group of service users face, this scenario remains largely unachievable.

An increasing number of healthcare services facilitate patient decision-making, thus demonstrating this shift in responsibility from the state to the service user. For example, 'Choose and Book' is an online and telephone interface that enables service users to book their appointment at a time that suits them. There is also a significant amount of healthcare information available to service users both online and in booklet and leaflet form, which enables them to learn more about services, and treatments which are available. Types of healthcare interventions vary and include '*formal health education in schools, colleges, and adult learning centres, educational courses for small groups, and one-to-one counselling with health professionals'* (Coulter 2012:82). One-to-one counselling tends to be more common with specific interventions that target a particular type of health behaviour. For example Miller and Rollnick (2004) point out that motivational interviewing has been known to target behaviours such as HIV risk reduction, addictive behaviours, exercise, eating disorders and the intake of fruit and vegetable. The following three examples represent interventions that aim to promote service user autonomy, and healthcare service engagement. They were

identified as appropriate interventions to support engagement amidst the elderly chronically ill as they are particularly geared towards improving service users low self-efficacy, low motivation and provide a means of social support. They may therefore be useful approaches as these barriers to engagement are arguably a recurring theme throughout the above literature (see NICE 2009; Bayliss et al. 2007 and Coulter 2012).

2.3.6.1 Motivational Interviewing

Motivational interviewing has been selected as an appropriate intervention that supports healthcare engagement because it has the potential to promote *'better adherence to treatment recommendations, improve health behaviours, reduce risk factors [and] improve health outcomes'* (Coulter 2012:83). *'Motivational interviewing is a tool for helping patients feel engaged and in control of their health and care'* (The Health Foundation 2011:4). Motivational interviews aim to stimulate behaviour change, resolve pre-existing perceptions and motivate individuals by eliciting intrinsic values and goals which are employed as the basis of behaviour change (Rubak et al. 2005). Arguably, motivational interviewing is particularly appropriate for elderly chronically ill service users, as they tend to experience a great sense of loss[8]. This loss is experienced not only in terms of their physical and mental ability but also in terms of their self-efficacy and often low levels of motivation (Bugelli and Crowther 2008). To help to overcome this, motivational interviewing employs the use of empathy to support and motivate elderly service users who may not yet be in a mental or physical position to actively change their behaviour.

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[8] For example, *'common themes when working with older adults include grieving for losses, fear of physical illness, disability and death, and guilt over past failures'* (Bugelli and Crowther 2008:3).

2.3.6.2 Communication Techniques

Another important facilitator of healthcare engagement is the communication of health information so that it is comprehendible to all service users (Simpson 2009; Viederman 2002 and Schillinger el al. 2003). The role of effective communication in supporting healthcare engagement is particularly important, as elderly chronically ill service users have prevalence for specific barriers to communication. For example, elderly service users are more likely to experience visual and hearing impairments, which are directly linked to ageing. This is in addition to a prevalence of mental health problems and often a decline in their cognitive ability, thus representing significant communicational challenges for both them and healthcare professionals (Alzheimer's Association). Furthermore, elderly chronically ill service users tend to experience side effects from taking multiple medications (polypharmacy), for example dizziness, tiredness and nausea, which therefore creates further problems for effective communication (Huang et al. 2013). Schillinger el al. (2003:83) point out that *'patients recall or comprehend as little as half of what physicians convey during an outpatient encounter'.* Alarmingly, as Schillinger el al. (2003) sample group is not comprised of elderly service users, one might argue that the comprehension and retention rate may therefore be actually be lower for this communication impaired cohort.

2.3.6.3 Expert Patient Programme

A UK intervention that is specifically targeted to support chronically ill service users to self-care independently is the Expert Patients Programme.[9] This is a six-week intervention that enables service users to discuss their chronic condition, their current self-care strategies and ways in which they may improve things like healthy eating and exercise. The course aims to support service users

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[9] http://www.expertpatients.co.uk

to manage their chronic illness, whilst building their confidence by providing them with techniques to cope in everyday life. The programme was deemed to represent *'significant increases in self-efficacy and energy, and is likely to be cost effective'* (Kennedy et al. 2006:260). There are a number of online testimonials, which demonstrate the influence that this programme has had for some people. For example, one service user stated that *'the course has definitely helped with my confidence levels and I feel brighter'.* Another service user suggested that *'I would recommend the course to anyone with a long-term condition as it can make a big difference to your life. I am certainly feeling a lot more positive about the future'.*[10] Although the online feedback seems positive *'there were no statistically significant reductions in routine health services utilisation'* after the 6 month follow up (Kennedy et al. 2007:254). Coulter (2011:94) further points out that although there's no empirical evidence to suggest that these types of programmes reduce healthcare costs, there is evidence to suggest that anxiety levels and self-efficacy may be improved after the intervention.

It is apparent from this review that healthcare service engagement is influenced by a number of elements. These seem to include service users social and economical status, their health literacy, the role assumed by healthcare professionals, and healthcare services responsiveness to their often varied and complex healthcare needs. Although there exists empirical data to show that these influences affect services users engagement, it is unclear whether they have an equal influence on engagement or whether some elements are more influential than others. Relatedly, also exists an opportunity to increase understanding about how these influences relate to and potentially interact with each other, as current accounts seem to depict engagement as a linear byproduct of multiple influences rather than making explicit any interconnections between these influences.

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[10] http://www.expertpatients.co.uk/course-participants/personal-stories

The following and final section of this review introduces engagement within falls prevention services, and details why this is a particularly suitable context to increase understanding of healthcare engagement amidst the chronically ill elderly service users. As a means of addressing these emerging questions, the falls prevention service was identified as an appropriate research context on account of its high incidence of elderly chronically ill service users.

2.4 Part Three: Engagement in Falls Prevention Services

The area of falls prevention was identified as a rich context within which engagement may be studied, as falls prevention services encounter large numbers of elderly service users with multi-morbidities. Falls prevention services target service users who are aged sixty-five and over, and who exemplify varied and complex healthcare needs. Service users who are referred to the falls prevention service are identified as presenting a high risk of falling, which is normally a consequence of their underlying chronic illnesses. This group of service users typically interacts with a wide range of healthcare services as a result of their chronic and diverse healthcare needs. Falls prevention service users therefore exemplify a sample group, whose engagement needs sit across healthcare sectors, thus representing a plethora of physical, psychological, environmental and social barriers to healthcare service engagement. As a consequence of our ageing population, these types of complex engagement needs are expected to become increasingly commonplace, thus creating a requisite to understand how it may better supported. Therefore, by focusing one's enquiry upon this cross-disciplinary field of healthcare engagement, it may be possible to contribute towards developing a better understanding of service users complex engagement needs. In particular to increase understanding of and conceptualise how elderly

chronically ill service users engage with the falls prevention service, whilst also engaging with other healthcare services.

The area of falls prevention has also been selected as it represents an area of healthcare within which engagement is a particularly pertinent issue. For example, the uptake of service users engaging with falls prevention interventions remains on average around 50% (Robertson et al. 2002, and has been shown to be as little as 10% (Day et al. 2002). Furthermore *'interventions with proven efficacy will be effective in practice if only patients adhere to them, but clinical guidelines rarely make evidence-based recommendations about how best to involve patients in their implementation'* (Yardley et al. 2007:230). Dickenson et al. (2011:725) inform us that *'to increase uptake, we need to understand and address the facilitators and barriers to participation interventions'*. There is thus a significant opportunity to contribute towards an understanding of engagement, which occurs across healthcare services from the vantage point of falls prevention services.

2.4.1 Why are Elderly People More Likely to Fall?

Falls involving the elderly costs the NHS around £2.3 billion per year, with costs arising mostly in the form of expensive hip replacements and lengthy hospital stays (NICE 2009). Falls amongst the elderly have devastating effects *'representing the most frequent and serious type of accident for people over the age of 65'* (Age Scotland 2000). With an aging population[11], the issue of falls amongst the elderly has become an increasing concern for healthcare providers, in that *'30% of people over the age of 65 and 50% over the age of 80 will fall at least once a year'* (SLIPS 2011). There exists growing anxiety pertaining to how the National Health Service will manage to deal with large numbers of elderly service users who are increasingly likely to fall as they age. Consequently *'the*

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[11]*'Increased rates of falling, and the severity of the consequences, are associated with growing older and the rising rate of falls is expected to continue as the population ages'* (DH 2009a:4).

prevention of falls if currently high on the health policy agenda in the United Kingdom, which has led to the establishment of many falls prevention services' (Bunn et al. 2008:449).

A fall is defined as '*a sudden, unintentional change in position causing an individual to land at a lower level, on an object, the floor, or the ground, other than as a consequence of sudden onset of paralysis, epileptic seizure, or overwhelming external force'* (Tinetti et al. 1997 cited in Feder et al 2000:1). There are many reasons why elderly people fall. Factors include but are not limited to '*orthostatic hypotension, lower extremity muscle weakness, decreased reaction time, impaired vision and cognition, decreased lean body mass and overall impaired mobility'* (Kjaer et al. 2003:324). As elderly people tend to experience poorer health, for example in terms of chronic illness, they are therefore more likely to fall than other age demographics. Taking multiple medications for some illnesses can increase a person's likelihood of falling, as these can cause drowsiness, dizziness or confusion to name a few side effects. For example, '*pharmacological factors that place the elderly at greater risk of drug-related side effects include changes in body composition, serum albumin, total body water, and hepatic and renal functioning'* (Huang et al. 2013:359). When one combines the medical changes in a person's body due to multiple medications being taken, the effects of natural health decline, and the symptoms from the chronic illnesses from which they suffer, it is not difficult to see how elderly individuals are more likely to fall.

Socioeconomic factors also have implications for one's risk of falling, for example, '*low income, low education, inadequate housing, lack of social interaction, limited access to health and social care especially in remote areas and lack of community resources'* all increase the likelihood of a fall (WHO 2007:6). There is evidence to suggest that '*low level social engagement on its own exercises an adverse effect on mortality'* (Bennett 2002:167). For example,

in her study Bennett (2002) identified that low social engagement and morale acted as a precursor for mortality. However, the author did acknowledge that undiagnosed and unrecognised health problems could act as a marker for later ill health, and also cause an individual's social engagement to inadvertently decrease (Bennett 2002). The psychological implications of social isolation may sometimes be observed in an individual's lack of confidence and self-efficacy, which also act as key contributors to falls. For example, when people engage less in their community, leaving the house less (often as a consequence of leaving the work force), they can start to feel isolated which has implications for their self-efficacy to self-care, and to remain active, which consequently effects their quality of life. For example, '*a decline in quality of life in the elderly is reflected by the presence of negative feelings, lack of meaning in life, additions of various kinds and a loss of their autonomy*' (Hudakova and Hornakova 2011:81). Negative feelings and a loss in self-efficacy can result in elderly people walking and moving their bodies less assuredly, which in itself can cause them to trip or fall.

2.4.2 Falls Prevention Services

Falls prevention services vary in size and structure dependent upon where one lives in the country; however their share the same objective in that they aim prevent falls from occurring amidst elderly high risk service users in the community. As one's likelihood of falling becomes more prevalent with age, these particular services target those over the age of sixty-five. There are a number of guidelines, which aim to offer regulation and support to healthcare professionals on their quest to prevent falls from occurring in the community. For example *'Falls and Fractures: Effective Interventions in Health and Social Care'* (DH 2009a) outlines a multitude of ways in which it is possible to prevent falls from occurring. For example, it suggests that the most successful interventions for preventing falls include the existence of *'a falls care pathway; a falls service; a falls co-ordinator; multifactorial interventions and community-based*

therapeutic exercise' (DH 2009a:14). Other recommendations to reduce instances of falls include but are not limited to regular medication reviews, home hazard assessments and interventions, vision assessments and referrals, assessment of suitable footwear, access to podiatry services and the identification of underlying health problems which may increase one's chance of falling (NICE 2013).

Additionally, there have been a number of audits, which assess the extent to which these policies have been and can be effective in practice. For example, the 'Falls Prevention Services: An Economic Evaluation' by the Department of Health (2009c) and 'Falling Standards, Broken Promises' by the Royal College of Physicians (2009). It has been suggested that 'well organised services, based on national standards and evidence-based guidelines can prevent future falls, and reduce death and disability from fractures' (Royal College of Physicians 2011:5). The Department of Health (2009b) also point out that for service users to fully benefit from falls prevention services, their ability to engage with them must be a central concern. However, the evidence base for how engagement may be supported across healthcare services as a consequence of this groups chronic illness is almost non-existent (Bayliss et al. 2007). Therefore, the success of falls prevention is reliant to some extent upon our ability to understand how engagement with multiple healthcare services influences service user's ability to engage with falls prevention services.

The most recent guidelines that falls prevention services are at liberty to adhere to is the 'Falls: Assessment and Prevention of Fall in Older People' (NICE 2013). In accordance with NICE (2013) guidelines, falls prevention services should offer service users multidisciplinary teams of healthcare professionals, who are able to work collaboratively in the interest of preventing falls. Falls prevention services therefore tend to be made up of a range of healthcare professionals including; occupational therapists, district nurses, clinical nurses, community therapists and physiotherapists. The NICE (2009) falls guidelines

covers all individuals over the age of sixty-five as it has been commonly acknowledged that 'falls exponentially increase with age-related biological change' (WHO 2007:3). Additionally, these guidelines cover individuals who are aged fifty to sixty-four who pose a significant falls risk, and have an underlying health condition, which may contribute towards their falls risk. The NICE (2013:13) falls guidelines suggest that *'falls prevention programmes should also address potential barriers such as low self-efficacy and fear of falling, and encourage activity change as negotiated with the participant'*. Although it is reassuring that some barriers to self-care are recognised by these guidelines, one might argue that the complexity of these barriers and the ways in which they emerge across services and interactions has yet to be fully understood and addressed, hence why engagement with the falls prevention service remains under supported. The following section explores what is currently known about the barriers to engagement in this context, and how these barriers are defined and studied by researchers.

2.4.3 Falls Prevention Service: The Barriers to Engagement

A range of underlying attitudes exist towards falls prevention services, which results in many elderly service users declining to engage with them. *'Crucial to the success of such interventions is changing the beliefs, attitudes and behaviour of older people themselves, the health and social care professionals who provide the services, and the wider communities in which older people live'* (WHO 2007:20). For example, Yardley et al. (2006) conducted a study, which explored the perceptions, which elderly service users have regarding falls prevention programmes. They conducted interviews with sixty-six people aged between sixty-one and ninety-four years who they recruited from a range of settings including sheltered housing, church groups, retirement clubs and the local community. They found that elderly service users often reject the idea that they are at risk of falling, and are optimistic about their capabilities. They also found

that elderly service users fear that falls services will undermine their independence and believe that they may be stigmatized as old or frail, in addition to feeling that nothing can be done to reduce their risk of falling (Yardley et al. 2006). Those who do believe that they are at risk of falling, often believe that the effort required to reduce the risk is not worth the potential health benefits (Yardley et al. 2006). The predisposing attitudes that service users have towards both falls and falls prevention therefore have important implications for their engagement. This is in addition to whether they feel they are susceptible to falling and whether the effort to reduce falls is worth any potential health benefits (see Health Belief Model, Hochbaum 1958).

Similarly, McInnes et al. (2011:2525) found that due to the perceived associations with frailty '*some [service users] prefer to adapt to this reality by taking control and implementing self-management strategies'*. This reaction to one's falls risk might be said to have positive implications for healthcare service engagement, as their move towards self-management is indicative of their awareness and commitment to their own health. This perception of engagement thus challenges the notion of engagement as a form of adherence (Bosch-Capblanch et al. 2009) in that non-adherence often exemplifies some kind of engagement. The notion of risk is not just restricted to risky behaviour around falls, but includes a vast array of healthcare decisions, which the service user decides to make. For example, the types of food service users eat, whether they exercise and find the motivation to stay mobile, and how they monitor their medication all include elements of risky behaviour. In this sense, it is not uncommon for healthcare and illness to be understood in terms of risk (for example see Gabe 1995). Ballinger and Payne (2002:305) also point out that the construction of risk '*is often constrained by a rationalist perspective that focuses on physical causes and functional outcomes, and that presents risk as external to the self and predictable'*. Conversely, Ballinger and Payne (2002:305) suggest that risk should be understood more broadly to consider the views of service users

in that they consider risk as a *'challenge to their self-image and identity'*. Furthermore, as falls prevention services are provided specifically for the elderly, the introduction of safety equipment and assistive devices may be interpreted as proclaiming a shift into becoming elderly, as well as representing general health decline (Kingston 2000). Thus ironically, steps that promote health and well-being, are interpreted as representing quite the opposite in terms of service users identity. Considering these key messages, it seems evident that healthcare professionals, and service users may view perceptions around the prevention of falls and risk reduction quite differently. It is therefore important to fully understand how risk is perceived and experienced by chronically ill service users, as this has huge implications for their engagement with the falls prevention service.

In their study Yardley et al. (2006:522) found that almost all of the participants had never heard about falls prevention in the past, however it later became apparent that participants had received advice pertaining to falls prevention, for example being advised to *'take care, slow down, limit activities and sometimes reduce risks in the home'*. Yardley et al. (2006) also found that participants tended to make light of their falls risk, often using humour and disassociating themselves with such risk, with the assertion that falls prevention services are for much older and frailer people. A study by Riglin et al. (2010) focused more upon the organizational elements of falls prevention services enquiring into how service users were referred to the service, their experience of various elements of the service, and how effective they believe the intervention had been (Riglin et al 2010). The study received an abundance of positive feedback with at least two out of three participants knowing why they were referred, felt that they were seen quickly enough to aid their recovery, felt they had received a thorough health check up, and felt that their overall experience had been useful (Riglin et al 2010:4). Conversely, service users who were not satisfied with the service seemed to raise the same recurring points, for example

delays in referrals, poor communication of their health information after their assessment and many participants did not know what action would be taken after they were seen by the falls prevention healthcare professionals (Riglin et al 2010:5).

The disparities in service users personal experience of the service again raises the issue of engagement across healthcare services and extent to which this influences service users engagement with the falls prevention service. For example, the information provided by healthcare professionals outside of the falls prevention service and the length of time referrals take which is also subject to external services attributes a level of significance to the ways in which engagement is supported across services. Some of the recommendations which were developed from the empirical data were that '*written information about referral criteria and pathways to healthcare professionals' should be provided; in addition to 'adequate verbal and written communication about treatment*'; '*concerns of the individual should be listened to and documented at each stage of the assessment*' and '*commissioners of falls prevention services should recognise that effective communication takes time*' (Riglin et al 2010:6).

In addition to these attitudinal barriers that effect engagement with falls prevention services, elderly service users are also more likely to have physical and mental barriers to engagement as detailed above. The role assumed by healthcare professionals has been identified as having important implications for engagement, and so the following section explores their role in more detail.

2.4.4 The Role of Healthcare Professionals

The NICE (2013) guidelines describe the responsibilities, which healthcare professionals have in terms of preventing falls. The guidelines place significant emphasis on healthcare professionals asking elderly service users if they have fallen in the last 12 months, how this happened and the context in which it

occurred. It also advises that '*older people who present for medical attention because of a fall, or report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should be offered a multifactorial falls risk assessment*' (NICE 2013:7). Such multifactorial assessment must include considerations of all impairments, which may influence a service users falls risk. For example it must consider; '*cognitive impairment; continence problems; falls history, including causes and consequences (such as injury and fear of falling); footwear that is unsuitable or missing; health problems that may increase their risk of falling; medication; postural instability; mobility problems and /or balance problems; syncope syndrome12 and visual impairment*' (NICE 2013).

The NICE (2013) guidelines also point out that it is the responsibility of healthcare professionals to educate service users about falls and inform them about various other services which aim to prevent them. For example, healthcare professionals should encourage '*the participation of older people in falls prevention programmes*' [and educate them about] *measures they can take to prevent falls; how to stay motivated to exercise; the preventable nature of falls; the physical and psychological benefits of modifying falls risk and how to cope if they have a fall*' to name a few (NICE 2013:13).

The role of healthcare professionals in preventing falls has also been broached by Dickenson et al. (2011) who sought to explore the extent to which they both support and hinder the referral to and uptake of falls prevention services. Their main findings were that healthcare professionals and their response to reported falls, played a major role in both facilitating and creating barriers for referrals to falls prevention services. They found that healthcare professionals failed in many instances to refer service users who had either fallen, or reported falls related injuries, thus hindering access to healthcare services

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[12] Syncope syndrome is 'temporary loss of consciousness caused by a fall in blood pressure (Oxford Dictionary Online 2014b)

(Dickenson et al. 2011).   Dickenson et al. (2011) point out that a significant barrier was actually a reliance on service users in reporting their falls to healthcare professionals. For example, some of the respondents comments included *'there's no point telling the doctor'*, that they are too *'busy'* and don't want to be a *'burden'* on healthcare services (Dickenson et al. 2011:726). Therefore, and as the NICE (2013) falls guidelines stipulate, it is crucial for healthcare professionals to routinely ask elderly service users about falls in a reassuring and inviting manner.

There exist a number of sensitive considerations that healthcare professionals must make when attempting to support service users' engagement with falls prevention services. For example, Kraskowsky and Finlayson (2000) explore a numbers of factors, which influences a service users likelihood of using adaptive equipment.   They suggest that considerations must be made by occupational therapists regarding *'the clients receptiveness to the equipment and the extent to which the device may call unnecessary attention to the client'* Kraskowsky and Finlayson (2000:304). They also point out that the suitability of the equipment itself, training provided to service users, and the amount of home visits, which a service user receives, all have implications for engagement with and the usage of the equipment. Providing equipment which specifically suits the needs of service users, and training them in how to use it therefore represents an integral part of supporting the engagement process. Another key indicator that Kraskowsky and Finlayson (2000) suggest dictates the extent to which assistive devices are used, is the level of meaning, which an activity has for the service users, and extent to which the device supports this activity. Kraskowsky and Finlayson (2000) point out that *'qualitative exploration of the personal motivators for using assistive devices may help to explain why some older adults choose to use particular devices, whereas others do not.'* For example, if one were to provide a service user with assistive devices, which help them to cook, when they do not enjoy cooking and rarely partake in culinary ventures. Accounting for the meaning that

service users attribute towards certain everyday activities is therefore important, when trying to better understand how engagement may be better supported.

Given that the role of healthcare professionals is oriented to play a central role in service users engagement at a policy level, this study aims to explore how their role responds to all of the other influences that effect service users engagement. It also aims to explore the ways in which they facilitate healthcare engagement for service users whose self-care needs span across healthcare services.

2.5 Conclusion

Evidence supports the need to investigate the role of healthcare engagement and its potential to improve the health and wellbeing of service users with complex care needs. In particular the UK's ageing population (Age UK 2013), and an increased prevalence of chronic illness present an opportunity to more fully understand how healthcare engagement emerges and functions across healthcare services. The literature revealed a number of key influences that are thought to influence healthcare engagement. These influences include but are not limited to service users age (Age UK 2013), health status (Baumann and Dang 2012), health literacy (Smith et al. 2009), suitability of healthcare interventions, socio-economics, the role played by healthcare professionals (Dickenson et al. 2011) and level of physical, social and emotional support that they receive. Although evidence suggests that these influences effect healthcare engagement, this review revealed an absence of literature that indicates clear relationships between these influences. It is also unclear exactly how these influences emerge across healthcare services, as healthcare engagement research tends to focus upon the self-care behaviours of one illness or one particular service. This lack of clarity pertaining to the understanding of how engagement occurs in this context

potentially contributes towards the tendency for elderly chronically ill service users to struggle with engagement more than other groups of service users. For example, *'lower levels of knowledge, confidence and skills for self-management were observed among respondents who were elderly...'* (Ellins and Coulter 2005:3). It therefore contributes towards one's central research question for this study: *How can healthcare services be better designed to support healthcare engagement for service users with complex needs?* This question is accompanied by three supplementary research questions that are:

1. *What is the nature of healthcare service engagement for service users with complex healthcare needs?*

2. *How can healthcare service engagement be conceptualised for service users with complex healthcare needs?*

3. *What are the design recommendations for the future development of healthcare service engagement for service users with complex healthcare needs?*

These research questions are intentionally broad and are concerned with the nature of healthcare engagement amidst elderly chronically ill service users, which is not limited to a single service, or single set of self-care priorities. In this sense this enquiry employs an exploratory approach as a means of generating new knowledge about the nature of engagement as it occurs across healthcare services.

The first question is concerned with identifying a broad range of influences that create conditions that are both conducive and nonconducive to healthcare service engagement. Also, given service users varied and fluctuating healthcare needs, one aims to explore the nature of their engagement needs and the extent to which a parallel exists between service users' health and engagement. It is also of interest how healthcare professionals and healthcare services respond to service

users fluctuating healthcare needs, and the ways in which they currently support or fail to support engagement.

The second question is concerned with better understanding the emergence or existence of engagement at a conceptual level, and as a means of developing design recommendations for the future development of engagement, thus enabling one to respond to question three. Given that chronic illness exists over long periods of time, this enquiry aims to explore the impact that temporality has upon healthcare engagement, and the current ways in which services and healthcare professionals respond to this feature. The focus on the role of healthcare professionals and the service within which they operate emerged as a central part of this enquiry as the literature positions healthcare professionals as playing a prominent role in service users engagement, which is enforced by healthcare policy.

The third question was developed as a response to widely reported oversights regarding the lack of service user-centred healthcare interventions and a lack of integration of services, which provide healthcare to chronically ill service users. For example, *'there have been a great many public consultations, surveys, and one-off initiatives, but the service is still not sufficiently patient-centred'* (Coulter 2012a:4). The literature also points to a significant lack of integration between healthcare services that can have devastating effects on the health outcomes of elderly chronically ill services users due to their frequent and varied use of such services. This question is therefore concerned with gaining a better understanding of the ways in which advances in engagement research may provide new insights for integrated and service user-centric care, thus responding to the current challenges facing the UK National Health Service.

Chapter 3. Methodology and Research Design

3.1 Introduction

This chapter addresses the methodological and practical research design concerns of this empirical study. It introduces the epistemological and ontological perspectives that have informed the methodological choices throughout this research. It also explores the extent to which interpretivist and grounded methodological approaches, and one's perspective as a sociologist have informed the various aspects of this project. These aspects of the project include the selection of viable research questions, the sample group and the ways in which the data were collected, defined and interpreted. Following this are details of the practical steps taken in this research endeavour and the roles of ethics, access and consent in obtaining the interview and survey data. Important research considerations are also discussed including validity, and the ways in which the findings may be transferrable to other research contexts.

The core research question this empirical study aims to address is: *How can healthcare services be better designed to support healthcare engagement for service users with complex needs?* The research questions located on page 53 were identified as a means through which the above question may be deconstructed, and were developed as a result of reviewing key literature, and informed by existing and initial empirical research.

3.2 Research Focus: The Influence of Personal Experience

This part of the chapter addresses the extent to which my experiences, beliefs and philosophical outlook have influenced the questions raised within this research, and have informed various elements of the research design, data collection and analysis. As a sociologist I have a keen interest in how people, practices and systems work together. A key interest of mine is to observe people in their workplace setting in an attempt to understand and theorise about their varied behaviours. My previous dissertations studied the management and organisational infrastructure in a small mail order company. This undergraduate and postgraduate research stimulated an interest in the way larger and more complex systems support or inhibit those working within them, which eventually led to an interest in healthcare systems.

This then led to employment within community social care services during the first year of the PhD. I worked part-time as a carer for elderly and disabled people living in the community, most of whom suffered with at least one chronic illness. The rationale behind working in this particular context was driven by increasing publicity surrounding health and social care provision for elderly individuals. It was also driven by a desire to better understand this particular context first hand as a means of informing my PhD topic. During my employment as a carer, it soon became apparent that, in addition to providing health and social care, carers also acted as care coordinators. For example, carers would regularly explain to service users when and how they should expect to receive care from other services. It was commonplace for carers to call doctors, pharmacists and specialist services on the service users' behalf, when service users didn't feel confident enough to do so on their own. Carers would regularly enquire about services and resources on the behalf of service users, in addition to

coordinating visits and ensuring that service users were well supported during these visits.

The supportive and coordinating role I played as a carer brought to the fore some concerns about who is responsible for this care coordination, and who drives service user engagement when both formal and informal carers are absent? My experience highlighted many situations whereby service users would be left disengaged with healthcare services, if it were not for the proactive efforts of carers. This was because all of the service users within my care suffered with at least one chronic illness, and, many of those aged sixty-five and over often lacked the motivation, skills, self-efficacy and physical ability to drive their own engagement and coordinate their own care.

3.2.1 Interpretivism: Recognising one's Philosophical Approach

My social science background and work experience has caused me to veer away from objective and positivist approaches to research, drawing me instead towards interpretivist paradigms, which recognise the meaningful nature of human behaviour. This is because *'from an interpretivist point of view, what distinguishes human (social) action from the movement of physical objects is that the former is inherently meaningful'* (Schwandt 2003:191). I therefore believe that specific methodologies within social research are required, which embrace and are sympathetic to the complex and meaningful nature of people.

My understanding of the social world is that meaning is fluid and produced during interactions, and therefore the experiences of actors provide key insights into what may be happening in particular contexts (Gallimore et al. 1993). Consequently, I employed the interpretivist tradition within this thesis as *'the strategies in sociology, which interpret the meanings and actions of actors according to their own subjective frame of reference'* (Williams 2000:210). An interpretivist approach suggests that the way in which people interpret their social

world is influenced by a wide range of contextual features such as culture, previous experience and knowledge passed onto them by others. For example, *'all interpretation of this world is based on a stock of previous experience of it, our own or those handed down to us by parents or teachers, which experiences in the form of "knowledge at hand" function as a scheme of reference'* (Schutz 1953:4). Having this *'scheme of reference'* allows us to make sense out of what we see, however this sense-making process is very subjective as it employs a plethora of predisposed attitudes and experiences. In keeping with this view, Kroeze (2011:2) points out that *'interpretivism is a philosophical system that focuses on reality as a human construction which can only be understood subjectively'*. It was therefore by understanding people's accounts of their own engagement, within their 'inter-subjective' frame of reference, that I felt an adequate contribution could be made. Inter-subjectivity refers to the way in which subjective meaning may be relatable to two or more people. For example, the view that falls can be prevented in a number of ways is one held by the falls prevention healthcare professionals and is also shared by some of the service users. Therefore, the ways in which healthcare professionals promote this view of reality through their professional practice has implications for the inter-subjective view held by service users. Similarly, the ways in which service users construct and communicate their health conditions to the falls healthcare professionals may be accepted by professionals, thus influencing the way in which they provide care.

As one of the aims of this research is to reveal the barriers that influence service users' ability to engage with healthcare services, then the participants' interpretations of their own health, needs, ability and view of the service arguably represent a valuable source of relevant data. Thomas-Maclean (2009) points to the importance of inter-subjectivity and its implications for ethical healthcare. She suggests that *'if healthcare professionals engage inter-subjectively with patients, then connections promoting the recognition of social inequalities may be established, potentially influencing social change within the context of ethical*

healthcare' (Thomas-Maclean 2009:45). It is these inter-subjective accounts of reality from the participants that provided particularly rich findings, forming the basis of this research. Similarly, my own inter-subjective interpretations of the participant's experiences are embraced as a valuable contribution to the research process, as they represent a richness that is unique to my interpretation of the observable phenomena.

3.2.2 Ontological and Epistemological Approach: Understanding Healthcare Service Engagement through a Social Constructivist Lens

My view of reality is aligned with the social constructivist perspective in that I believe that knowledge is continually negotiated and constructed by social actors. A social constructivist view of reality maintains that *'human beings do not find or discover knowledge so much as we construct or make it'* (Schwandt 2003:197). People therefore generate knowledge about the world through their actions and it is from this assumption of reality that this research is situated. A social constructivist lens is employed throughout this research as it is felt that *'everyday life presents itself as a reality interpreted by men [and women] and subjectively meaningful to them as a coherent world'* (Berger and Luckman 1966:33). Therefore, by accepting that the participant's view of the world is learnt, constructed and reinforced by a range of influences, it was possible to access what gives rise to these constructions, and how they influence service users' experience of healthcare service engagement.

Visible signs of social constructs around ageing, for example, can be seen when one compares the normative treatment of elderly people with that of other cultures. For example, in the Western world elderly people tend to experience a sense of redundancy in old age, with their sense of worth deteriorating after leaving employment. In detailing the stereotypical views held towards the elderly, Sahlen et al. (2012: 2) point out that these views *'assume that people produce up to age 65, after which they only consume'*. This perception of the

elderly contributes towards the view that they are no longer capable of making worthy contributions, and therefore have little value within a society, which is driven by economic gain and individualism. In keeping with the idea that reduced productivity equates to a deterioration of power and importance, Dowd (1975:584) points out that *'because power resources decline with increased age, older persons become increasingly unable to enter into balanced exchange relations with other groups with whom they are in interaction'*. Thus, other constructs such as economic value and power are defined as being intrinsically connected to productivity, therefore rendering elderly groups contributions as inadequate. Conversely, if we look at Eastern cultures, elderly family members tend to be respected and valued, as families adhere to traditional hierarchies where elders remain as the head of the family and key decision-makers. Elderly people tend to be viewed as knowledgeable; their age providing them with a great amount of wisdom, rather than signifying a decline in their competence and ability to contribute.

Throughout this research I have considered the various ways in which social constructs and perceptions of normality influence service users' inclination and ability to engage with healthcare services. For example, the perception that falling is inevitable provides an inevitability to its occurrence. It is possible to recognise these constructs by taking note of the compelling evidence that falls can in fact be prevented, or at least reduced, by using a multifaceted approach that addresses the multiple causes of falls (Age UK 2013; Department of Health 2009a; and Feder et al. 2000).

3.3 Using a Grounded Theory and Ethnographic Approach

This section provides an introduction to the grounded theory and ethnographic approach that have been applied throughout the research project. These methodological approaches helped to inform research decisions including the exploratory stage of the project, the planning phase, data collection and the interpretation and analysis of the findings.

Ethnography is concerned with recording aspects of people's lives within a particular group, and often involves collecting and cross referencing a range of data, from interviews and observations to diagrams, documents and photographs. Ethnographic research seeks to deconstruct and understand the taken-for-granted multifaceted nature of daily life. In ethnographic research *the analysis of data involves interpretation of meanings and functions of human actions and mainly takes the form of verbal descriptions and explanations'* (Hammersley 1990:2). As a means of interpreting these meanings of human action, a grounded theory approach is also employed, as it enables one to develop a framework that is directly informed by the phenomena under study. *'Grounded theory and ethnography are suggested to be highly compatible, as ethnographic studies can provide the 'thick description' that is very useful data for grounded theory analysis'* (Geertz 1973 in Pettigrew and Cowen 2000).

Adopting a grounded theory approach is motivated by my own philosophical position, which is to account for reality as it is constructed and experienced by people. *'The "groundedness" of this approach fundamentally results from the researcher's commitment to analyze what they actually observe in the field or in their data'* (Charmaz 1990:1162). As such, and as indicated earlier, I am committed to represent data how it emerged in the field and from the perspectives of the participants. Instead of entering a research field with a hypothesis, which is

based on existing concepts as defined by others, a grounded theory approach necessitates that the concepts should emerge directly from the data. I have applied this approach to develop an understanding of engagement from the interpretations and perspectives of participants. For example, by seeking context specific understandings of engagement it has been possible to discuss both acts of engagement and barriers to engagement in a way that is meaningful to those being studied. This is because my understanding of the nature of engagement has been developed as a result of the participant's descriptions. A grounded approach therefore offers a clear distinction between the generation and verification of knowledge (Glaser and Strauss 1967), in that it aims to seek out new understandings of our social world, rather than being restricted by current conceptual understandings of it.

Charmaz (1990) illustrates this point well when explaining how some of the participants from her study were seen to 'deny illness' when actually, with a proper understanding of the relevant concepts something very different was happening. Charmaz's (1990:1162) research found that *when viewed from an ill person's vantage point of desiring to realize identity goals and struggling to have a valued self, that person's behaviour becomes understandable, rather than standing as evidence of denial of illness'*. Similarly, Tait et al. (2002:3) point out that *'non-engagement should not always be viewed as a problem of clients'* but instead may indicate that healthcare services do not meet their needs, and are *'socially devaluing or oppressive'*. Therefore by grounding the focus of ones' research within the data, it is possible to account for reality as the participants' experience it, rather than making assumptions based on pre-existing and often outsider accounts. That said, revealing accurate interpretations of reality, which account for how this reality is experienced by the participants requires a degree of critical skill on the part of the researcher, thus posing a challenging aspect of one's analysis.

In keeping with my own approach to research, Corbin and Strauss (1990:418) point out that *'grounded theorists share a conviction with many other qualitative researchers that the usual canons of "good science" should be retained; but they require redefinition in order to fit the realities of qualitative research and the complexities of social phenomena that they seek to understand'*. Similarly, the way in which I approached my research setting and topic employed the principles of 'good science' in that I reviewed a wide range of important topics as perceived by the participants to ensure their significance and suitability for further enquiry. I was not restricted by the confines of a scientific approach by employing a set hypothesis, but instead remained open and adaptable to issues that emerged as a result of these initial interviews.

One of the disadvantages of using ethnography and grounded theory includes a reliance on the knowledge and education of the researcher, as it is their decision to collect and interpret raw data, which provide the basis of the theory being developed. For example, Martin and Turner (1986:144-5) point out that *'grounded theory is a systematic way of dealing with such nonstandard data, and -skillfully handled- can produce accounts of a corporate culture that are recognizable to the members of that corporation'*. Therefore, although grounded theory has the potential to reveal knowledge about a particular group, which may benefit this group, this largely depends on the skill of the researcher to handle complexity and *'relies on the researcher's intuition and talent'* (Charmaz 1990:1163). I have minimised this disadvantage by adopting a systematically thorough approach to this project, always deconstructing and thoroughly understanding data before setting out to collect more. I also tested emerging ideas and categories by asking the participants for their perspective on these ideas. Finally, in addition to using 'researcher's intuition', I also cross-referenced new data with existing literature so that I could identify the development of new knowledge and also plan to collect more data in the appropriate areas. As a researcher with a continuously emerging

research focus, I recognise my own agenda to provide an insight into the process of engagement, while also maintaining the integrity of the data, as understood by the participants.

3.4 Applying Grounded Theory and an Ethnographic Approach to Healthcare Service Engagement

'*Qualitative methods, like their quantitative cousins, can be evaluated in terms of their canons and procedures only if these are made explicit*' (Corbin and Strauss 1990:419). It is therefore an important responsibility of researchers to thoroughly explain their research practices so that others may accurately evaluate their results. As such this section summarises how I've applied both a grounded theory and ethnographic approach in a practical sense to various aspects of my work.

While employing an ethnographic approach within this study, I actively participated in research during the interview process, and also collected a wide range of supporting documents that enabled a rich understanding of engagement in this context. For example, I collected blank assessment forms, assessment guidelines and procedures, the services official pathway, diagrams of the service in relation to other healthcare services, and a wide range of falls prevention leaflets from various other services, private companies and charities.

As outlined above, a grounded theory approach involves the adoption of an iterative process to continuously develop research ideas and questions throughout a research project. For example, Charmaz (1990:1162) points out that '*grounded theorists affirm, check and refine their developing ideas, but they do not limit themselves to pre-conceived hypotheses*'. I have adopted this approach by

constantly reviewing data as it is collected so that it may inform and continue to develop the focus of this research. The reason for adopting this approach was to ensure that the data being collected and the focus of the research were in keeping with the issues that the participants felt were central to healthcare service engagement. To demonstrate this developmental process, Table 1 Table 1: Developmental Research Phases illustrates the research activities that enabled me to elicit new knowledge about the organisation of the falls prevention service, the roles and practices of healthcare professionals and the experiences of service users. The table shows the research process as having taken place in five key stages, which are detailed along the left hand side. The topics along the top include the participant selection process; emergent research questions; my understanding of the falls prevention service and a summary of the data that was collected during each research phase. The selection process and research questions contain arrows as a means of illustrating that each phase informed the next. Following Table 1 are a number of sections, which detail the various iterative phases of this research.

Table 1: Developmental Research Phases.

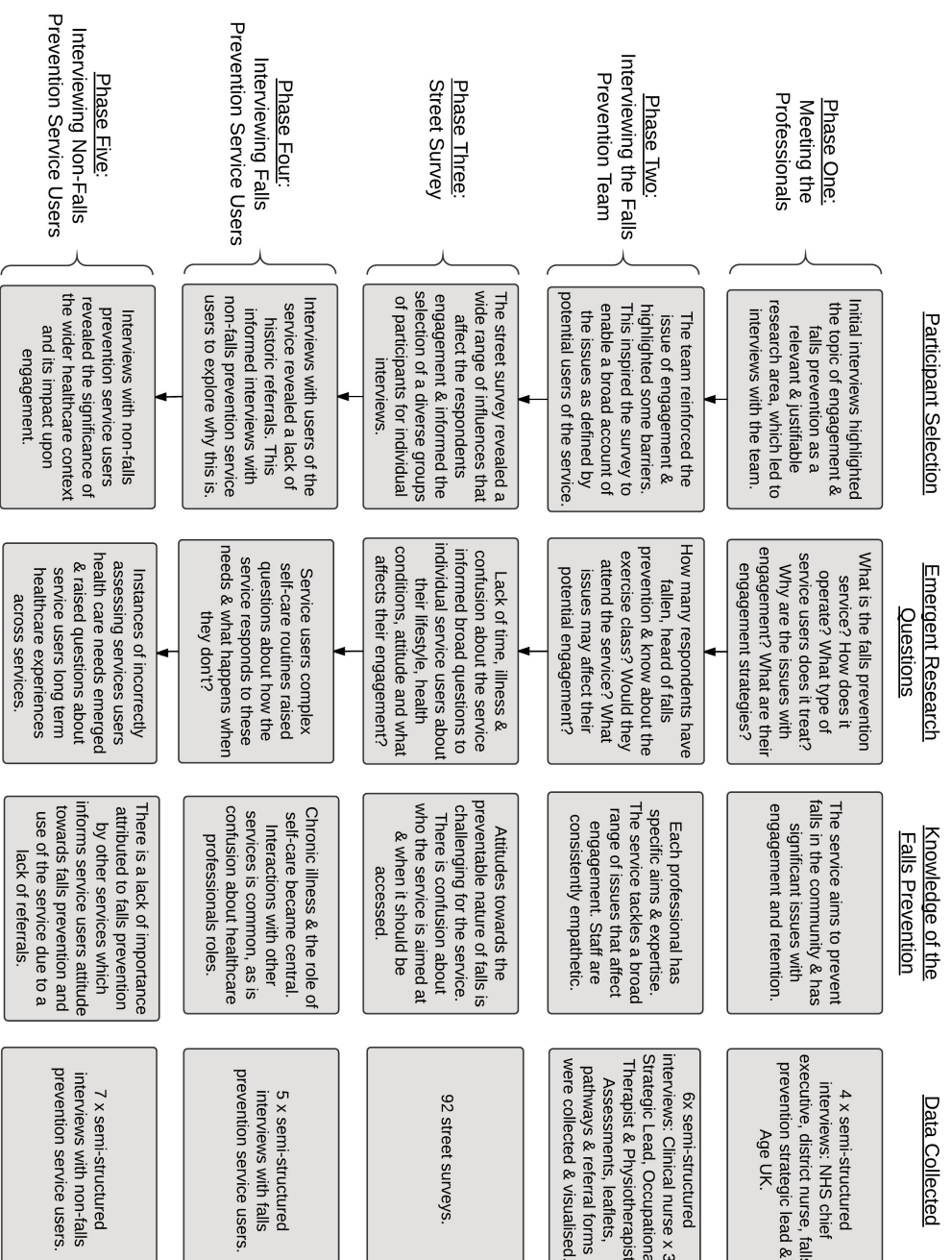| Phase	Participant Selection	Emergent Research Questions	Knowledge of the Falls Prevention	Data Collected
Phase One: Meeting the Professionals	Initial interviews highlighted the topic of engagement & falls prevention as a relevant & justifiable research area, which led to interviews with the team.	What is the falls prevention service? How does it operate? What type of service users does it treat? Why are the issues with engagement? What are their engagement strategies?	The service aims to prevent falls in the community & has significant issues with engagement and retention.	4 x semi-structured interviews: NHS chief executive, district nurse, falls prevention strategic lead & Age UK.
Phase Two: Interviewing the Falls Prevention Team	The team reinforced the issue of engagement & highlighted some barriers. This inspired the survey to enable a broad account of the issues as defined by potential users of the service.	How many respondents have fallen, heard of falls prevention & know about the exercise class? Would they attend the service? What issues may affect their potential engagement?	Each professional has specific aims & expertise. The service tackles a broad range of issues that affect engagement. Staff are consistently empathetic.	6x semi-structured interviews: Clinical nurse x 3, Strategic Lead, Occupational Therapist & Physiotherapist Assessments, leaflets, pathways & referral forms were collected & visualised.
Phase Three: Street Survey	The street survey revealed a wide range of influences that affect the respondents engagement & informed the selection of a diverse groups of participants for individual interviews.	Lack of time, illness & confusion about the service informed broad questions to individual service users about their lifestyle, health conditions, attitude and what affects their engagement?	Attitudes towards the preventable nature of falls is challenging for the service. There is confusion about who the service is aimed at & when it should be accessed.	92 street surveys.
Phase Four: Interviewing Falls Prevention Service Users	Interviews with users of the service revealed a lack of historic referrals. This informed interviews with non-falls prevention service users to explore why this is;	Service users complex self-care routines raised questions about how the service responds to these needs & what happens when they don't?	Chronic illness & the role of self-care became central. Interactions with other services is common, as is confusion about healthcare professionals roles.	5 x semi-structured interviews with falls prevention service users.
Phase Five: Interviewing Non-Falls Prevention Service Users	Interviews with non-falls prevention service users revealed the significance of the wider healthcare context and its impact upon engagement.	Instances of incorrectly assessing services users health care needs emerged & raised questions about service users long term healthcare experiences across services.	There is a lack of importance attributed to falls prevention by other services which informs service users attitude towards falls prevention and use of the service due to a lack of referrals.	7 x semi-structured interviews with non-falls prevention service users.

3.4.1 Phase One: Meeting the Healthcare Professionals

In the early exploratory stages of the PhD I met with a healthcare professional who had personal knowledge and experience of the current challenges facing the NHS. Through my supervisor's connections, it was possible to meet with a healthcare chief executive of a NHS Trust who was leading the transformation of multiple services at a time of major organisational change. After hearing about my personal interests in user involvement and organisational processes, she suggested falls prevention services as a suitable research area, because they were undergoing significant restructuring due to a rise in the occurrence of falls in an ageing population.

Meetings with Age UK, a NHS specialist falls prevention team strategist and a NHS district nurse brought to the fore some of the major healthcare challenges[13] existing within their specialisms. By meeting with the falls prevention strategist and district nurse it was possible to understand how the falls prevention service is organised and delivered in a multidisciplinary manner, involving a range of healthcare professionals with different areas of expertise. As a result of these meetings it became apparent that there was a great deal of research opportunity within the falls prevention service, which offered potential insights into the nature of engagement across other healthcare services[14].

By approaching the research topic in an organic and grounded way it was more likely that the research aims, which emerged from these meetings, were in keeping with values and interests of the participants involved. For example, Turner (1983:348) cited in Martin and Turner (1986:142) points out that grounded theory *'has enabled him to produce theoretical accounts which are*

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[13] For example, the recent abolishment of some services from the NHS which help to prevent falls were placing increasing pressure on organisations, such as Age UK, to expand their services.

[14] This is because services users who are referred into the falls prevention service typically have several other health concerns, which require them to access other healthcare services.

understandable to those in the area studied and which are useful in giving them superior understanding of the nature of their own situation'. Therefore, by commencing my research with broad exploratory research questions I was able to provide an account of engagement that is not only sociologically useful and interesting, but is also useful to the participants as it reflects the issues that were raised by them.

As a result of these meetings and a review of relevant literature, a broad preliminary research question was developed: *how can healthcare service engagement be better supported in falls prevention services?* The topic of healthcare engagement within falls prevention services was also identified, as the meetings indicated healthcare engagement as a pressing issue of concern. This was because the service was experiencing low retention rates and what they defined as 'disengaged service users'.

3.4.2 Phase Two: Interviewing the Falls Prevention Team and Understanding the Service

The initial meeting with healthcare professionals raised an awareness of the different healthcare professionals who are involved in the prevention of falls. The next logical step was to interview each member of the falls prevention team to gain a better understanding of their role, and how they contribute towards the prevention of falls. It was also of interest at this point to determine how each healthcare professional promoted and supported the engagement of service users, considering the lack of engagement highlighted by the chief executive and academic research (Yardley et al. 2005).

Each member of the relatively small falls prevention team was contacted by the manager and asked to arrange an interview with me at their earliest convenience. The team included a medical nurse who was also the service

manager, a physiotherapist, an occupational therapist, a district nurse and the strategic lead, whom I had met previously. By interviewing the healthcare professionals who worked within the service, it was possible to obtain varied perspectives on the same topics, taking into account the healthcare professionals' expertise and key priorities. Each healthcare professional was interviewed once except for the medical nurse, who was also the service manager, who was interviewed three times. Interviews with the service manager took place between interviews with the other healthcare professionals, and enabled me to ask further questions that emerged from each interview, checking my understanding of information that had been given.

When attempting to engage service users with the service, each healthcare professional had specific aims based on these priorities. For example, the strategic lead was concerned with eliciting information during focus groups; the district nurse focused on service users' general healthcare needs and potential referrals to other services; whereas the occupational therapist focussed more on how equipment and home modifications may support service users' movement[15]. These interviews revealed some of the ways in which healthcare professionals complement each other in supporting service users' ability to self-care, and thus highlighted different targets of engagement.

In an attempt to understand how the falls prevention service is organised and as an integral part of the data collection process, it was necessary to develop a visualisation of the falls prevention pathway. Martin and Turner (1986:142) point out that a grounded theory approach necessitates the researcher to *'commence by*

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[15] To support this process I requested blank copies of all of the assessments used by the healthcare professionals on the falls prevention team to determine a service user's falls risk. This enabled me to understand many of the key behavioural and medical issues which influence both a service user falls risk and their ability to engage with the service.

concentrating on a detailed description of the features of the data collected before attempting to produce more general theoretical statements'. Similarly, Charmaz (1990:1163) points out that *'delaying focused theoretical sampling fosters gaining an in-depth understanding of the realities and issues at hand'*. With this in mind, I developed a detailed description of the falls prevention service, which now features in Chapter 4[16] provides the reader with a useful context from which they may better relate to more theoretical interpretations of this data. It was valuable to develop a good understanding of the service before interviewing the service users in that it enabled me to better understand their experiences of the service.

During an interview with the falls preventions team's occupational therapist, she revealed that a technique she used for engaging service users was to *'let them tell their story, [as] they've all got a tale to tell'*. She explained that giving service users plenty of time to express their thoughts and talk about their falls is crucial in *'getting them on board'* with the aims of the service. This piece of advice is something that I later applied directly in the interviews with service users, as it enabled them to talk about the issues they felt were important, which invariably led to other issues that are central to their engagement.

3.4.3 Phase Three: Conducting a Street Survey

Before interviewing the users of the falls prevention service, an opportunity emerged to gain a broad understanding of the barriers that affect service users' engagement with falls prevention services. A survey was therefore developed and used at a National Falls Prevention Week event organised by Age UK. This survey was comprised of five questions, which sought to reveal whether the

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[16] Chapter 4 describes the roles of all of the healthcare professionals, their relationships with the service users and how they relate to each other at various points along the pathway.

respondents had heard of or used falls prevention service; if they had ever suffered a fall; and if they would use the service if they needed to in the future.

Understanding these reasons enabled me to develop appropriate questions that I later asked service users in individual interviews. For example, in the survey a number of respondents stated that they already have a number of healthcare appointments, and therefore couldn't possibly find the time to engage with the falls prevention service, even if they needed to. Therefore, when conducting semi-structured interviews with falls prevention service users I asked them questions pertaining to other healthcare services, the appointments they attended, and the self-care behaviours, which they may have been asked to perform. Before learning about the busy medical lives of chronically ill elderly people in the survey, it is unlikely that I would have enquired further about this specific issue. Therefore, as Charmaz (1990:1163) points out *'moving across substantive areas fosters developing conceptual power, depth, and comprehensiveness,'* which was only possible by eliciting different types of data in these phases of the research process.

A total of ninety-two surveys were completed providing sufficient information to gain an insight into a range of attitudes towards the falls prevention service. Respondents were selected as they walked past the Age UK stand, which was situated in a busy market place[17]. Participants were approached based on whether they looked over the age of sixty-five, and were then politely asked if they would answer five questions on a short survey.

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[17] A conscious effort was made to ask an equal number of men and women to complete the survey; however as women live longer than men there were a higher number of women who took part, which is in keeping with local demographics.

3.4.4 Phase Four: Interviewing Falls Prevention Service Users

As a result of the street survey, I was able to understand a broad range of influences that affect service users' ability to engage with the falls prevention service. The next phase in the research process used these insights as a basis to recruit individual falls prevention service users in that they reflected some of the contrasting illnesses, attitudes and personal circumstances that were revealed in the street survey.

Recruitment was conducted by providing the falls prevention clinical nurse with the inclusion and exclusion criteria, where she conducted a search of current and previous falls prevention service users. The clinical nurse also stated later that she used her intuition in the selection process, identifying service users she believed would be more likely to take part in the research. Formal letters were then posted to their home addresses, which included an information sheet and consent form. The participants who wished to take part then contacted me directly by telephone where we organised a suitable time and place to meet.

During the interviews I asked about the service users' experiences of using the falls prevention service; how and why they were referred; how much they knew about the aims of the service; and how they believe the service might be able to address their healthcare needs. I also asked if the service users experienced any issues that affected their interaction with the service. It was found that by asking this broad question about engagement that the service users were encouraged to describe how their health conditions, lifestyles, personal circumstances, previous experiences and levels of social support influenced their engagement.

As particular service encounters and experiences seemed quite important to some of the service users, I encouraged the participants to tell these stories. In this sense I took active steps to encourage the participants to freely express

experiential data. It was important during the interviews with service users to explain how their stories were important for my research as they would often say things like: *'I bet this isn't helping you'* or *'this isn't really what you wanted to know was it?'* In response to these comments, I would reassure service users that their experiences were valid and important for the research. In this sense the information obtained during the interviews was co-created by both myself and the participants as my approach helped the participants to recall, interpret and express these experiences.

As the inclusion of NHS service users required a Research and Ethics Council (REC) application, it was necessary to describe from the outset exactly who this sample group would include. The strict inclusion and exclusion criteria required for my ethical application enabled me to consider from the very early stages of the research exactly which types of people may be appropriate for this study. Full details of the NHS ethical application are detailed in the ethics section later in this chapter.

3.4.5 Phase Five: Interviewing Service Users outside the Falls Prevention Service

After conducting five interviews with service users who had been referred into the falls prevention service, it soon became apparent that they had posed a significant falls risk for a long time before they were eventually referred. It was therefore appropriate to recruit participants from outside the falls prevention service to access these individuals. Recruiting these types of participants was crucial in order for me to fully understand the reasons why they were never introduced to a falls prevention service, which may have been appropriate for their healthcare needs.

Seven additional participants were recruited via a private physiotherapy company, which treated several people who had recently fallen. The physiotherapist who owned the company asked potential participants if they would be interested in taking part in this research, and provided them with some verbal information about the project. Those who were interested were provided with a formal information sheet, which included information about the project, my contact information and a consent form. Participants who were still prepared to take part in the research after reading this information then telephoned me, at which point we scheduled a meeting at their convenience.

This stage of the research process revealed that all of the participants interviewed were eligible to be referred to the falls prevention service as they met several requirements of the 'falls risk assessment tool' (FRAT) criteria[18]. Interviewing this group of service users found that, despite haven fallen on multiple occasions and reporting these falls to healthcare professionals, they were never referred to the falls prevention service. This failure to correctly assess service users' healthcare needs meant that the cause of their falls was never properly investigated. These interviews also revealed that had the falls prevention service been offered to this particular group of individuals, they would have been happy to receive this type of intervention to address their healthcare needs. The study found that the incorrect classification of these service users' healthcare needs had important implications for their engagement, in that they felt disenfranchised and undersupported by healthcare services. Accounting for this group of individuals was very useful in understanding that engagement with the falls prevention service is also subject to the practices of healthcare professionals operating outside the service.

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[18] More information about the ways in which service users are assessed for the falls prevention service will be introduced in the next chapter.

3.5 Formal NHS Ethics Approval

As this research endeavour required the participation of NHS service users who are elderly and chronically ill, the ethical concerns of this work are considerably high. In order undertake this type of research within the NHS it was necessary to go through the methodical process of obtaining ethical approval through formal channels. This process involved submitting a substantial application through an 'Integrated Research Application System' (IRAS), which detailed my response to a wide range of questions regarding the research project. For example, the application form asked what the specific research aims were, and how these may be met; what the scientific justification was for the research; and for the credentials of all the researchers involved in the project. It required me to provide a detailed research protocol, which documented how the participants would be selected and contacted, and also who would contact them.

Deciding on this level of detail at such an early stage of the project was particularly problematic when employing a grounded theory approach. This is because it prohibited methodological decisions from being made as key findings began to emerge from the data. To minimise this limitation, the ethical application was comprised of a number of permissions, which were unlikely to be achieved due to time constraints. For example, it was stated that each of the participants would be asked to participate in up to twelve interviews over a twelve-month period. The maximum number of interviews with service users was actually two interviews; however, by seeking permission for an increased number, it enabled increased flexibility.

3.6 Field Procedures and Technical Research Methods

The following sections outline a range of procedural and technical research methods and considerations, which have been made throughout the duration of this project.

3.6.1 Informed Consent

To ensure that consent was fully informed, key information about the project was summarised on an information sheet, which was designed specifically for service users and healthcare professionals. The falls prevention team manager was provided with both of the information sheets and specifically designed consent forms, which were either handed out to staff or posted out to service users taking into account the above inclusion criteria for the study. With the information sheet and consent forms posted out to potential service user participants was a cover letter, which explained my role and intentions as a researcher at Lancaster University. The healthcare professionals were also provided with the same cover letter for informational purposes. As the potential service user participants were provided with information about the project, its aims, their potential role as a participant, and how the information obtained would be useful, I was confident at this initial point of contact that all of the relevant information had been disseminated to them. Furthermore, the research protocol and information given to obtain consent was also scrutinised as a result of applying for NHS ethical approval and so, as a researcher, I was satisfied that consent was obtained in a proper and ethical manner[19].

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[19] Other issues that were considered throughout the project included that of my presentation, time keeping, social etiquette, dress code and general professionalism and conduct when entering into participants' homes or, in the healthcare professionals' case, their place of work.

There was also the issue of ensuring that the participants fully understood the information, which had been disseminated to them at the start of the project. For example, the Royal College of Nursing Research Society (2011:8) point out that *'when giving information about the research, it is important to ensure potential participants are in a position to give informed consent'*. To ensure that the participants' consent was fully informed, I ensured that all of the interviews began with an introduction to the project, its aims and a discussion of my role as a researcher. Despite making quite clear that I am a researcher from a university (both in written form and verbally) rather than a healthcare professional, there was still one occasion when a service user tried to order healthcare equipment through me. Consequently, I reiterated both to that particular participant and to the others exactly what my role was and the purpose of the research.

As I was required to enter the homes of people I had never met, I consulted Lancaster University's 'Lone Working Policy' throughout the project to ensure my safety during all of the home visits[20].

3.6.2 Data Collection and Recording

All of the semi-structured interviews were recorded by using a mobile phone and iPad application, which enabled me to securely transfer recordings onto my laptop[21]. After each voice recording was transferred to my laptop, they were deleted from both devices. I asked all the participants individually whether it would be alright to voice record their interviews. It was explained to them that their names would be changed when the interview was transcribed and that the voice recording would be encrypted and stored securely on a password protected laptop. In addition to asking permission verbally the consent forms also clearly

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[20] For example, by informing others of my whereabouts and also letting them know once I had safely left the participants' homes.

[21] The reason for recording on two separate devices during the interviews was because the very first interview did not record properly and so it was decided that two devices would help minimise this risk of any kind of malfunction.

state that the interviews will be recorded unless consent for this is not obtained, for example it states: *'I understand that audio-recordings will be taken during the interviews and that these recordings will be stored securely and encrypted'*. All of the participants who took part in a semi-structured interview gave their consent for the interviews to be voice recorded.

In addition to taking a voice recording, extensive notes were also taken during the interview. Using a grounded theory approach, Martin and Turner (1986:145) note that *'to be most useful, notes should be rich in detail and "story like" in explaining the topic described'*. With this in mind, I described important features of each interview, detailing who made which comments, noting down any visible changes in body language, tone and expression when new topics arose. Note taking had multiple functions and, in the instance where the voice recorder failed there were still a range of quotes, my own comments, and general details about what was discussed during the interview. It was felt that my writing notes alleviated some of the awkwardness of the interview, meaning that the participants felt less pressured because I was busy writing notes rather than looking at them. Retrospectively, the notes were massively insightful as they included comments of my interpretation of the information given by the participants. It is quite possible that had this analysis not been noted during the interview it may have been forgotten and therefore important interpretative data may have been lost.

3.6.3 Transcribing and Analysis

The analysis of this data occurred in developmental phases, as detailed in this section corresponding to the data being collected in phases, with preceding phases informing the next in terms of emerging insights and research questions.

All of the interview data was fully transcribed manually by playing and stopping the voice recordings in a private space so that they could not be

overheard[22]. The transcripts were then printed out and I went through each one systematically highlighting and commenting on various statements, which were found to be significant[23]. This level of emphasis defined the significance of statements the participants attributed to particular service encounters, illnesses and other influences they believed affected their engagement. Using this information I employed what Geertz (1973) refers to as a *'thick description'* in that an extremely detailed account of the participants' lives and experiences was documented. Geertz (1973) points out that it is my duty as a researcher to make available all of the known details about particular phenomena so that the reader may make their own judgement about each phenomenon.

The ninety-two surveys were collected during National Falls Prevention week and analysed by inputting them into Microsoft Excel in their existing question categories. For example, whether the respondent had fallen previously, or if they had ever heard of the falls prevention service. As the respondents often gave additional information - for example they may not have attended the service but their neighbour did - this information was also added to the spread sheet. From the Excel spread sheet I was able to analyse demographical information, the percentage of respondents who had fallen, had heard of the service or who would consider using the service if it was recommended to them. The survey data proved to be a useful accompaniment to the interview data in that it not only informed some of the research questions asked in the individual interviews but also retrospectively supported many of the claims made in the interviews.

By analysing the data at each phase of the research process it was possible to define a range of factors that affect healthcare engagement from the perspectives

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[22] I had initially intended to use voice recognition software for transcription purposes; however, after transcribing one interview manually I felt increasingly familiar with the data and so transcription was completed manually as a part of my methodological process.

[23] In addition to customising each transcript in the analysis process, I also created a large mind map for each participant which acted as a quick point of reference to access key issues that they felt affected their engagement.

of both service users and healthcare professionals. Following the interviews and street survey it was possible to cross-reference the data as a means of identifying recurring themes and evidence that would strengthen specific claims. It was found, for example, that the ways in which both the interviewees and survey respondents described their falls, placed the emphasis on environmental influences and physical obstacles that were outside their control. This concurrent theme was thus interpreted as the participant's reluctance to be held accountable for falling, for fear it might bring into question their physical or mental competencies. Other themes that emerged across data sets included the significant role of service attitudes and beliefs towards falls prevention; the influence of healthcare delivery and the level of social support service users could access. All these themes were identified using thematic analysis, which enabled me to identify recurring themes that are present in the data after reading and interpreting it multiple phases. Fereday and Muir-Cochrane (2008:83) point out that *'the coding process [of thematic analysis] involves recognizing (seeing) an important moment and encoding it (seeing it as something) prior to a process of interpretation'*. I employed this approach by identifying statements that were both important to the participants, and which I felt provided an important insight into the nature of healthcare service engagement.

Following thematic analysis, the data revealed a level of complexity that could not be properly understood by using thematic analysis alone. This was because a large number of factors emerged that seemed to influence healthcare engagement, which also exemplified emergent non-linear relationships with each other. For example, it was found that changes in service users' health influenced on their motivation, self-efficacy to self-care and created changes for the level of support they needed, to maintain their engagement with the service. These factors were also subject to constant change and emerged across time and space thus influencing service users' engagement in a number of diverse ways. Some of the factors that were identified include: the service users' health status; their physical

environment; the level of support that was available to them; and the availability of skills, knowledge and appropriate resources for their self-care needs. It was thus found that these factors appeared to be interconnected in complex ways, making it difficult to see how each factor both individually and accumulatively affects healthcare service engagement.

As this enquiry is underpinned by a grounded theory approach, the decision was made to seek further conceptual clarification of these emerging factors of engagement. It was also decided that a framework was needed to accurately model this level of complexity and to support further analysis of the data. The Healthcare Service Engagement model was therefore developed following multiple analyses of the data. Its development is described in detail in Chapter 7, and it is then properly introduced and applied in Chapter 8. The Healthcare Service Engagement model encapsulates concepts that were observed in the data, for example services users' health status; their perceived susceptibility to falling; the seriousness of falls; barriers that affect their ability to self-care; the role played by healthcare professionals; service users' attitude and self-efficacy; and the organisation of the service. The developed model therefore includes theoretical insights from the Health Belief Model (Hochbaum 1958); Self-Efficacy Theory (Bandura 1977); Orem's Self-Care Theory (Orem 1985); The Patient Activation Measure (Hibbard et al. 2004); The Precede-Proceed Model (Green 1980) and a Complex Adaptive Systems approach (The Health Foundation 2010).

3.6.4 Validity and Reliability

While embracing the subjective nature of this enquiry, it was crucial to provide a detailed account of how my philosophical view and preoccupations with particular types of knowledge have influenced on the way in which the data has been accounted for and framed. Should another scholar decide to conduct this research again, they will also be required to reflect upon their preferences for particular types of knowledge and to determine how their personal experiences

may influence their data. Having gone through this reflective process, I feel that similar findings may be revealed as to the nature of healthcare service engagement; however these findings will also reflect the researcher's philosophical and epistemological outlook. This is because no two pieces of ethnographic research can produce the exact same results and nor should they. It is the interpretive work of the researcher and the co-production of knowledge with the participants that has made this empirical work so rich and valuable. However, this is not to say that this research is not reliable. It is, instead, uniquely crafted by the wealth of experience and knowledge of its interpreter. In addition, there is a range of conceptual insights that I have gained from this research, which, if this research is repeated, should be recognised at least at some level despite the researcher's personal agenda.

3.6.5 Generalisability

There are several key findings from this research that are arguably transferable to other contexts, both within and outside healthcare institutions. Before I detail the transferable elements of this research, it is important to define what exactly is understood by the term generalisability. Williams (2000:212) points out that *'if one takes generalisation in a broad non-scientific sense to mean a general notion of proposition obtained by inference (Concise Oxford Dictionary), then interpretive research is replete with generalisations.'* The falls prevention service and people's views and experiences within it are unique. No other group of people will exist with the identical experiences, health conditions, support and local resources that would allow one to expect identical findings should one conduct this research again in another context. It is, nonetheless, possible to infer that certain characteristics that have been constructed and learned about the falls prevention service through this study may be relevant to other contexts that exemplify similar characteristics.

For example, to suggest that findings about the nature of engagement within the falls prevention service may only be applied to this particular service may easily be challenged when one considers the multi-organisational nature of this research.

Although the participants were accessed via the falls prevention service, their chronically ill status means that they are generally receiving care from a whole range of other services, such as the memory clinic, diabetes care and specialist heart services. Moreover, the service users' experiences are not limited to healthcare services but cross over into various other sectors, for example Age UK in the voluntary sector and physiotherapy in the private sector. Therefore, by their very nature, many of the findings from this research are not only representative of service users within the falls prevention service, but are also representative of a wide range of other services. There are also other agencies involved such as housing and social services, with which some of the service users have contact, and this has implications for our understanding of the nature of engagement. For example, a common theme that is experienced across services is the difficulties service users exemplify when trying to distinguish between the purposes of various services. The assessments conducted and the overall aims of healthcare services are so similar to service users that they often find it difficult to establish who does what and what they need to do in response. Therefore, although my initial enquiry sought to understand the barriers to healthcare engagement within the falls prevention service, it has also highlighted barriers to engagement across services, thus adding value to the project. With this in mind, it is fair to say that other findings from this study that have been accessed through the falls prevention service are actually representative of other services with similar characteristics.

A more general contribution offered by this study is that of a developed understanding of the process of healthcare service engagement. The insights gained about how and where engagement may be better supported among service

users with complex care needs may be transferred not only to other healthcare services but also more generally to areas of service engagement. This is because the findings of this research challenge the current way in which healthcare engagement is understood and conceptualised. It is therefore possible to adapt and apply these key insights to engagement processes that include individuals with complex care needs that exist beyond falls prevention services.

3.7 Conclusion

This chapter aimed to describe all of the methodological and practical design choices that were selected for this empirical study. It achieved this by describing one's interpretivist perspective of how knowledge is generated, which has important implications for how it is understood and articulated throughout the thesis. For example, by viewing knowledge as something that is constructed rather than something that is discovered, one is able to better understand the role of the researcher, as a participant of this knowledge generation, and the ways in which their views influence it. The grounded nature of this research was clearly described in this chapter, which provides the reader with a broader picture of ones research design choices and the ways in which each phase of the research helped to informatively sculpt the next. Now that one's methodological and practical design choices have been outlined, the following chapter describes an overview of the falls prevention service, which is intended to provide the reader with a contextual understanding of its organisational structure and the healthcare professionals who work within it.

Chapter 4. Overview of the Falls Prevention Service

4.1 Introduction

This chapter provides a comprehensive account of the falls prevention service and is based on the descriptions of the falls prevention team being studied. The chapter is organised into two main parts. Part one provides an overview of the service and describes the healthcare policy that underpins its organisational structure. It also provides an overview of the team of healthcare professionals who work within it. Part two describes each stage of the falls prevention pathway, and the individual assessments and practices that are employed by the falls prevention team.

By providing this initial 'thick description' of the setting and actors who occupy it (Geertz 1973), it was later possible, to develop an appropriate theoretical framework that guided further data collection (Martin and Turner 1986). The following overview provides a context within which the falls prevention service is situated. This is subsequently followed by a description of the service's structure, and the roles and responsibilities of each healthcare professional who operate within this organisational structure.

4.2 Part One: The Organisational Structure of the Falls Prevention Service

The *'Falls: Assessment and Prevention of Falls in Older People'* (NICE 2013)[24] guidelines and other government strategies (Department of Health 2009a; 2010) provide the foundation upon which the falls prevention service is established. NICE in particular provides clinical guidelines and sets minimum healthcare standards for the National Health Service (NHS). They provide information about the different service users who should be targeted under different initiatives, and numerous ways in which healthcare should be delivered, to achieve maximum health benefits and healthcare equality. Various elements of the falls prevention service are dictated by healthcare policy in this way, for example, the demographic which this service targets (over sixty-five years), and the maximum waiting time in which high risk service users should be seen by a medical professional (six weeks) are specified in policy guidelines.

The falls prevention service's core team who were interviewed as part of this study is comprised of six healthcare professionals, and aims to prevent elderly people from falling in the community. The team of healthcare professionals include a clinical nurse; a district nurse; a physiotherapist; an occupational therapist; a strategic lead and an administrator. These healthcare professionals also work in collaboration with a community team, which is comprised of a number of healthcare assistants. The healthcare assistants support the rehabilitation of service users by implementing home exercises and supporting and implementing interventions that have been prescribed by the falls prevention team. The falls prevention team is regarded as multidisciplinary, in that different healthcare professionals generally assess and treat the same service users within their different specialisms, which represents another requirement of NICE (2013)

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[24] National Institute for Health and Care Excellence

guidelines. The team share the same office space in an out-of-hours community clinic; however, the exercise classes take place in a different health centre.

4.3 Part Two: Healthcare Professionals and the Falls Prevention Pathway
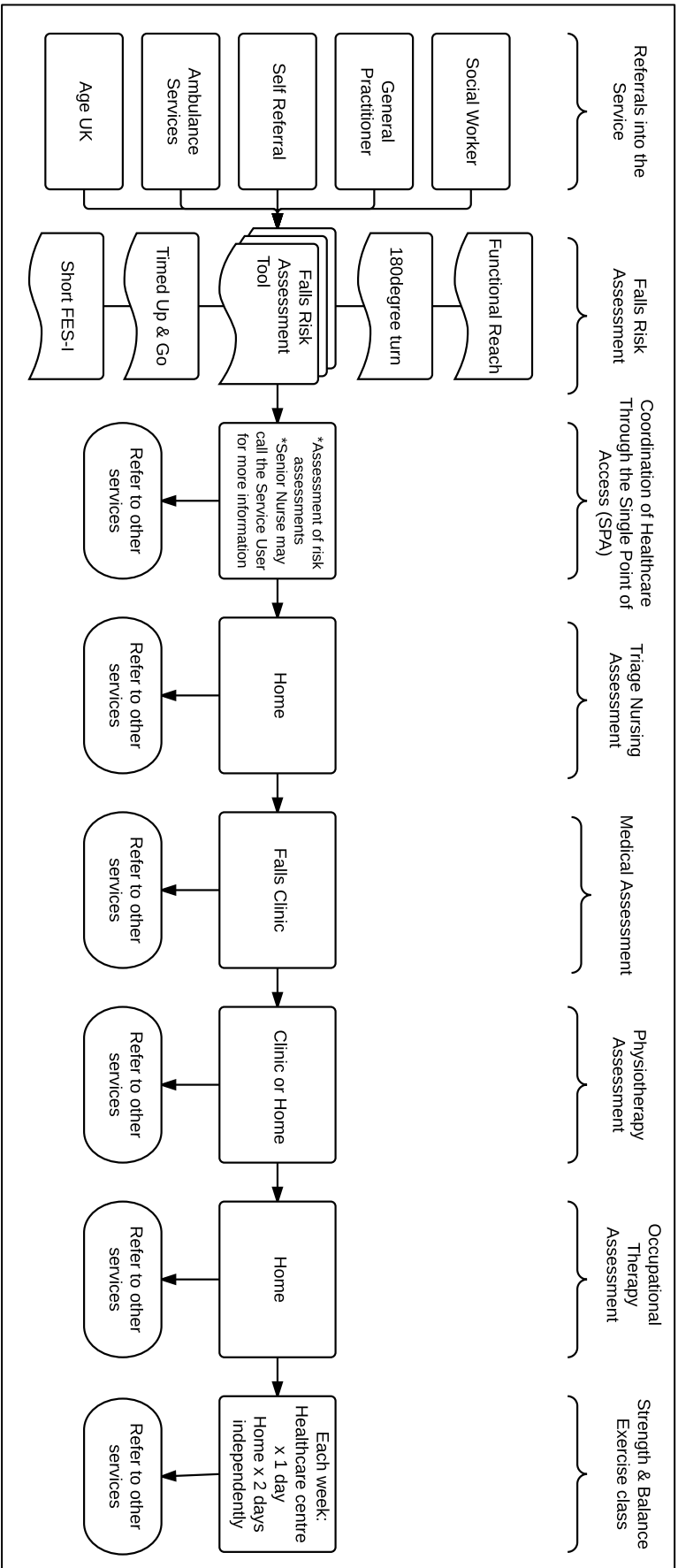
Figure 1 illustrates the falls prevention pathway and is followed by a description corresponding to each stage. Each member of the falls prevention team was asked to describe the falls prevention pathway, their role, assessments they use, and details of their organisational practices. The following figure and accounts are an accumulation of the falls prevention teams' descriptions; contrasted to provide greater detail about the service.

Figure 1: Falls Prevention Pathway Referrals into the Service

The falls prevention service accepts referrals from a large number of other health and social care services. For example, ambulance services; general practitioners; social workers; district nurses; Age UK; and handyman services[25] all refer into the falls prevention service. Service users are also able to refer themselves into the service; however this is not currently publicised, as the falls prevention team do not have the capacity to process a large influx of referrals. To ascertain whether service users are appropriate candidates for the falls prevention service, referrers employ the use of a number of risk assessments, which are described in the following section.

4.3.1 Falls Risk Assessment

Members of the falls prevention team pointed out that the falls prevention service is commissioned to provide healthcare to service users who are regarded as presenting a high risk of falling. They described that a service user is defined as high risk if they score three or more on a 'Falls Risk Assessment Tool' (FRAT), which includes five indicative questions ascertaining a person's likelihood of falling. The questions include whether there is a history of any fall in the last year; if the service user is on four or more different medications per day; and whether they have been diagnosed with having a stroke or Parkinson's. It also asks whether they report any problems with their balance and if they are unable to rise from a chair of knee height without using their arms. The FRAT is employed as a universal risk assessment tool across health and social care settings as a means of quickly ascertaining service users' risk of falling.

In addition to the FRAT, health and social care professionals ascertain a service user's risk of falling by using other validated outcome measures. These include a '180 degree turn' where the number of steps required to turn 180 degrees is counted, with any more than four steps representing a higher falls risk

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[25] Handyman services are community-based and are able to make small structural changes in service users' homes for a subsidised cost.

(Simpson el al. 2002). The 'functional reach' measures the difference between one's arm length and the maximum they are able to reach forward while standing or sitting in a fixed base position (Duncan et al. 1990). The 'timed up and go' measures in seconds the amount of time it takes a service user to stand from sitting, walk 3 metres, turn around and then sit back down (Podsiadlo and Richardson 1991). Finally, the 'Falls Efficacy Scale-International (Short FES-I)', is a quick tool, which helps to assess how concerned the service user is of having a fall while engaging in daily activities (Kempen et al. 2008). These activities include getting dressed; getting undressed; preparing simple meals; going to the shop; cleaning the house; and going up or down the stairs. The service user's score is then tallied up to assess how likely they are to fall in the future. It is important to note that in addition to other health and social care professionals employing the above assessment tools to measure service users' risk of falling, the falls prevention team also use these tools once the service user has entered the service. To enter the service, the health or social care professional must forward their assessment and service user information to what is known as the 'Single Point of Access' (SPA). The following section describes the process of coordinating service users' care via the SPA.

4.3.2 Coordination of Healthcare through the Single Point of Access (SPA)

Members of the falls prevention team describe that once referrers have assessed a service user as posing a significant falls risk, they refer the individual along with the FRAT and a standard referral form to the 'Single Point of Access' (SPA). They point out that as referrals are accepted from a wide range of services, the information sent to SPA can be variable, in that some referrals have considerably more detailed information than others. The SPA is a team consisting of senior nurses who decide which services (including falls prevention) are required by the service user based on the information they receive in the referral.

For additional information, the SPA sometimes interview the service user by telephone. The intention of the SPA is to enable service users to access a range of services simultaneously; for example, they may be referred to the falls clinic and also to social services concurrently. In ideal cases the single point of access system ensures that the service user is appropriately referred to all the services they need at that point in time. In some urgent cases, the senior nurse may call the emergency services for services users who raise considerable cause for concern. If the senior nurses decide that a referral to the falls prevention service is appropriate, they fax the relevant information to the falls prevention team, which reviews the information every morning. Service users, who represent a high risk of falling, receive an invitation to attend the falls clinic. They also receive a letter, which explains that before their clinic appointment, the nurse will visit them to conduct an initial nursing assessment. The following section describes the role of the nurse and the reason why she visits all service users when they first enter the falls prevention service.

4.3.3 Triage Nursing Assessment

Receiving a home visit from the triage nurse represents the first physical interaction that service users have with the falls prevention service, once they have been successfully referred through the SPA. As soon as service users are referred into the falls prevention service, they are automatically sent an appointment letter notifying them of their medical assessment at the falls clinic. However, before attending their clinic appointment, the triage nurse visits each service user who has been referred to ensure that they are appropriate candidates for the falls prevention service. At this stage, the nurse aims to ascertain if the service user is receiving treatment from any other healthcare services and whether the nature of these treatments make them unsuitable for the falls prevention service. Service users who are not suitable are referred to other services, and discharged from the falls prevention service where appropriate. The service does

not 'officially' have an urgent pathway for service users, however, if there are any appointment cancellations, the administrative team prioritise more urgent cases as much as is reasonably possible. As part of her assessment, the nurse asks a range of standardised questions on the 'Nurse Assessment' form. These questions enable the nurse to ascertain why the fall may have occurred, and to reveal any pre-existing diagnosed and undiagnosed health conditions. The 'Nurse Assessment' form includes questions regarding vision; hearing; alcohol consumption; palpitations; dizziness; loss of consciousness; the direction of a fall; the activity undertaken when the fall occurred and both lying down and standing blood pressure. The nurse ascertains whether the service user has had any investigatory work undertaken on their health, if they've been to hospital, and if the ambulance service was involved in any urgently provided healthcare. The nurse also looks at health concerns such as incontinence, and the service user's general wellbeing, for example, whether they've been referred to the memory clinic, or assessed for mental health issues. The questions included in the main assessment prompt more extensive questions, which are located at the back of the assessment form. For example, if the service user triggers further questions regarding their mental health, a 'mini mental health assessment' will also be conducted. The questions asked will depend upon the amount of information documented on the referral from the SPA, as they tend to vary considerably. Once the triage nurse has completed her assessment and is satisfied that the service user's condition is appropriate to use the falls prevention service, the service user will go on to attend their medical assessment at the falls clinic, which normally takes place in the next week or two. The following section describes what happens when service users attend the falls clinic and receive a medical assessment.

4.3.4 Medical Assessment

In the falls clinic, the clinical nurse aims to diagnose any medical issues, which could cause, or are currently causing, falls. Medical reasons, which may cause someone to fall include but are not limited to: balance problems caused by ear infections; cerebral vascular disease; strokes; postural hypotension; epilepsy; sudden loss of consciousness; palpitations; dizziness; cardiac arrhythmia and Parkinson's disease. The clinical assessment is similar to the nursing assessment; however it provides more medical detail, for example, the medical nurse is able to perform an ECG in the clinic, chest investigations and a full medication review. After this assessment the clinical nurse is able to refer the service user to a range of other services which are external to the falls prevention team, for example, podiatry; the memory clinic; mental health services; ophthalmology; social services or the hospital for further tests.

Unless it has been ascertained that the service user does not require other services from the falls prevention team, they will have an appointment with both the physiotherapist and occupational therapist following their medical nurse assessment. From an organisational perspective, the team found that by sending a nurse to each service user before their clinic appointment to conduct a nursing assessment, and provide information about the service, the service users were far more likely to attend their clinic appointment:

> *"the 'Did Not Attend' (DNA) rate went down massively… cuz*
> *DNA rates have always been a big issue so patients knew why*
> *they were coming, they were more engaged to come to clinic"*
> *(clinical nurse).*

Attending the clinic appointment represents a significant step for the service user, and acts as a gateway to access other services, for example physiotherapy, occupational therapy and the strength and balance exercise class. Without the medical approval, it is not possible to determine if the service user is currently

well enough to be referred to these services. The following section describes the next step in the falls prevention pathway, which is the physiotherapy assessment.

4.3.5 Physiotherapy Assessment

The physiotherapist tries to attend to service users immediately after the clinical nurse to prevent the service users having to make two journeys to the clinic. If this is not a feasible option, or the service user cannot make it into clinic for mental or physical reasons, the physiotherapist will conduct a home visit. The physiotherapist assesses the individual's history of falls, their general strength, gait, mobility and range of movement by employing the above validated falls risk tools (for example the functional reach). The physiotherapist will complete her assessment and ascertain if the service user requires physiotherapy treatment. If physiotherapy is required, this will be arranged accordingly and treatment will be administered during regular visits. It is commonplace however, that the service users require specific skills and techniques for safe movement, which the physiotherapist will also discuss during the assessment. The following section details the occupational therapy assessment, which takes place after the medical and physiotherapy assessments.

4.3.6 Occupational Therapy

The occupational therapist always conducts home visits, unless this service is not required. She will complete a '*Home Falls Accident Screening Tool*' (HOMEFAST), which assesses the individual service user in relation to their environment, along with an environmental assessment tool, which assesses the service user's home. The occupational therapist will assess how the service users transfer themselves from one piece of furniture to another, and how safely they are able to complete their daily activities. She will focus on existing assistive equipment, such as a walking aid and how safely this can be moved within the service user's home. She will look at floor coverings, mats, lighting and where

light switches are located to ensure that the service user can move around without tripping over hazardous obstacles. These obstacles might also include clutter or a haphazard environment when one considers the service user's potential mobility issues. Once the occupational therapist has identified the potential for assistive devices, home modifications or some general recommendations about the service user's living space, she will discuss all of the available options with them. In the case that no changes are required the occupational therapist will provide some general advice on home safety and promote falls awareness with the service user. Once service users have been assessed by all of the aforementioned healthcare professionals, they will then begin a ten-week strength and balance exercise class, which is facilitated once a week in a healthcare centre by members of the falls prevention team. The following section describes the function of the strength and balance exercise class.

4.3.7 Strength and Balance Exercise Class

The strength and balance exercise class is a two-hour session in which a group of service users are given a number of chair exercises to undertake; the majority of movements include sitting down and standing up. The class takes place once a week, and the course lasts ten weeks. Only service users who are regarded as medically 'well' and 'stable' are invited to complete the class as the ratio is approximately 1:4 (practitioner: service user), and so there is a requirement that they are able to support their own weight. It is therefore imperative that service users are targeted by the falls prevention service before their mobility becomes significantly reduced. The service users will normally receive a minimum of one home visit, where they are familiarised with the exercises, before attending the group sessions. Thereafter, some service users who are unable to attend the group exercise class for medical or psychological reasons will continue their exercises at home with the community therapists, or the physiotherapist.

The exercise programme prescribed during these classes, whether at home or in groups at the community clinic, is an evidence-based programme called Otago (Campbell et al. 1999). Otago exercise programmes enable service users to exercise safely, utilising movements that have been designed for those with reduced stability and strength. In particular, the exercise programme aims to strengthen the service users' leg muscles in addition to rehabilitating their ability to balance. For example, a particular exercise involves standing behind a chair, while holding onto the back of it and slowly rising onto one's tiptoes and slowly lowering down again. The exercises become increasingly difficult to ensure that the service users benefit as much as possible from them, as they become stronger and more stable.

When the Otago exercise programme is initially introduced, the service user is given a handbook, which details all the exercises they will be performing. The service users are encouraged to exercise on at least two occasions in their home, in addition to the class they attend or the home visit they receive once a week. The exercise programme takes around thirty minutes to complete, and service users are encouraged to document their progress so that they can report their progress to the healthcare professional who is working with them.

4.4 Conclusion

The multidisciplinary design of the falls prevention service enables different healthcare professionals with a diverse range of skill sets to work collaboratively, with the common aim of preventing falls in the community. The prevention of falls is approached from a variety of angles, as it is believed that no one preventative measure will be sufficient, and that one's falls risk is only significantly reduced by accumulative and coordinated interventions (NICE 2013). For example, the medical assessment concerns itself with understanding

any medical reasons why the service user may be at an increased risk of falling. This involves reviewing the service user's medication, as postural hypertension may be caused when certain medications are taken together. Underlying medical conditions may also be present, which may be alleviated with medication to reduce falls risk. The physiotherapist concentrates on the service user's movements, and whether they are unnatural as the result of an injury or long-term incorrect posture. Whereas the occupational therapist aims to introduce skills and assistive equipment to reduce the service user's risk of falling as they move around their home, whilst accepting their current mobility status. Finally the strength and balance exercise programme has been associated with several benefits, including the increase of strength, balance, correct posture and self-efficacy, and it also introduces a social element as the service users are able to express their health concerns with people in a similar situation. In isolation, the above interventions are unlikely to significantly reduce a service user's risk of falling; however, when implemented cumulatively there is strong evidence to suggest that falls among the elderly can be prevented. For example, NICE (2013:9) maintain that their falls prevention guidelines, which recommend both multifactorial assessments and interventions is *'based on the best available evidence'* at the time the guidelines were developed. It has therefore become common practice that a range of falls prevention specialists should collaboratively assess and treat service users who pose a high risk of falling.

It is important to note that service users may, at any point during their journey through the falls prevention service, be referred to other services. As this elderly and often chronically ill cohort presents a high risk of falling, it is not uncommon for service users to fall, become injured and even hospitalised while using the falls prevention service. They may also suddenly require more intensive care if their physical or mental health deteriorates and they have to be admitted to a nursing home. Sometimes, when this occurs, and appointments are missed, the falls prevention service team will enquire about their whereabouts, which can

often be extremely time-consuming. The main concern here is that the very nature of this cohort means their circumstances may suddenly change, which requires the service to be quite responsive. At present there is no procedure for re-referring service users back into the service if they have had to stop due to injury or illness. Instead they are asked to either self-refer or ask an appropriate healthcare professional to refer them once they are physically and mentally able.

The above pathway represents a fairly typical passage through the various assessments and interventions, i.e. the triage nurse, medical assessment, physiotherapy, occupational therapy and the strength and balance exercise class. However it is important to note that the falls prevention service is tailored to a large extent to the requirements of the service user. For example, if it has been ascertained during the initial visit from the triage nurse, that the service user does not require support with mobility, transfers, or any kind of assistive devices, then the occupational therapist will not be scheduled to visit them. Specific parts of the service may be omitted if the initial assessment from the nurse indicates they are not required. However, it may be possible, due to the habitually changing circumstances of the service users, that this part of the service may be required in weeks to come, and in this instance they will be referred accordingly.

As the individuals who enter the falls prevention service tend to also suffer with a number of pre-existing health conditions, the examination of healthcare engagement in this context includes service users with complex healthcare needs. This is because the falls prevention team must identify and respond to a wide range of health concerns, collaborating with other services where appropriate. Therefore although the falls prevention pathway is depicted as linear (as a means of illustrating different actors and services within the healthcare system), this representation is artificial, in that service users typically exemplify a wide range of non-linear treatment trajectories. This diversity is also exemplified from the perspective of service users, as they must perform new self-care behaviours for

the falls prevention service, whilst continuing to perform a number of self-care activities for their existing health conditions, as advised by other services. Additionally, the multidisciplinary approach adopted by the falls prevention team represents its own set of complexities, as service users are required to become familiar with each healthcare professional's objective and perform self-care behaviours accordingly.

Now that the organisation of the falls prevention service and the roles of its employees have been described, the following chapter provides a detailed account of the observed influences that affect healthcare service engagement. It also goes on to suggest that emerging findings from this enquiry depict these influences as inherently interconnected and intricate.

Chapter 5. Ageing, Chronic Illness, Self-Care, & Healthcare Service Engagement

5.1 Introduction

This chapter provides a comprehensive account of the interconnected conditions, which support and encumber healthcare service engagement in the context of a falls prevention service as emerged from field data. The conditions for healthcare service engagement appeared to be so intricate that it has been necessary to deconstruct them into more manageable components. For example, Chapter 4, 'Overview of the Service' described how the falls prevention service is organised, and detailed the various practices and procedures that healthcare professionals enact to assess, diagnose and treat elderly, chronically ill service users with the aim of preventing falls. Following this description of the falls prevention service, this chapter discusses a wide range of factors affecting healthcare service engagement, which were highlighted by the service users and healthcare professionals in this study.

This chapter is divided into two main parts. Part One details the nature of healthcare service engagement as expressed by both service users and the falls prevention team. Its aim is to illustrate a wide range of influences, which influence service users' engagement with the falls prevention service and associated self-care behaviours. This section includes information about the experience of ageing, chronic illness, falls and sudden health decline; health belief

and its relationship with behaviour change. It describes how service users' attitudes, values and perception of falls and falls prevention have important implications for their engagement, both with the service and with associated self-care behaviours.

Part Two is focused on the individual and collective organisational practices of the falls prevention team, and the ways in which they aim to support healthcare engagement. This section describes how members of the falls team tailor and communicate health information to service users in an active attempt to support healthcare engagement. It describes how they promote falls prevention as part of their everyday practice, while consciously managing their schedule so that high-risk service users are assessed, diagnosed and treated as quickly as possible. This section also describes some of the shortcomings of the service's organisational structure, which are addressed later in the thesis with specific design recommendations.

Although the data in this chapter has been presented in two distinct parts, it is important to acknowledge that data in each part could easily be presented in the other. For example, the sudden health decline of a service user represents an important feature of the elderly and chronically ill demographic, and helps to illustrate the nature of engagement within this particular age group. However, the ways in which the service responds to sudden changes in health just as quickly becomes an organisational issue and could therefore be represented in the second part of the chapter. The reason for creating this artificial separation was to show a number of influences that affect engagement from different perspectives, for example, as experienced organisationally by the falls prevention team and as experienced by the service users.

5.2 Part One: Service Users and Healthcare Engagement

This part of the chapter explores a wide range of topics relating to service users engagement with the falls prevention service. It begins with a description of falls prevention service users' physical state of health, which provides a contextual understanding of some of the effects of ageing. In demonstrating the effects of ageing and long-term health conditions the following section describes how service users in this demographic are prone to both physical and cognitive health decline, which has important implications for their engagement. Following this are sections that explore the ways in which health belief, attitudes towards falls and falls prevention, awareness of ones falls risk and feelings of marginalisation influence service users' ability and inclination to engage with the falls prevention service. Finally, this section describes the ways in which informal care and support create particular conditions for healthcare service engagement and the reliance service users have on it.

5.2.1 Understanding the Effects of Ageing

This section details the some of the effects of ageing, as described by the falls prevention team and its service users. It helps to contextualise some of the experiences of ageing, chronic illness and injuries that are sustained after falling and how this makes healthcare service engagement particularly difficult for this demographic.

Some of the chronic conditions and injuries the participants suffer from and have experienced in the past include but are not limited to; digestive problems; muscle loss; osteoporosis; shoulder dislocations; finger, leg, wrist and cheek fractures; dizziness and blackouts; epilepsy; and memory loss. It was found across the interviews that elderly service users with long-term health problems

often find self-management of their illnesses overwhelming, and view their continuous interactions with healthcare services as an 'on-going struggle' to maintain their health. Fortunately, the falls prevention team recognise that 'our patients are not getting to the bus stop', as they are physically unable and so home visits are commonplace. For some of the service users, simply getting up and ready each day can be a real struggle. Exemplifying their perception of the service users' daily struggle, members of the falls prevention team made the following comments:

> *'some people are obviously quite poorly, obviously they have to be at a certain level, but that level is really quite low, so everything is a struggle, plus they are unsteady, they know they are unsteady, they know they are at risk of falls' (Physio)*

> *'sometimes they just, they haven't got the energy, sometimes people's daily life is such a struggle that they just can't summon up the energy so no matter how you explain it' (OT)*

> *'I think sometimes their confidence has gone so much that they are so frightened of going out, that's the big issue, cuz they'll make excuses like oh our Fred won't be able to take me, I'm not gonna be able to get there' (Nurse)*

> *'the patients have not been going out, you know 12 months down the line they haven't walked over their front step unless they've been in an ambulance or with a relative for an appointment. So you've gotta gain that confidence which is a biggy, some patients just don't wanna do it, some patients don't wanna do any exercise at all' (Nurse).*

In addition to having long-term health conditions, being elderly is itself a clear barrier to healthcare service engagement. For example, the district nurse

points out: *'so our patients we generally see because they're more frail, they can't even get out of their house sometimes'*. As the falls prevention service is commissioned to treat those who are at high-risk of falling, the service users who are referred into the service tend to have multiple health conditions, which contribute towards their falls risk in complex ways. Fortunately, the healthcare practitioners in the falls prevention team recognise this, and empathise with the service users' daily struggle to maintain their health. For example, when talking about having the occupational therapist visit service users before the obligatory clinic appointment, the nurse suggested: *'it's too much for patients'*. Also, when explaining that most service users from care homes aren't well enough to come into the clinic, the clinical nurse pointed out that *'it's not fair on them'*. Losing confidence and not leaving ones' home for long periods of time not only makes the services users less likely to engage in the falls prevention service, but they are also less likely to engage in society more generally (Age UK 2014).

5.2.2 Quickly Changing Health Status

The following example shows how a service user's quickly changing physical and cognitive health status caused her to suddenly disconnect from the falls prevention service[26]. It also describes how the service users strong desire for independence acted as a potential mechanism to reengage her with the service. Two interviews were conducted with this participant, the first of which took place following her leg injury and the second was five months later when her cognitive health had suddenly declined.

A service user named Kate was referred to the falls prevention service from a community clinic as she had fallen on multiple occasions. Kate is 73 years old and has suffered with epilepsy since she was 13. Kate has always been fiercely

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[26] Although this example is also rooted in the organisational element of the falls prevention service[26], its cause derives from the nature of ageing, chronic illness and injury, which is why it is discussed in part one of this chapter.

independent. She was never married and has no children or living relatives with whom she has contact and so her social support is relatively low. Over the years and despite the barriers Kate has managed to live independently without any formal social support.

Kate has experienced different types of seizures such as violent fits, and also absent seizures where she is awake but not fully conscious to her surroundings. As a result of her falls, Kate has sustained a significant number of injuries one of which is detailed in this section. Kate has interacted with all components of the falls prevention service, including receiving the nursing and medical assessment; physiotherapy; occupational therapy; and attending the strength and balance exercise class. Therefore, her experiences provide a holistic account of some of the barriers elderly, chronically ill service users may encounter as they interact with this service. Kate attended the falls clinic for her clinical assessment; however, she had actually fallen on the same day as this assessment causing serious injury to her leg and a great deal of pain:

> *'I was going fall clinic and I was in so much pain and I said I can't stand it, I can't see anything wrong, I can't stand it, and she said let me get on the phone and she organised everything and I went for a scan, they have a mobile unit outside and I'd torn my cartilage so that was the pain you know what I mean, so everything was out on hold until this was sorted' (Kate)*

Having torn her cartilage, Kate was advised that she must rest her leg until it was fully healed. Kate was advised that she should contact a healthcare professional to re-refer her into the falls prevention service once her leg was healed. This fall had direct implications for Kate's engagement with the falls prevention service:

> *'they were gonna send me somewhere else for some follow up but she said, but at the moment with your knee being so like that*

I can't send you, come back when your knee is sorted, and I never went back so that's my own fault' (Kate)

'I'd forgotten all about that and I did, I really did' (Kate)

Shortly after Kate's leg injury, she started to experience a sudden decline in her cognitive health, causing increased complexity for her re-engagement with the service. As Kate ages and her physical and cognitive health pose increasing problems for her safety, she recognises the risk she takes by living on her own. However, Kate feels that there is no real alternative to taking this risk, as living in sheltered accommodation would make her incredibly unhappy:

'I shouldn't live alone but I refuse to go into sheltered accommodation yet, I'm not ready for it yet, it would kill me that, it would kill me, I'd give up, so as long as I can keep going lovey and I will go back to the fall clinic, I will ring 'em and get these exercises' (Kate)

We can see from the above statement that for Kate, maintaining her independence is a strong influence for her engagement with the service, as it may help to improve her mobility. For example, Kate talking about the negative experience of sheltered accommodation quickly led into '*I will go back to the fall clinic, I will ring 'em and get these exercises*'. Therefore, the consequence of Kate's immobility (having to live in sheltered accommodation) creates a strong incentive for her to participate actively in exercise, which she believes will improve her mobility so that she can remain living in her own home. In this sense, Kate's belief that she is 'susceptible' to falling and the 'severity' that a fall may have on her physically, and on her independence, influences her engagement in an impactful way, or at least on her intention to act (Hochbaum 1958).

During Kate's first interview, her memory was sharp and she was able to recall her service encounters with a high degree of certainty, healthcare

professionals' names and all of the appropriate names, which describe her physical and cognitive aliments. Approximately five months later during her second interview, Kate was visibly different in that she was significantly more reserved and struggled to recall both short- and long-term events. Kate also struggled to express herself with words, becoming increasingly frustrated because her memory problems prohibited her from articulating what she wanted to say, for example: *'I'm struggling for which words and I'm terrible and I've never been like this, I'm so frustrated'* (Kate). A testament to Kate's dramatically changing needs was that it was necessary for her friend, Irene, to be present during the interview, not only to help her to remember events and express herself but also to ensure that Kate was reminded that the interview would be taking place. These dramatically changing circumstances mean that in addition to posing a significant falls risk due to her epilepsy, previous falls and diminishing self-efficacy to move around, Kate's decline in cognitive health now creates new problems for her engagement and independence. Since falling multiple times and experiencing memory and communicational problems, Kate felt unable to leave her house on her own in case she suddenly forgot where she was going or why:

> *'It's confidence on my own, you know, going out and doing*
> *these things, I wanna do it you know but, I wanna keep as*
> *mobile as I can you know, I'm not gonna be as mobile as I was'*
> *(Kate)*

Kate recognises the importance of staying mobile despite her problems with self-confidence. She also appreciates that physical decline in her abilities is to be expected; however she wants to make the most of what she has. During the second interview, Kate expressed clear frustration at her deteriorating cognitive health. It also became apparent that her ability to remember how and when to engage is becoming less and less possible, for example: *"I still do my things when I remember; you know what she taught me at hospital for my shoulder, I still do*

that". In addition to feeling unable to leave the house, Kate also feels unable to engage in activities she was particularly good at previously, for example, her love for crosswords:

> *'I can't, its impossible, impossible and I could go through a*
> *book of crosswords in a day, a book and it was just d d d d*
> *and that were it' (Kate)*

Kate used to be very good at crosswords, completing books of them on a regular basis; however, she is now unable to concentrate and locate the correct words in her head. Kate also no longer feels that she is safe to cook food in her home for fear she will set something on fire. For example, while cooking food under the grill Kate has had a seizure, which caused her to sit and vacantly watch the burning food as it filled her home with smoke:

> *'I used to love baking...I don't think I could trust myself with it*
> *now, I don't know, I keep saying I'll make a start' (Kate)*

> *'We think she must have had an absenteeism because she sat on*
> *the chair looking at the bacon and it went on fire and then she*
> *panicked and since then she won't use it' (Irene)*

Losing the ability to engage in an increasing number of activities brings into question how this is all influencing Kate's sense of worth and identity. For example, not being able to leave the house and express herself in words is something that really influences the way she views herself:

> *'I'm so frustrated, and the more frustrated I get the worse I get,*
> *I'm a...I'm a word freak and I have to have the right word for*
> *the right... and I can't' (Kate)*

Kate's strong determination to regain her memory is clear; however she also recognises the many physical and cognitive limitations she currently faces. At present, the falls prevention service doesn't provide any kind of advocacy support

for service users who suffer with their memory. They will instead be referred to the memory clinic, which has its own pathway and support. Although it is really useful for the falls team to be able to refer service users to other specialised services, the problems Kate faces in terms of her memory remain unsupported by the falls prevention service itself. Poor physical health, low self-efficacy, low social interaction, poor mobility and declining cognitive health are what define elderly service users who suffer from chronic illness. The falls prevention service was commissioned to deal with high-risk fallers over the age of sixty-five and, as such, will invariably treat service users who are also chronically ill. Therefore, one might argue that there should be the expectation that service users' health status may suddenly change because of their 'high falls risk' status and various ailments. Although the falls prevention nurse instigated an efficient referral to other healthcare services, the current design of the falls prevention service did not account for Kate's re-entry back into the service once she had disconnected. This oversight represents opportunities for developing specific service design recommendations, which fully consider the variable nature of elderly, chronically ill service users.

UNDERSTANDING THE EFFECTS OF AGEING

- The physical and psychological consequences of ageing, chronic illness and falls have a significant influence on service users' ability to engage with the falls prevention service and to perform daily self-care behaviours.

- By their very nature, elderly and chronically ill service users are likely to experience rapidly changing health circumstances, which cause their healthcare needs to suddenly change, and their engagement to be suddenly redirected to other services. This raises the question: to what extent should healthcare services be designed around this anticipated fluctuation in service users' engagement?

5.2.3 Behaviour Change and the Role of Belief

One of the relationships this study has identified is the strong connection between healthcare service engagement and health belief. This section therefore describes the ways in which service users' beliefs influence their inclination to make safety changes in their home in a bid to prevent them from falling.

Others have documented the relationship between belief and behaviour change quite extensively, for example the 'Health Belief Model' (Hochbaum 1958) stipulates that if service users believe they are 'susceptible' to specific health conditions and that this condition may be 'serious' or life threatening, they will be more likely to engage with health promoting behaviours. A fundamental belief in the validity of healthcare information and advice thus seemed to represent a pivotal concern for many of the service users in this study, and a reason for them to accept or decline the need for a change in health behaviour. The below example demonstrates a typical scenario for the falls prevention team, in their attempt to persuade service users about the risk of falls in their homes. It demonstrates some of the regular objections they encounter, in terms of altering service users' behaviour and asking them to make changes in their homes to reduce this risk.

Assistive equipment, home modifications and general healthcare advice for behaviour change are invariably met with avoidance and an unwillingness to make practical changes in the home, as it is often believed that these changes are unnecessary. Service users regularly adopt the view that these changes are for other, more elderly or disabled individuals, who they feel present an 'actual' falls risk. This perception is concurrent with findings from previous studies exploring attitudes towards falls prevention advice. For example, Yardley et al. (2007:512) found that *'a very common way of qualifying approval of falls prevention advice was to agree that it was useful—but only for other people who were in need of it'*. Thus, although service users generally advocate falls prevention

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recommendations, they also tend to reject that this information is appropriate for them, and would be more useful for those who needed it.

To combat these objections, this study has found that a wide range of techniques are employed by healthcare practitioners to successfully engage services, persuading the service users that these changes hold the potential to significantly increase safety in their homes[27]. In this example, the occupational therapist explains how service users often appease her by agreeing to make changes to their behaviour and their home while she is present during the assessment. However, these changes tend to be short-term, as the service users don't genuinely believe that there is a definitive risk:

> *'they can agree just to shut you up and they might roll the rug up and stick it somewhere but if they're not, if they don't take on board what you are saying then they will just put it back when you are not looking… they have to want to do it really, they have to believe' (OT)*

Without the fundamental belief that objects in the home present a significant hazard the OT has found that service users frequently agree to changes during a visit and then disregard these changes thereafter, for example:

> *'like I've moved somebody's bed and he did agree at the time, but when I popped round unexpectedly he'd shoved the bed back into the middle of the room' (OT)*

> *'you can go round doing all sorts like rolling up rugs, but really they've got to do it themselves, so no I don't, there's got to be a point, they've got to know what they should be doing and they've got to decide to do it' (OT)*

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[27] These techniques will be described more extensively in the second part of this chapter.

Even when service users agree to changes that aim to reduce their falls risk in the home, this does not mean that they agree or engage with the advice presented to them by healthcare professionals. This is not surprising when one considers the number of years the service user has successfully navigated around their home without tripping over rugs and furniture, for example:

> *'yeah and obviously they have lived with your 'potential hazards' for years, and been fine, but equally I might hear that so and so's in hospital because they've tripped over their rug so I do have to point these things out to them even if it is common sense' (OT)*

Years of experience has therefore taught service users that their homes are in fact 'safe' and that the objects within them do not present any significant hazard. There is also an element of reluctance on the healthcare practitioner's part to point out what she perceives as a common sense hazard. However, and as the falls prevention team are only too aware, as people age, they will experience an incremental decline in their health and mobility. For example *"there was a lady in particular who broke her hip and she did trip over a rug, I mean that's tragic and it was avoidable"* (OT). Therefore, five years ago a service user may have been perfectly fine navigating steps or rugs in their home without a handrail; however, this may become an increasingly risky activity as they age. For example:

> *'don't forget these people are probably 70+ more likely to be 80+ you know, they're not idiots, they might have walked around or over a rug for 50 years and not fallen over so, it's a gradual thing' (OT)*

Helping service users to appreciate these gradual changes in ability can be difficult, as it relies upon them exposing a certain amount of vulnerability, confessing what they can no longer do without some kind of support. The above

examples help to illustrate the central role of belief in healthcare service engagement and the challenges faced by healthcare professionals when trying to negotiate self-care behaviours with service users. It also raises more general questions regarding how healthcare professionals may better understand and appropriately confront health beliefs so that they may more successfully facilitate healthcare engagement.

BEHAVIOUR CHANGE AND THE ROLE OF BELIEF

- Understanding the health beliefs of service users is crucial in order for the falls prevention team to support healthcare service engagement.

- Removing service users' autonomy does not support healthcare service engagement and does not lead to long-term behaviour change. There are opportunities for changes in design among the in-situ practices of the falls prevention team and the ways in which they may produce conditions for healthcare engagement.

5.2.4 Attitudes toward Healthcare and Falls Prevention

This section presents some of the attitudes that service users have towards both the falls prevention service and its aims. It describes findings about the healthcare knowledge, attitudes, values and the perceived needs and abilities of the service users in this study.

5.2.4.1 The Value Placed on Written Healthcare Information

Once service users have been referred into the falls prevention service, the initial letter from the nurse and falls clinic represent the first major contact point for them, and therefore is also an opportunity to inform and engage them. Regrettably, the service users often show significant underutilization of written

healthcare information that informs them how the service is organised, and what they should expect when engaging with it. For example, the clinical nurse pointed out: *'Well I just don't know how much that gets read or understood* [and] *we're all very involved with that but, but I get the impression some people don't even read the leaflets'*. Attempts to simplify and visualise the healthcare information provided are on-going, and lay service user groups are invariably called upon to discuss the layout and information that is offered in any new leaflets. However, it was also apparent in many of the interviews that service users had received the written information about the service and the advised self-care behaviours, but confessed that they hadn't really spent any time reading it. For example, Joan, who is 85, points out that *'yes I've got the blue book with all the exercises and lots of other leaflets from the falls service. I can't say that I've done much with them though, they're over there in that drawer'*.

This finding is in keeping with Yardley et al. (2006) who also found that service users tend to accept that falls prevention information is useful, however don't necessarily act upon the advice offered. For example, one of the participants from their study points out that *'you get a little booklet, and its very attractive and you ... read it all and you find it interesting and then you put it away and you forget it'* (Yardley et al. 2006:512). Accepting that healthcare information may be useful to service users represents a positive first step for falls prevention. However, if service users do not put these preventative measures into practice, one ought to question the way in which this information is being delivered. It is evident that service users simply aren't engaging with falls prevention literature, therefore one must consider other means of delivering this information, or perhaps a reframing of how the key messages are communicated. A large amount of work has already been done in terms of promoting an active lifestyle rather than focusing on physical loss in old age (Age UK 2013); however, if these well-drafted empowering messages aren't being read, what good are they in preventing falls?

5.2.4.2 Perceptions of How Falls Occur

This section details responses from the interviews with service users as well as those who participated in the street survey. It includes descriptions of the participants' falls and the reasons they felt had caused them to fall. It is useful to understand how service users interpret and describe incidents of falls as this is directly linked with their perceived needs for an intervention, and their perceived physical ability, which in turn has implications for healthcare service engagement.

During the street survey, once respondents had acknowledged they had suffered a fall, they were asked how they had fallen. The findings show that most of the respondents referred to external environmental factors, which they believed contributed towards their fall. For example, they described obstacles such as the pavement; a garden pot; stairs; flags; or that it was raining at the time. Similarly, the respondents also referred to parts of their body, which had failed them, thus causing a fall. It was almost as though these body parts were external and separate to their core, and more competent, ability. For example, respondents stated that a body part was weak at the time, or that their legs gave way and so caused them to fall. Conversely, one of the respondents described having a blackout, indicating a reduction or total loss of cognitive and physical control; however, this was only one person out of ninety-two and so a very small minority.

Further to the accounts from the street survey respondents, this study found that many of the service users who took part in semi-structured interviews also tended to describe their falls in a similar vein; that is, making reference to environmental and unexpected obstacles. For example, Kate, who suffers with epilepsy and memory loss described her falls as follows:

> *'yeah I have had quite a few falls, erm, and I've been sort of*
> *unsteady and injured myself while I've been unsteady' (Kate)*

'it was just one particular fall in my old flat, no it wasn't a fall, I just went really unsteady' (Kate)

'in the meantime I had a bit of a, not a fall but sort of a twisted thing and I've done my knee' (Kate)

The ways in which Kate describes her falls corresponds with falls literature, in that she tries to maintain a perception of control and competence, avoiding calling what happened a 'fall' (Yardley et al. 2006). The respondents mostly described their fall as mechanical, often tripping over an unexpected obstacle they did not anticipate. Describing falls in this way is not at all uncommon; in fact, some of the other service users also described external factors, which unexpectedly caused them to fall, for example:

'As I got out of the car, you know the roads in Spain aren't very well finished, they tend to leave cobs of tarmac…I don't think it was raining but the road was wet, and as I stepped out I caught my right foot, slipped on one of these cobs or tarmac or concrete and it was wet, as I slipped' (Penny)

'We had parking spaces and when you put your car in you put this little barrier up which was about 2 feet high and instead of them flopping inward when you took your car out towards the hedge they flopped it outwards onto the path' (Penny)

'We were coming out of bright sunshine into a dark car park… it's not dizziness, it's nothing to do with my brain, and as I said it's a trip say on an edging or something that I didn't see' (Penny)

'Simply not putting the foot right on the pavement crossing a road and I had shopping and I just saved myself… I caught the pavement and I was just basically a bit shook up, a bit

surprised, didn't black out at all, didn't even have any bruises'
(Hannah)

*'[Laughs]...I actually fell out of bed the other day...about 2
weeks ago and it was a daft thing, I was at the end of the bed
and fell out of bed' (Jen)*

Bright sunshine; unexpected obstacles; carrying shopping; slippery pavements; one-off mechanical oversights in stepping; and a silly, unexpected fall are some of the ways in which falls are framed so as to draw attention away from vulnerability and place it on external factors. In doing this, the service users are able to control the image they present to others, and in turn protect themselves from often unwanted exchanges with health and social care providers. The outlook of 'it's difficult but I'll manage' is a recurring response to illness and disability across the interviews, and shows a strong determination for the service users to maintain their independence. It is important for the falls prevention team to know if a service user has tripped; lost their balance; or blacked out when falling, as all of these scenarios have implications for their assessment, diagnosis and treatment of the conditions, which led to the fall. One might therefore argue that there is still much work to be done in terms of encouraging service users to be open about falling and not to fear that they will lose their independence should they report a fall.

5.2.4.3 Awareness of Falls Risk

Although falls are commonly described as mechanical, having a fear of falling is something many of the service users acknowledge and accept. This section therefore describes some of the service users' awareness of their risk of falling and how this influences their everyday lives; from the types of activities they participate in, to the places they feel they can visit safely.

Husband and wife, Jen and John, explain the various ways in which their fear of falling influences their lives, for example:

> *'I know because of the arthritis that I've got to be very careful stepping over those stones that are at the side of the flower beds, because sometimes my leg just does that and if I step on that leg it means I'm gonna fall and fall badly' (John)*

Reducing the risk of falling is something Jen and John consciously consider, for example by being close to something soft that they can fall onto, or by taking a specific route, which avoids obstacles such as curbs:

> *'Every now and again it just goes and so if your leg's sore and you try to step back and step forward at least there's a thing you can fall over, and that's what you've gotta be careful about, you've gotta think about it all the time when you're in the garden you know' (John)*

> *'Also I think when you get older you're more aware of it, you're more aware of falling so you do try to eliminate things and you do tend to think about things, you tend to think more about going over steps, how you eliminate steps in properties and in gardens, you have to try and think about things like that' (Jen)*

> *'There's stairs all over the place, you know, I think a lot of that happens, you watch where you walk if you're going down stairs you've got to look is there a hand rail there' (Jen)*

> *'I've always been very wary of curbs, you know if I see a high curb I try and miss it and that's in my mind all the time' (Jen)*

Being aware of falling is further reinforced by an appreciation of how quickly a fall can occur, for example, John talks about the lack of control he feels that he has over his own body: *'my feet just left me'.* Jen also points out that having faith

and confidence in your own body to move in certain ways makes a massive difference to how she feels when she leaves the house:

> *'I lost my confidence going down escalators, you see when you have a bad leg you programme yourself to work round it…and I didn't have the quickness because I thought my leg was going to give in on me, now I have got that confidence back and it's amazing what a difference being able to do that makes, just having faith in your body that you're gonna be able to do it, its amazing what it does' (Jen)*

Having legs that *'just go'* or *'give in'* isn't ideal when one considers the different levels of confidence Jen and John experience depending on their current levels of mobility. They both, therefore, have a strong belief that they may fall and act in accordance with this belief every day, by avoiding what they perceive as risky obstacles. This accurate awareness of their own vulnerability is arguably a strong influence for their inclination to engage with falls prevention services. For example, when asked if they would use the different services on offer they both agreed that they would consider being referred, if this would help them to be steadier and healthier.

5.2.4.4 Feeling Marginalised and Self-Caring Independently

This section describes the case of a service user mentioned and quoted above, named John, and his perception of the healthcare services he has interacted with. It describes John's sense of marginalisation and the perception that healthcare services and professionals have little regard for elderly service users.

John has a hereditary heart condition for which he has had a triple by-pass operation. He also suffers with: diabetes, taking nine different tablets for this condition; muscular pain; panic attacks; asthma; a heart condition; and arthritic pain. John has severe arthritis in his hips and knees and does not sleep more than

three hours each night as a consequence. For example, he points out that *'I never sleep more than three hours at the most...you can't get comfortable and all of a sudden you get this sharp pain, there's not a lot you can do about it.'* John sought medical advice from his GP for his pain and mobility issues; however, John was not assessed for his falls risk nor was he offered advice or referred to any other services relating to this risk. Instead, John was prescribed painkillers to address his pain:

> *'I think that the fact that they were giving me these painkillers I got the impression that they weren't gonna be doing anything more for me, and I've had a 3-way heart bypass done and I really didn't want to be facing any knee replacements, I've had enough knife work done'* (John)

Another instance, where John felt disappointed and that his health wasn't a priority for healthcare services, was when he was 'struck off' from his podiatrist. John was removed from his local podiatrist's service user list, as they believed that John no longer required the service; however John claimed that he never requested to be discharged from their service, therefore there had been a misunderstanding. This was in addition to feeling that this particular service did not spend enough time with him:

> *'They don't spend much time with you, because I used to go to the foot place, and he struck me off'* (John)

When asked if John feels he should have had some kind of preventative treatment for his pain he stated:

> *'I think that they should have had an X-ray to find out what was happening... anyway it's got a lot worse since then and I've never pushed it and I just got the impression that they've spent all they were gonna spend on me'* (John)

John was disappointed with the absence of investigatory treatment, which could have been undertaken to ascertain the origin of his pain. John also feels that the NHS has no interest in him, or in spending money on his healthcare. When asked why John feels this way he responded by stating:

'Well, I don't like complaining to start off with, I'm not that sort of person, I get on with it and do what I can and take what comes without any hassle, there are people who get loads and loads of things done and they only get it done because they mither all the time and I'm not one of those sorts of persons, so I would suspect that's why I've not had any x-rays done, to go in and just put your foot down and say I'd like some x-rays done to see what's going on here cuz I know both knees are buggered you know, and my hips from time to time go too, and this left leg gets so bad sometimes that I can't lift it into the car you know' (John)

John's perception of healthcare provision is that those who complain or request it will receive the care that they require, and those who say nothing do not receive appropriate care. John believes that if he were to ask for the x-ray, that he would probably get it.   John is disinclined to pursue the NHS for care or treatment, despite having a range of pressing health concerns, which require attention. John's wife, who suffers from arthritis and problems with her joints, shares this negative perception of the NHS, seemingly reinforcing John's outlook. For example, when discussing the treatment she received for her knee, she described the healthcare professionals' approach:

'she said go and have this physio and all they did, I think it was about 6 weeks and I end up with a sheet [of paper] with loads of exercises on, well that was it… no I've never been forwarded to any other services' (Jen).

Although John's opinion of the NHS is quite low, this is not to say he is averse to enacting self-care behaviours he has learnt from previous interactions with healthcare professionals. John has paid for private physiotherapy for a number of years in an attempt to alleviate the pain and stiffness caused by his arthritis. Therefore, his private physiotherapist has provided some of the care and advice that he would otherwise receive from the NHS. For example, the physiotherapist asked John how he fell to ascertain whether he has blacked out, suffered dizziness or tripped over something. Therefore, the assessments conducted by his private physiotherapist are concurrent with the assessments that the falls prevention team would have performed. The private physiotherapist has supported John in regaining aspects of his mobility and has also helped to improve his self-efficacy for walking:

> *'When I went to see Val (the physiotherapist), it's upstairs and I couldn't walk upstairs one at a time, now I can, I can't get down straight, I can get down sideways...I can do that better now'*
> *(John)*

However, one of the disadvantages of employing a private physiotherapist is that she cannot refer John directly to other services should she discover anything alarming; however, she can write to his GP who would then process a referral. Although the private physiotherapist possesses the same professional qualifications as NHS physiotherapists, there often exists a sense of doubt regarding her competencies among other NHS professionals. Consequently, when she writes to GPs on behalf of service users, she feels she must justify this referral more than she did when she worked within the NHS. This apparent view towards private healthcare professionals therefore has the potential to delay, or disallow altogether, access to other healthcare services, which may cause problems for healthcare service engagement.

Although John has had disappointing experiences with the NHS, he would not dismiss proposed healthcare provision if it were offered to him. For example when asked if he would use falls prevention services should they be offered to him, John said *'I probably would yeah'*. However, as he is very unlikely to report his medical conditions, they remain overlooked by a whole range of services, which could improve his health and wellbeing in a number of ways.

In addition to having regular contact with his physiotherapist, John also engages with a number of self-care behaviours, for example by attempting to regulate his diet in accordance with his medications. As John takes a range of medications, he is very aware of the symptoms they cause when they interact with each other, which is known as polypharmacy. For example, John often experiences tiredness, dizziness, and nausea. When collecting his medication from the pharmacy, John enquired about some of his medication and received what he believes to be really useful advice about how he should take them:

> *'[The pharmacist] started on about that because if you're having that tablet you don't mix it with milk and the first thing I was doing was having a coffee with milk and I read that you can't have it…you know it's just little things like that, he's talking to you about which is really very good' (John)*

John welcomes healthcare advice, and since learning about not taking milk with one of his tablets, he now waits an hour before having his morning coffee. Another example of John's engagement with self-care behaviour is that he is aware that certain tablets make him very lethargic, and so he avoids taking them because of how they make him feel. For example:

> *'…and the thyroid thing, which I wasn't going to take because of serious tiredness in the afternoon, I mean I haven't been so bad recently but having said that when I wake up so often I'll go into the kitchen and take that tablet, and then I won't have my*

breakfast until about 10am so I've got it on an empty stomach
and I'm taking it the way I ought to but I mean the tiredness in
the afternoon' (John)

Although John knows the medical benefits of taking his thyroid medication, the severe tiredness he experiences outweighs those benefits. He therefore makes an active decision not to take the medication and in doing so demonstrates that he is actively self-caring, based on his own personal interests. John's case demonstrates that some service users are able to self-care independently as they have built up a repertoire of skills and knowledge to effectively self-care. It therefore seems apparent that it is possible to engage with self-care behaviours without necessarily engaging with a particular healthcare service. It is, therefore, important to fully understand the conditions, which empower self-care behaviours when interactions with a particular service are absent. This is particularly important among elderly, chronically ill service users, as their self-care needs invariably extend beyond the lifespan of specific healthcare interventions.

ATTITUDES TOWARDS HEALTHCARE AND FALLS PREVENTION

- The lack of engagement with written healthcare information brings into question its usefulness in terms of supporting service users' inclination to perform self-care behaviours.

- There are widespread misconceptions about who the service is aimed at and what the service entails. This is particularly prevalent around the strength and balance part of the service, in that service users either feel it is for very disabled and much older service users or that it will be too energetic for them.

- There are misconceptions among service users about the nature of falls, what causes them, and the extent to which they may be prevented.

- When service users have an accurate awareness of their health conditions and

associated falls risk, they are more likely to take practical steps to reduce this risk. Therefore, being engaged with one's personal risk represents a significant first step in engaging with healthcare services and their associated self-care activities.

- An ideal scenario for engaged service users is arguably when they are disengaged with healthcare services and yet continue to enact self-care and health promoting behaviours. This occurs because the service users are engaged with the aims of the service without requiring further intervention. Believing that their health-promoting behaviours will make a difference to their health, and having a realistic understanding of the risks posed by their conditions represent significant influences for positive disengagement to take place.

5.2.5 Informal Care and Support

This study found that service users with complex and chronic care needs often rely significantly on their friends and family for support. This support is often exemplified by physical assistance and emotional support, as friends and family help service users to deal with their complex long-term health conditions. For example, a previously mentioned service user named Kate relies a great deal upon her close friend Isabelle for emotional support. This is because Kate suffers quite badly with her memory and so needs Isabelle to remind her about appointments, and the various self-care behaviours she needs to perform. In addition to her concerns about being alone and forgetting what she is doing, Kate has a fear of falling or suffering from an epileptic seizure when she is alone. Kate expresses that she would really like to attend exercise classes and swimming sessions, which would support both her confidence and physical and cognitive health, however she does not feel confident enough to attend these alone:

'See I'd be interested in that [a swimming class] Isabelle but I'd need you with me because my confidence is going… I wanna do it but my confidence, I couldn't do it on my own but having someone who knows me inside out' (Kate)

'When you fell, you did lose your confidence and when you lose your confidence it's hard to get it back up again, but you're doing alright now cuz like I said I pick you up and we go out' (Isabelle)

Regaining this lost confidence seems to be understood in terms of a long and delicate process, which requires both time and social support. Kate doesn't expect to suddenly wake up confident one day; instead she understands that support, particularly from her friend Isabelle, is crucial to slowly regain the self-efficacy and ability to participate in activities, which used to be commonplace for her. Having someone who knows Kate *'inside and out'* is important for her as her friend is aware of her medical history, what she likes to do, what she struggles with and how she can support her. Isabelle also has a personal account of Kate's health problems, when and under which circumstances they occurred, and the ways she believes she can help. As Kate has a close relationship with Isabelle, she does not appear to feel self-conscious about discussing her declining health in her presence. For example, during the second interview, Kate happily allowed Isabelle to retell events, which Kate was unable to recall. She was also very open about the things she feels no longer able to do, for example leaving the house on her own. Not feeling judged for her changing abilities seems quite important to Kate, and enables her to express her deepest concerns, for example, she feels worried and guilty about her increasing reliance upon her friend Isabelle:

'I'm very independent love, but she is good, I must admit that, I'd be lost without her but I don't wanna feel a burden on her, I don't wanna become Isabelle's burden' (Kate)

'You'll never be that cuz we help one another' (Isabelle)

Luckily, Isabelle is more than happy to support Kate as she has few friends and family and really enjoys spending time with her. In a similar example, another service user named Penny describes how she looks after one of her neighbours, taking her shopping each week, in addition to taking two other women to choir classes twice a week:

> *'And I pick 2 old ladies up at 1pm and I'm all in my scruffs, so I fly up the stairs have a quick wash, change my clothes, put my face on…' (Penny)*

Penny is 83 years old and regularly looks after people who are ten years younger. If Penny did not take her neighbour shopping and her friends to choir practice, they simply would not be able to go. Penny therefore provides essential social support in facilitating an active and social lifestyle for both herself and others.

Although Penny describes others as being elderly or old, despite her being older, it was clear from the interview that this is not a category within which she feels she belongs, as she still leads a very active and sociable lifestyle. When asked if she would attend the falls prevention service, she was not opposed to the idea. However, it was evident that she did not categorise herself in the same group as those with poor mobility and less active lifestyles.

The above cases exemplify the important role of social support and how this can affect engagement with self-care behaviours, access to social activities and one's overall quality of life. Considering our ageing population, the prevalence of chronic illness and disability is expected to rise[28]; therefore, the necessity for different types of social support will rise correspondingly.

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[28] Numbers of the population aged 65 and over are expected to increase by 65% to 16.4 million by 2033 (Age UK: Agenda for Later Life 2013:13).

INFORMAL CARE AND SUPPORT

- The role of friends, family and others and their provision of informal health and social care play a crucial role in service users' engagement with healthcare services.

- This brings into question how the falls prevention service may utilize the role played by informal carers and the extent to which they could be informed, skilled and involved in more systematic ways.

5.2.6 Conclusion

Part one of this chapter described some of the age-related health concerns; predisposed attitudes and requirements for care and support that influence elderly, chronically ill service users' engagement. It also highlighted that the role service users' beliefs serve towards their healthcare needs and their self-efficacy to perform self-care behaviours, often underpinning many of their engagement behaviours. Although presented in specific themes, it is important to highlight at this point that all of the above factors that affect healthcare service engagement are related to each other in complex ways. For example, section 5.2.4.4 described how John's health significantly influences his ability to self-care, and that his wife's negative perceptions of the NHS reinforce his own. This section also highlighted the ways in which previous service encounters, despite a lapse in time, also shaped John's attitude towards the NHS more generally. Therefore, when attempting to understand how healthcare service engagement may be better supported, it is important to consider how all of the influences raised by service users relate to each other, and that they exist before and after the life of healthcare interventions.

5.3 Part Two: Professional Practice and Healthcare Delivery

This part of the chapter describes some of the ways in which healthcare professionals respond to the declining health of service users as detailed above, while also considering their need for independence, autonomy and control while also needing social support. It describes a range of practices employed by the healthcare professionals as part of their healthcare delivery role.

The first section describes how the falls prevention team tailor healthcare information to respond individually to service users' objections about assistive equipment. The following section describes how taking time, building trust and responding sensitively to service users' reluctance to share health information is an essential part of the assessment process. Following this is a description of healthcare professionals effectively communicating health information, in a way that is both impactful and memorable for service users. The following section describes how the falls prevention team respond to cognitive health decline, demonstrating their understanding of service users' varied needs and use of empathy. The last two sections point to the organisational components of the falls prevention service and demonstrate the healthcare professionals' ad hoc response to service users who pose a high falls risk, and also some of the problems caused by the multidisciplinary and multi-stage nature of the service.

5.3.1 Tailoring Health Information for each Service User

This section illustrates the awareness the occupational therapist from the falls prevention team has of service users' reluctance to engage with new assistive equipment. For example, to persuade service users to consider using assistive equipment, the occupational therapist has developed a range of situated

techniques, which assist her in everyday practice. These techniques include the manner in which she reveals information about equipment, for example:

'From an OT point of view, your equipment is a real tool to what you can offer, so it helps if you've got your own positive view of it, it helps if you understand that people might not want something, but you can sell it in a positive way, and generally I talk about what it is and kind of prepare them, and then...you leave it in the hallway for a period of time, there's a real, a whole load of stuff around equipment, but it's functional and it really makes a difference, if you put a raise seat on somebody's toilet, they're like oh wow, now some people say that they've tried a raised seat and before and didn't like it and that's fine, but you can try it again, or at least you know what it is, or maybe you could have a rail or a frame' (OT)

Presenting equipment in a positive light with an appreciation for why service users may not want it helps the occupational therapist overcome their rejection of it. From experience, the occupational therapist has become accustomed to a range of objections as to why equipment may not be wanted by service users. Consequently, the way in which she introduces new equipment tends to address these objections before they arise, thus increasing the likelihood that service users will accept the equipment, if only on a trial basis. It is not uncommon for the occupational therapist to leave equipment in the hall while she 'prepares' the service user, explaining what it looks like, how it works, and how it will help them. A trial basis is always offered to service users who are reluctant to accept new equipment, as they are sometimes concerned about being 'stuck with it' if they decide it's not what they want.

Perceptions of equipment can often present a significant barrier to its adoption as service users may have seen something similar, which they do not

want, or equipment may look quite different once it's in their homes. For example, the occupational therapist explains how a bed lever *'has a big piece that goes under the mattress which is my point because it just gives you a little handle by your pillow so like when you are trying to get out of bed, you've got this really useful little neat handle'.* Knowing that the service user is likely to reject this huge piece of equipment, the occupational therapist employs specific language to try to depict what the bed lever will look like once in place, which is a *'really useful little neat handle'.*

Interactions between healthcare professionals and services users are relatively short when one considers the array of information service users need to understand and engage with. As a result, *'pitching it right'* plays an essential role when trying to persuade and motivate service users to make changes in their home or adhere to healthcare recommendations. For example:

> *'It's about pitching it right for every person, you can't just be the same person all the time, in fact you've probably got to be different people each time so you've got to be able to do that, you've got to suss it out pretty quickly, cuz if you get off to a bad start, it's not gonna get better, it's harder, so you need to pitch it right...quite often they've got their own tale to tell, so you need to hear that first before you can start chipping in' (OT)*

Each service user receives a slightly different presentation once the healthcare professional has ascertained exactly how to *'pitch'* the healthcare information for optimal impact. There exists a small window of opportunity, within which occupational therapists must introduce themselves, their purpose, information about falls and dangers in the home, followed by potential changes that may reduce these dangers. However, it is also essential to enable service users to express themselves, explaining the situation from their perspective, and, possibly, how and why they believe they've fallen and the type of support they

feel they require. Cramming this huge exchange of information into such a short appointment requires a significant amount of skill on the healthcare practitioner's part. Consequently, there is a great deal of multitasking, which takes place so that the full assessment is completed, whilst also empowering and listening to the service users' experiences, for example:

> *'So obviously in my mind I'm filling this in in my head, so I need*
> *to get the information I need out of it but equally you need to*
> *listen to the tale' (OT)*

Another consideration in addition to pitching healthcare information in the 'right way' is that the occupational therapy assessment takes place in the service user's home, offering a very personal dynamic. Not only is the service user subject to assessment, but their home is also open to scrutiny, for example:

> *'We are assessing somebody's home, so you have to pitch it in a*
> *way that you are getting them on your side, at the end of the day*
> *it's their home and it's a very different dynamic to seeing*
> *someone at clinic, or in a hospital or anywhere' (OT)*

An occupational hazard when assessing a service user's home is to be mindful of the personal and meaningful relationships they may have with objects and furniture, and the ways in which they are organised. The language employed and ways in which potential changes are proposed hold a great deal of weight, when one considers how accustomed the service user is likely to be with the organisation of their home.

Getting off to a bad start is avoided at all costs, as the occupational therapist has a huge list of tasks, which require the service user's full cooperation and engagement. Keeping the assessment light-hearted and friendly enables the practitioner to deliver important information while keeping the service user supportive of their objectives. Despite the short time in which the occupational

therapist must fulfil her objectives, she is still mindful that coming on too strong is likely to have adverse effects, potentially disengaging the service user from her recommendations, for example, *'too much pressure puts people off anyway, so...it's about experience and how you pitch it'*.

The manner in which practitioners deliver healthcare information is not only crucial in engaging service users with services at this time, but also supports them in accessing care in the future. The occupational therapist will invariably find that new equipment or home modifications are not immediately necessary; however, there is a strong likelihood that they will be required at a later date, therefore: *'a bad experience can put them off getting all kinds of access to care in the future'* (OT). Providing appropriate information and engaging patients with the services available is therefore imperative for their future health needs, as it gives them the knowledge required to access all different types of services, for example:

> *'If they don't need something here and now at least they are aware of our service and the other services that might be available in the future, and I think that's really important, sometimes people are struggling, you know they got stuck on their toilet or they can't get out of their chair, real basic things that we could sort out so easily but they don't know what to do'*
> *(OT)*

Conversely, while making safety changes in service users' homes is a priority for healthcare professionals, it is clear that this is not a priority for some service users. For example, when describing a service user's home, the district nurse stated that: *'his family have redesigned the whole of the house so it's lovely and safe and they've got him a walk-in shower, a little step'*. 'Lovely and safe' is a clear priority for the falls prevention team. However, making service users' homes 'safe' can sometimes clash with their desire for independence and personal preferences; thus the need for compromise is not uncommon.

TAILORING HEALTH INFORMATION FOR EACH SERVICE USER

- Healthcare professionals on the falls prevention team employ a range of situated practices, which recognise the barriers to healthcare engagement and deliver bespoke healthcare information in engaging ways.

- With limited time, the falls prevention team use every interaction with service users to persuade them with sensitivity to engage with specific self-care behaviours, while also making them aware of services they may require at a later date.

5.3.2 Building Trust with Service Users

During the various assessments undertaken by the falls prevention team, questions exist, which can cause the assessor to ask additional questions located on the back of the assessment form. For example, if a service user smokes or drinks to excess, or show signs of cognitive deterioration, they are subject to additional assessment depending on their responses. Information given by service users does not only trigger more detailed questioning, it also enables the nurse to think about potential referrals to other services, whether the service user would be amenable to being referred, and the various actions she will take to facilitate such referrals. During this process, the nurse delivers a range of information in a way that she feels *'gets them on board'* (Nurse) and supports their engagement.

During her assessment, it is crucial for the nurse to establish rapport and gain the confidence of service users. Without this, it is very difficult for her to obtain the personal healthcare information, which she requires to complete her assessment. Quite often, the nurse is required to *'tiptoe'* around particular

lifestyles in an attempt to elicit sensitive information from service users, for example:

> *'One of the questions is how much alcohol do you drink, and I knew she drank because the OT had already put it in, but I don't wanna say I believe you drink, [the service user would say] where have you got that information from? So I then say, do you drink any alcohol, yeah I drink a cider a day, and I know she didn't because the OT has said she drank more, so I'm then trying to get round, so I'm saying do you know how many units that is a week, I didn't know, I actually have 3 not 1, so it comes out eventually. I had one lady who drank a bottle of brandy a day but told me she has one, only because I'd not gone to her and said I know you drink because this persons told me, I go round the houses, ask her other questions, ask her when these falls occur, ask her why she's falling out of bed, why was you slipping out of bed? Because I'd gone to bed and had a drink, me and my husband had fallen out, well how many drinks did you have that night, does this occur a lot, yeah it does, so it takes a lot of time, it's the confidence, I need to gain that confidence and it's very difficult when you've got such a short time to see the person and sometimes it takes longer' (Nurse)*

The nurse understands that making the service user aware of any information she possesses about them is of no benefit to the assessment, and could quite negatively influence the service users' engagement. For example, if the service users feel that sensitive information has been divulged and discussed among healthcare professionals, they are less likely to offer sensitive information in future assessments. It is therefore important that the service user feels totally in control of the information they choose to offer about themselves, even if this

means that the assessment takes more time. A similar situation occurred when the physiotherapist was assessing a service user who had fallen twice; however, after carefully questioning the lady, it turned out that she was falling quite regularly:

> *'the letter said that they've had 2 falls or whatever, it will say oh they fell in Sainsburys and they fell in the garden, but when you are actually in their home they're like ooo well I fell in the bathroom and got stuck behind the toilet, and you're like well that wasn't in the letter, or they fell in the garden 6 times while hanging the washing out but they don't do that anymore...it's not that they're lying and it's not that they're downplaying it, but they don't always want to think about it, and some people have lost a lot of confidence, so you've got to get that'* *(Physiotherapist)*

The physiotherapist understands why service users may not want to reveal information about themselves; however, to assess why the service user is falling, she needs to know about all of the falls and under what circumstances they occurred. Often, as the service user becomes more relaxed, they tend to openly reveal information because of the assessor's friendly and understanding personality. For example, the clinical nurse takes a very informal and friendly approach when reviewing the service users' medication. She finds that her informal bedside manner helps to facilitate a relaxed environment, within which service users feel able to be more honest about their self-care activities:

> *'The other thing I find in clinic, the erm, they are open to telling me that they are not taking medication, and most patients that you see in some studies show that they've not told the doctor for months that they've stopped taking medication'* *(Clinical Nurse)*

Therefore, by interacting with service users in a very approachable and informal way, the nurse finds that they share information with her, which they

wouldn't necessarily share with their GP. Forbat et al. (2009) suggest that healthcare engagement can be understood as a *'working partnership'* between healthcare professionals and service users. Engaging service users as equal partners in their healthcare therefore requires a significant amount of time, patience and skill on the part of the healthcare professional. A working partnership of agreeing future health goals can only be effective if the information obtained during the initial health assessments is accurate. For example, when information is withheld, the service user cannot be referred to appropriate services and therefore will not receive appropriate healthcare. Encouraging service users to be honest about their lifestyle therefore represents an important aspect of the engagement process, and also sets a precedent of trust for future interactions with healthcare professionals.

BUILDING TRUST WITH SERVICE USERS

- Eliciting sensitive information from service users has the potential to cause significant disengagement with the service if it is not executed carefully.

- Obtaining accurate health information from service users helps to ensure that they are accurately diagnosed by the falls team and supports referrals to other appropriate healthcare services.

5.3.3 Communicating Health Information

As we have seen, the way in which healthcare information is elicited and delivered is a central concern for healthcare service engagement. Building trust, rapport and a working partnership with service users helps to create a sound foundation, making healthcare engagement more likely. This section presents

information about how healthcare information is communicated by the falls prevention team, and its direct implications for healthcare engagement.

Len is a 75-year-old service user who has fallen on multiple occasions. He is cared for by his wife Sally who supports him in many ways; taking him to appointments; cooking and helping him dress; and helping Len process and understand healthcare information. Len's memory has declined significantly and so he relies on his wife to recall what has happened at appointments, and to prompt him about all of the self-care behaviours he needs to perform. Both Len and Sally experienced an encounter with the falls teams district nurse, which they felt had greatly improved their understanding of Len's condition, for example:

> *'We learned more off her about what's not right with me in about 2 hours than off anybody' (Len)*

> *'Yeah, really really helpful, we felt as if a breath of fresh air had come in really and we weren't sort of messing about in the dark really' (Sally)*

The way in which the district nurse provided information to Len and his wife seemed to have huge implications for how they understood and felt about his various health concerns. Sally freely described the interaction as a *'breath of fresh air',* in that they both felt uplifted and greatly informed by the information the nurse presented to them. More specifically, it was the way in which the nurse described what was happening to Len's body physiologically that enabled this understanding. For example, Sally explained how Len had fallen down the stairs and landed on top of her, and that she had been trapped next to the radiator. Len's fall occurred when he froze at the top of the stairs and was completely paralyzed. Neither Len nor his wife knew what was happening to cause this paralysis and so didn't know how to avoid it in the future:

'We were telling her [the nurse] about it and she understood straightaway what had more or less gone on with you didn't she, obviously you can't move and just count to 30 and by the time you've counted to 30 that feeling will pass, it's like, she described it as all the electrical currents in Len's brain and some of them are cut off and when that electrical current is going across those particular blood vessels it stops, and that's when he freezes, so she said don't panic, stay where you are which we haven't had to do, and we don't wanna have to do it, but at least she understood' (Sally)

The nurses' immediate understanding of what had occurred during this very serious fall was a huge relief for Len and his wife, as they no longer felt that their experiences were unusual. The nurse used a very accessible example when explaining the electrical malfunction, which was taking place in Len's brain. She also provided him with the right self-care techniques, teaching him exactly how to cope should it happen again. This provided Len and his wife with a huge sense of relief and control as they are now armed with the knowledge and techniques to self-care for Len's episodes. Making health information accessible to service users is therefore crucial in terms of engaging and empowering them to act upon techniques and practices they fully understand.

A similar example of good communication of a medical condition is demonstrated below. A medical phenomenon that causes many elderly service users to fall in their homes is called a postural drop. A postural drop occurs when a service user transitions from one position to another, for example, from sitting to standing which causes a temporary loss of consciousness due to very low blood pressure. As the person's blood pressure is very low, oxygen and glucose are not being distributed rapidly enough to account for their sudden movement, and,

consequently, they lose consciousness. Postural drops are very common among the elderly, due to underlying health conditions, which cause low blood pressure.

The example below demonstrates a service user's understanding of what is happening when a postural drop occurs. Kate explains how she did not know what a postural drop was until it was explained to her by the nurse from the falls prevention service. Therefore, her newfound comprehension of her own physiology is arguably a testament to the nurse's ability, to explain health information in an accessible and explicable manner:

> *'She did me blood pressure and that and I didn't know, what they called postural drop. When you sort of, when I was lay and she asked me to stand up slowly and then just stand for a minute or two, and then she did it again, and it dropped dramatically, she said there's an awful, postural hypertension or something, it weren't brilliant lay down but when I stood up, just stand steady for a minute and she did it and she said it's just boom! Plummeting and that's why sometimes I'm slightly unsteady'* (Kate)

As part of her assessment, the nurse takes the service user's blood pressure when they are resting and once again when they change their position from sitting to standing. During this part of her assessment, the nurse explained exactly what she is doing and why she is doing it. It is clear from this example that the service user has understood the concept of a postural drop and, as a result, she describes how she will now wait a minute or two before moving once she has risen to her feet. Knowing how to alleviate feelings of dizziness when Kate changes position is not only crucial in preventing an avoidable fall but is also important for her general health and wellbeing.

COMMUNICATING HEALTH INFORMATION

- The way in which healthcare information is communicated holds important implications for successful engagement with, and completion of, self-care behaviours. The successful completion of self-care behaviours helps to reduce service users' falls risk and often improves their quality of life.

5.3.4 The Falls Prevention Teams' Experience of Cognitive Health Decline

The falls prevention team are accustomed to seeing a gradual and sometimes sudden decline in elderly service users' cognitive health. As such, the nursing assessment asks questions that specifically assess mental health, and the results of which determine whether the service user should be referred to mental health services. Whilst discussing cognitive health deterioration the nurse points out that:

> *'There's lots and lots of who've got dementia, Alzheimer patients, its massive, it's a big big issue, so I try and get as big a picture as I can when I do my assessments, that's the problem and then I try and do as much as I can externally and involve other services if I need to' (Nurse)*

> *'The most important thing is that their general condition has deteriorated, dementia has got worse, their frailty has got worse, you know things against it' (Nurse)*

> *'The GP might not see these patients for years and years, the patients might not have gone and seen them, and its just progressively got worse and worse, cuz the environments the same, they're safe, because they've got no family, nobody's seen it, but I've seen it when I go in' (Nurse)*

Cognitive health deterioration can progress unnoticed for months or even years, which is why it is so important for healthcare professionals to conduct a full holistic assessment of each service user. A progressive lack of engagement with healthcare services is often a result of natural cognitive and physical decline in health rather than a specific failing of healthcare services. Although, had there been some kind of follow-up or intervention in the above cases one might argue that both the service users' physical and cognitive health may have deteriorated at a slower rate. For example, the King's Fund (2012:1) found that *'care for large numbers of people with long-term conditions could be improved by better integrating mental health support with primary care and chronic disease management programmes, with closer working between mental health specialists and other professionals'*. To elicit valuable information about service users' cognitive health status, the nurse states that:

> *'I'll ask them what the date is today, what month and season are we in, which Royal is on the throne, erm can you remember the date of the second world war, things like that, can you count back from 20, and if I feel that there is an issue I will document that anyway' (Nurse)*

Living in isolation and often engaging the same routine daily can result in quite normal memory problems, as there is nothing that separates one day from the next; for example:

> *'it's easy done and it's not just because I can't remember where I put such and such a thing and I then say if I was sat in the 4 walls that you're sat in every day doing the same thing that you're doing and all you've got to do' (Nurse)*

Having a comprehensive understanding of the daily lives of elderly service users with chronic conditions enables the nurse and other members of the falls prevention team to conduct their assessments and engage service users

accordingly. For example, by knowing service users' limitations and understanding the difference between cognitive health problems and the effects of living in isolation. Because of this understanding, they would never try to get service users to set unachievable goals or ask them to attend impractical appointments. Instead, they sensitively assess service users and support them in their engagement in practical and empathetic ways.

THE FALLS TEAMS EXPERIENCE OF COGNITIVE HEALTH DECLINE

- The falls prevention team have a very good understanding of barriers to healthcare engagement faced by service users. They employ this understanding together with a deep sense of empathy to motivate and empower service users to self-care.

- Deteriorating mental health causes a wide range of problems for healthcare service engagement. This brings into question how the falls prevention service may anticipate and strategize for a sudden decline in service users' mental health and the ways in which engagement may be continually supported.

5.3.5 Nurse Triage Prioritising High Risk Service Users

As shown in the above example, the falls prevention team are seemingly passionate about their work, and contribute towards engaging service users with falls prevention in a wide range of ways. The example below shows how the triage nurse will actively try to slot service users into cancelled appointments in an attempt for them to be seen sooner by the medical nurse. This informal and situated process thus helps to reduce their falls risk and supports their engagement with the service, by speeding up the waiting time. For example, as the nurse is filling out her assessment, as well as considering the question at hand, she also

thinks of possible referrals to different services, which dictates how she conducts the assessment:

> *'From the assessment that I'm getting, I'm thinking about all different things not just what they are saying but I'm thinking about the consequences of what they are saying as well' (Nurse)*

For example, a service user may indicate that they are a high falls risk, which may prompt the nurse to search for an earlier clinic appointment. For example, *'because I can discharge at my assessment, that's a slot, so if I've got somebody that I've got concerns about, rather than them waiting 2 weeks I know that I've got slots, I know Amy will have slots in clinics'* (Nurse). In addition to thinking about the service users' physical ailments, the nurse also considers their treatment from an organisational perspective i.e., utilizing appointments other service users no longer require. The falls prevention service does not have an urgent pathway; however the informal freedom the nurse uses to fit service users into appointments is a quicker and more effective way in which they can be assessed, while also utilizing cancelled appointments. Therefore, the organisational flexibility the nurse has is beneficial for both the service users' engagement, and the effectiveness and efficiency of the service.

NURSE TRIAGE: PRIORITISING HIGH-RISK SERVICE USERS

- Organisational freedom within the falls prevention service enables access to the service in addition to supporting engagement with it. By enabling particularly high-risk service users to promptly enter the falls prevention service, the falls team also enable quicker access to much needed resources with the aim of preventing falls.

5.3.6 Managing Long-Term Illness: The Disadvantage of Multidisciplinary Multiple-Stage Service

In their nationwide study, Ellins and Coulter (2005:44) found that 'the chronically ill were far more likely to have problems of physical functioning, emotional well-being and social interaction'. As a result, the service users in this study often found themselves overwhelmed by the number of different services and healthcare professionals they are required to interact with.

This study found that many of the participants really struggle to engage with a new service as they already have multiple commitments with numerous other services. Long-term engagement for those with chronic illnesses is therefore more difficult to sustain than for short-term or one-off interactions with healthcare services. A good example of this is Kate, a service user introduced previously, who has epilepsy and memory problems and is becoming increasingly overwhelmed with the number of healthcare practitioners she is required to engage with. For example, while talking about the need to have a handrail fitted at the top of her stairs, I mentioned that the occupational therapist may be able to organise this for her, to which she replied: *'and that's another talk with somebody else, I'll have lost my bloody mind by the time...oh my'* (Kate). As Kate is becoming increasingly forgetful and confused, it is clear that interactions with many different healthcare professionals require specific support for her continued engagement.

The multidisciplinary nature of the falls prevention service unfortunately does not reduce the confusion experienced by some service users, as they receive multiple appointments for assessments by different healthcare professionals. For example, when service users are referred into the falls prevention service, they are sent two appointments letters; one for the medical clinic and one for the triage nurse to come out to their homes:

'As soon as the referral comes in we put them on the system and send them a clinic letter, but with the clinic letter we send them a leaflet on the falls clinic, explaining that the nurse will come and see you first… so it gives them information but I don't know how much they read the leaflet' (Medical Nurse)

Being sent two appointments, service users invariably become very confused, for example:

'They can never remember people's names, who's been out, they'll say like a nurse is coming tomorrow and when you actually look it's the OT or I've seen a nurse before and when you look it's a physio' (Physiotherapist)

It is not uncommon for the clinic to receive telephone calls with service users asking what the difference is between the appointments and whether they need to attend both. The element of confusion experienced by some service users arguably represents an avoidable barrier when they initially enter the falls prevention service. This confusion is not limited to the nurse and clinic appointments but also extends to the strength and balance exercise class, for example:

'I think they don't quite understand what the exercise will be, so that's why we try and do the exercises at home first to show them what they are doing and then guide them into the group. And I always make sure that they know that there's other people in the same circumstances who have been falling, who have injuries' (Nurse)

'you know they might think that exercise might be marching round the block or whatever, so you need to clarify that a lot of it will start in the chair, imagine someone who's like, if they're

really fearful, they don't wanna get out their chair cuz they're
frightened they are gonna fall over' (OT)

In an attempt to reduce the number of appointments, the falls prevention team will try where possible to visit the service users together. This also helps to avoid asking the service users the same questions on multiple occasions, which can be quite confusing. However, this informal practice doesn't always work to its full potential, leaving unnecessary crossover in visits and assessments. For example, the physiotherapist describes an occasion when she could have visited a service user with the occupational therapist but wasn't aware of her schedule:

'Yeah, I'd been to see a lady this morning and I'd sent her a
letter with the appointment on so she was expecting me, and she
said I keep them all together and she showed them all, and there
was the clinic letter, there was my letter, and then she showed
me another envelope which was Tish's appointment that's
tomorrow' (Physiotherapist)

Had the physiotherapist known that the occupational therapist was visiting the following day, she would have scheduled her assessment for the same time to save inconvenience for the service user, and to prevent any overlap in the questions. As there is significant overlap between the clinical, nursing, occupational therapy and physiotherapy assessments, it's easy for the service user to become confused. However, the main distinction between these professionals is that they use the service users' information in a variety of ways relating to their objectives and expertise. From the service users' perspective however, generic healthcare professionals are asking them very similar questions, which brings into question the extent to which the organisation of these assessments influence service users' engagement.

Another organisational problem which doesn't help to reduce the complexity caused by multiple service encounters is a lack of access to other services database, which contains useful information about service users. For example:

> *'I think sometimes because you can't access what social services assess, I suppose I can look up on our systems and see who's been out, I guess if I know a social services OT has been out and it hasn't marked out, I have to work harder to find out who it was' (OT)*

Another issue is that many of the service users in this study were referred into the falls prevention programme without their knowledge, or they were informed at the point of referral but had since forgotten. For example, one of the service users had a fall and was taken into hospital. When asked if that was the point they were referred to the falls prevention service they stated:

> *'I think it was sort of connected into it' (Len)*

> *'I think that may have been the start of it but we didn't hear anything until you had to go and see that specialist didn't you' (Sally - service user's wife)*

Another service user understood that she was taking part in another study about elderly falls prevention; however, she wasn't fully aware that she was also being referred into the actual service, which she found quite confusing. In this instance however, the service user was more than happy to be involved with the service:

> *'She just said can I put your name down for this study on falls and I said certainly you can, I didn't sign anything and she just put my details down and I got a letter, would I attend the falls clinic, found out where the bloody falls centre was so I took my friend.' (Kate)*

Without an explanation as to why they have been referred and who has referred them, it can be quite difficult for service users to feel involved and in control of their healthcare journey. The healthcare professionals involved in this instance seem to have missed an opportunity to fully inform and engage the service users at the start of the referral process, which also brings into question the issue of consent, and whether the service users wanted to be referred.

MANAGING LONG-TERM ILLNESS: THE DISADVANTAGES OF A MULTIDICIPLINARY, MULTIPLE-STAGE SERVICE

- Having service users attend multiple appointments with different members of the falls prevention team causes confusion about the role of the healthcare professionals and the purpose of the assessment.

- There is a significant amount of crossover with the occupational therapists', physiotherapists', and nurses' assessments, which contributes towards this confusion.

- Currently, service users must be assessed by each healthcare professional on the falls prevention team before they can access appropriate resources and, eventually, the strength and balance exercise class. This can be problematic if service users disengage early in this administrative process.

5.4 Conclusion

The findings in this chapter indicate that a wide range of factors influence service users' engagement with the falls prevention service. For example, service users' quickly changing health status; beliefs, attitudes and values; perceptions of how falls occur and their personal susceptibility of falling; previous experiences with healthcare services; access to informal care and support; the

communicational skills, responsiveness and experience of healthcare professionals; and the organization of the falls prevention service all have important implications for service users' engagement.

The above cases presented in this chapter highlight that the influences affecting healthcare service engagement do not do so in isolation, but exemplify complex reciprocal relationships. These relationships were observed when changes in one influence, such as the service users' health, created interconnected changes to other influences affecting the service users' healthcare service engagement. For example, when a service user's health suddenly changed, this required the service to respond to her new engagement needs, which included an increased need for physical and emotional support. These new engagement needs emerged when the service user's sudden health decline not only caused physical barriers for her engagement but also influenced her self-efficacy to self-care[29]. When the service failed to identify these new engagement needs, this necessitated increased informal social support. Therefore, the behaviour of one element affecting engagement, e.g. changes in the service user's health, has the potential to create changes that affect other influences, which in turn have implications for the service user's health and level of engagement. In another example, it was found that the practices of healthcare professionals also create interconnected changes to other factors affecting healthcare service engagement. For example, healthcare professionals' responses to the complex healthcare needs, attitudes and beliefs of service users that are easily understandable, create increased confidence, trust, and development of knowledge and skills in the service users. This, in turn, has implications for service users' engagement with the service and with related self-care behaviours.

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[29] For example, the service user no longer felt able to cook for herself, leave the house alone and engage in therapeutic activities such as crosswords due to her cognitive health concerns.

The diversity of cases and interconnected issues related with engagement therefore brings into question how one might analyse and conceptualise large amounts of interconnected influences on healthcare service engagement, while maintaining important detail and the integrity of the data. The following chapter employs the concepts that have emerged from this chapter, with the aim of developing a theoretical framework. This framework is then employed to support the conceptualisation of the engagement in the subsequent discussion Chapter 7.

Chapter 6. Theoretical Frameworks

6.1 Introduction

Chapters 4 and 5 revealed a range of interconnected factors[30] that influence the service user's engagement. This chapter describes existing theoretical frameworks and the extent to which they represent these interconnected factors. This chapter illustrates the need to develop a new theoretical framework that fully accounts for the complexities observed in the earlier chapters.

This chapter uses the factors that were identified through the analysis of the data in the previous chapters and links them to relevant theoretical frameworks. One of the purposes of this is to provide a theoretical context for the factors and their behaviours. By exploring existing theoretical frameworks, this chapter also aims to identify relevant theoretical concepts, which will be used to inform the development of a new model that better reflects the process of engagement. This process will help to ground the construction of a new model in relevant theory; identify contention points between theories the model should address; and highlight areas where existing literature is particularly strong or weak when generalised into this context.

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[30] In the interest of clarity these influences are described henceforth as 'factors', as this represents the influence that they have upon the process of healthcare service engagement. This chapter strives to make connections between the factors and behaviours of these factors as observed in the data with existing theoretical frameworks. Therefore, to make comparisons with existing work, the term 'factor' was chosen as it indicates that the process of engagement is comprised of different factors, some of which are reflected in existing theoretical contributions.

The development of a new theoretical framework has three main functions. The first is to provide a broad and cohesive conceptualisation of the process of healthcare service engagement, which more accurately represents the factors and their relationships as they were observed in earlier chapters. By exploring different potential conceptual underpinnings of a new theoretical framework, this chapter contributes towards answering the second research question: *'how can healthcare service engagement be conceptualised for service users with complex healthcare needs?'*. The second function of this new theoretical framework is to enable healthcare professionals to ascertain how and in which ways healthcare engagement may be better supported. The third function is to enable one to further analyse the interconnected relationships between the factors to develop design recommendations for healthcare engagements future development. The conceptualisation of the new theoretical framework, and details of how the framework may be used by healthcare professionals are presented in Chapter 7. The design recommendations are described in Chapter 8.

The structure of this chapter is divided into three main subsections. The first Section 6.2 'Overview: Selection of Criteria for the Identified Theoretical Frameworks' describes why each theoretical framework was selected for this review, by linking them to factors that were revealed in Chapter 5. The second Section 6.3 'Theoretical Frameworks' presents each of the aforementioned frameworks and the way in which they have been applied in practice. The third Section 6.4 'Discussion of Theoretical Frameworks' discusses the extent to which each theoretical framework described throughout the chapter may be employed to inform a new theoretical framework that reflects the process of healthcare service engagement.

6.2 Overview: Selection of Criteria for the Identified Theoretical Frameworks

This section describes how the findings in Chapter 5 informed the identification of relevant and useful theoretical frameworks, which provide further insight into how healthcare service engagement may be conceptualised. The theoretical frameworks presented in this chapter were selected to inform the development of a new theoretical framework in different ways. For example, the Health Belief Model (Hochbaum 1958) and Self-Efficacy Theory (Bandura 1977) were identified to ground what were found to be two key factors that affect engagement. The Patient Activation Measure (PAM) (Hibbard et al. 2004) and the Precede-Proceed Model (Green and Kreuter 2005) were identified as they offer a potential framework structure, within which the identified factors may be placed. They also provide an evaluative framework, which enables one to evaluate how and where engagement may be better supported. Finally, Complex Adaptive Systems Theory (Waldrop 1992) was identified as it recognises the coevolving interconnections between factors that affect engagement, and it also recognises the influence of a wider healthcare context for the process of healthcare service engagement. Although the decision to focus on these factors of the findings is justified in the following sections, it is important to note that this specific selection introduces the risk of overlooking other factors. For example, it may have been possible to explore theoretical frameworks that conceptualise the wider influences that affect healthcare policy and the implications this has for engagement. However, it was felt that this type of focus might detract from the experiences of service users and healthcare professionals. It should be noted that this review of relevant theoretical frameworks is not exhaustive, but does reflect some of the central factors that were found to influence engagement across different cases.

The following two sections describe why the above theoretical frameworks were selected for this review.

6.2.1 Factors that Affect Engagement

Thematic analysis of the data revealed a number of factors that emerged across cases, including (1) service users' rapidly changing health status; (2) beliefs, attitudes and values; (3) perceptions of how falls occur and their personal susceptibility to falling; (4) previous experiences with healthcare services; (5) access to informal care and support; (6) the communicational skills, responsiveness and experience of healthcare professionals; (7) and the organisation of the falls prevention service, all of which have important implications for service users' engagement. Although each of these factors has implications for service users' engagement, it was found that service users' belief and self-efficacy were prominent determinants that affected both their engagement with the service and with self-care behaviours. The following sections explain these selections in more detail, while relating them back to the findings of this study.

The findings of this study indicate that service users' engagement with the falls prevention service and with self-care behaviours are heavily influenced by their beliefs. Section 5.2.3 presents statements from the occupational therapist on the falls prevention team, who states that service users often believe they are not susceptible to falling. Therefore when she proposes that service users' furniture should be moved to make their homes less hazardous, she is invariably met with reluctance and a fundamental lack of engagement as the service users do not feel at risk of falling. The occupational therapist describes that service users must believe they are at risk of falling, in addition to believing that advice from the falls prevention service can reduce their risk: *'they have to want to do it really, they have to believe'.* Service users' lack of belief in their risk of falling was also exemplified in Section 5.2.4.2, where they portray instances of falls as something

other than a fall. For example, service user Kate describes two of her falls in the following ways: *'not a fall but sort of a twisted thing and I've done my knee'* and *'no it wasn't a fall, I just went really unsteady'*. Also detailed in section 5.2.4.2, another service user, Penny, described how her falls were a result of unforeseen obstacles such as wet pavements, rather than attributing them to her physical or mental competence. For example, Penny explained that '*we were coming out of bright sunshine into a dark car park, it's not dizziness, it's nothing to do with my brain*'[31]. The findings therefore indicate that if service users are unwilling to accept that they are at risk of falling, that they are less likely to engage with the falls prevention service. Given the centrality of service users' belief in their susceptibility to falling, and the implications for healthcare service engagement, the Health Belief Model (Hochbaum 1958) was identified as it specifically addresses this factor of engagement.

Self-efficacy has emerged repeatedly in the interview data as a strong influence on service users' engagement with the falls prevention service and with self-care behaviours[32]. The findings show that rather than referring to their low self-efficacy, both service users and healthcare professionals use the word 'confidence' to describe the lack of belief in service users' ability to perform specific self-care behaviours. For example, throughout Chapter 5 the service users describe how leaving their home, stepping over high curbs, using escalators, and cooking represent tasks that they no longer feel able to do. More specifically, in section 5.2.2 a service user named Kate states that *'I used to love baking...I don't think I could trust myself with it now'*, which also prohibits her from independently cooking meals for herself. Service users' low self-efficacy for a wide range of activities has important implications for their perceived ability to

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[31] Although this example might indicate the service user's lack of belief in her risk of falling, it is also important to note that her accounts may be an attempt to portray that she is both physically and mentally competent.

[32] Self-efficacy refers to an individual's perceived ability to perform a particular task and, in this context, refers to service users' perceived ability to successfully perform service and self-care behaviours.

perform self-care behaviours, and therefore represents an important factor that affects their engagement. The theory of Self-Efficacy (Bandura 1977) was therefore identified for this review, as it conceptualises the process of self-efficacy, and specifically describes how self-efficacy develops as a result of different types of experiences.

6.2.2 Relationships between Factors of Engagement

In addition to revealing the above factors[33], Chapter 5 also revealed other features, which characterise the process of healthcare service engagement. Continuing on from the above numbered list, these features include (8) interconnections between the aforementioned factors; (9) interconnections between the process of engagement and a wider healthcare context (10) non-linearity. The factors that affect healthcare service engagement exemplified both interconnections and non-linearity, where changes that occur in one factors create subsequent changes that were observed in others. For example, Section 5.2.2 described how when service users' health suddenly declines, this acts as a catalyst which affects other factors, namely reducing their self-efficacy to self-care and increasing their need for social support. Interconnections between the process of engagement and a wider healthcare context were described in Section 5.2.4.4, where a service user named John described how historical negative healthcare service encounters significantly influenced his inclination to seek healthcare advice. Also in Section 5.3.6, it was described that service users' interactions with multiple healthcare services significantly influenced their engagement, often leaving them feeling overwhelmed and confused.

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[33] (1) service users' quickly changing health status; (2) beliefs, attitudes and values; (3) perceptions of how falls occur and their personal susceptibility of falling; (4) previous experiences with healthcare services; (5) access to informal care and support; (6) the communicational skills, responsiveness and experience of healthcare professionals; (7) and the organisation of the falls prevention service all have important implications for service users' engagement.

These observations revealed both the need for theoretical frameworks that model all of the factors outlined in Section 6.2.1, and the interconnections between them in a cohesive framework. Furthermore, given that one of the purposes of a new theoretical framework is to provide healthcare professionals and academics with a tool to understand how engagement may be better supported, there also emerged the need for an evaluative engagement framework. To achieve this, the Patient Activation Measure (PAM) (Hibbard et al. 2004) Precede-Proceed Model (Green and Kreuter 2005) and Complex Adaptive Systems Theory (Waldrop 1992) were identified. The reasons for their selection are explained in the following paragraphs.

The Patient Activation Measure (PAM) (Hibbard et al. 2004) was identified for this review as it provides a framework to measure individuals' attitudes, beliefs and self-efficacy towards self-care behaviours. As described above, the findings revealed that attitudes, beliefs and self-efficacy are important influences of healthcare service engagement. Therefore, a framework that measures some of these factors is particularly relevant as it may enable one to ascertain how and where engagement may be better supported. Hibbard et al. (2004:1021) suggest that any attempts to better support healthcare engagement will in the first instance require *'development of a measure to assess patient activation'*. Some of the initial questions on the PAM therefore specifically refer to service users' belief that they are responsible for their own health, and that playing an active role in their health is important. These fundamental baseline questions highlight the need to assess not only if service users believe that they are susceptible to falling, but also whether they feel that prevention of falls is their responsibility.

The Precede-Proceed Model (Green and Kreuter 2005) was identified for this review because it accounts for all of the factors described in Section 6.2.1, depicts interconnections between these factors, and offers an evaluative framework, which may both support the conceptualisation of the process of engagement. It

may also offer guidance to healthcare professionals to understand how they may effectively support engagement in practice. For example, the Precede-Proceed Model (Green and Kreuter 2005) includes the following factors: health status; physical and social environment; health behaviours; predisposing attitudes, values and beliefs, the reinforcing role of friends, family and healthcare professionals; the provision of and access to resources; the influence of healthcare policy and how services are structured. The Precede-Proceed Model was designed to be adapted to specific contexts, and therefore would allow development of a new framework, which encapsulates the findings from this study. This flexibility would enable the benefits of a validated structure, while reflecting and remaining sympathetic to the diverse findings that have emerged from this study. The Precede-Proceed Model (Green and Kreuter 2005) also incorporates other relevant theoretical frameworks, for example the theory of Self-Efficacy (Bandura 1977) and Health Belief Model (Hochbaum 1958).

Complex Adaptive Systems Theory (Waldrop 1992) was identified as a potentially useful lens through which to better understand engagement, as it views healthcare systems as emergent, adaptive, and subject to constant and sudden change. Suddenly changing health circumstances were revealed in Section 5.2.2, where a service user named Kate suddenly fell and was injured, in addition to experiencing cognitive health problems, which also had a sudden onset. The Health Foundation (2010:6) describes that *'in its most simple form, complex adaptive systems is a way of thinking about and analysing things by recognising complexity, patterns, and interrelationships rather than focussing on cause and effect'.* Focusing on the interrelationships of influences that influence healthcare engagement has similarly emerged as a key focus of this research. This is because observations made in earlier chapters indicate the significance of these interconnections rather than suggesting that the process of healthcare service engagement functions in a linear, cause and effect manner. The case of service

user Len illustrated these interrelationships because his increased understanding of self-care practices and falls prevention caused adaptations in his self-care practices and also improved his outlook towards the service (Section 5.3.3).

Complex adaptive systems *'constantly react to what other agents are doing, which in turn influences behaviour and the network as a whole'* (The Health Foundation 2010:6). The findings from this study also show this constantly evolving relationship between factors that affect healthcare engagement. For example, in Section 5.3.5 the nurse describes how she utilises unused appointments from service users who have been discharged from the service. The nurse *'slots in'* service users whom she believes to be at a high risk of falling, ensuring that they have a medical assessment as soon as possible. In this sense, the nurse's practices have evolved to ensure that they meet local requirements, without necessarily considering the system as a whole. This process is referred to within a Complex Adaptive Systems Theory as a 'feedback loop', whereby individual components interact and adapt based on the conditions of the interaction and their local needs. Furthermore, in Section 5.3.2 developing trust within the assessment process illustrated how the nurse's situated practices, language, and the information she tried to elicit emerged within this specific interaction rather than being predetermined.

6.3 Theoretical Frameworks

This section introduces and describes each of the theoretical frameworks selected for this review.

6.3.1 Health Belief Model

The Health Belief Model (Hochbaum 1958) was selected to provide additional insight into the role of belief and its conceptual underpinnings. The

Health Belief Model is a psychological model that aims to explain and predict health related behaviours. The model was originally developed in response to a widespread failure in the participation of service users in health programmes and has since been employed more widely to understand people's responses to symptoms and adherence to health interventions (Stretcher and Rosenstock 1997:113). The Health Belief Model *'has spawned thousands of health education and health behavior research studies and provided the conceptual basis for many interventions in the years since it was formulated'* (Rimer 2008:42). The Health Belief Model assumes that several key factors are responsible for influencing health behaviour, namely *'susceptibility, seriousness, benefits and barriers to a behaviour, cues to action, and most recently, self-efficacy'* (Champion and Skinner 2008:46-7). For example, the 'susceptibility' part of the model refers to whether an individual believes that they are susceptible to a particular disease or health condition. This level of belief then informs the likelihood of that individual to engage in health behaviours to prevent this particular disease from occurring. If the individual's belief that they will develop or contract a particular disease is very low, this has negative implications for their enactment with health behaviours that aim to prevent the said disease. Following Hochbaum (1958) publication, Rosenstock et al. (1959:99) describe that individuals' health behaviour is also influenced by *'the absence of perceived susceptibility'*. In other words, an individual may not be aware of their susceptibility of a particular health condition and therefore cannot respond to it.

The perceived seriousness or *'severity'* part of the model refers to individual's belief in the severity of the disease and its amelioration through preventive measures if they happen to develop this disease. Individuals evaluate this notion of severity in relation to their physical health and the effect a condition might have on their social life, in terms of pain, disability, and also death (Champion and Skinner 2008). Even if a person believes they are susceptible to a disease and, that without prevention there could be a degree of severity, they still

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need to believe that the preventative measure offers the potential *'benefit'* of reducing the threat of the disease. Other non-health-related benefits of taking action can include appeasing a family member or financial gain; if, for instance, an individual ceases smoking.

The perceived *'barriers'* an individual believes they may face when trying to engage with a health intervention also have implications for whether or not they will engage with that particular intervention. Champion and Skinner (2008:48) point out that these perceived barriers might be defined by a *'belief about the tangible and psychological costs of the advised action'*. Therefore, if an individual believes that the barriers to enacting particular health behaviours outweigh the perceived health benefits, or make it too difficult for them to accomplish, then they are less likely to engage with that health behaviour. Increasingly, the likelihood of an individual enacting particular health behaviour is influenced by whether they believe they are susceptible, and how severe the illness or disease may be set against the health benefits and barriers they believe they are likely to face. Other influencing factors include *'cues to action'* which refers to the manner in which healthcare services promote or instigate particular health behaviours, the influence of one's bodily functions, the environment and other social influences such as the media (Champion and Skinner 2008). Finally, *'self-efficacy'* refers to the individuals' belief in their own ability to enact particular health behaviours successfully. Therefore, if an individual's self-efficacy towards a certain health activity is low, they are less likely to attempt an action, which they feel they are not able to complete. The construct of *'self-efficacy'* was added to the model at a later date, when it was recognised by Bandura (1977) that lifestyle changes required for health problems such as smoking, drinking, and eating to excess required the confidence of service users in their own ability, which is very different from accepting a one-off treatment or immunisation (Stretcher and Rosenstock, 1997).

The Health Belief Model is employed in practice by evaluating the perceptions of service users in the above categories and dealing with them in turn in an attempt to alleviate misconceptions, undue concerns and to educate service users in a range of ways. For example, a service user may believe they are not at risk of developing a particular disease and may use this as justification for not acting to prevent it. By tactfully delivering essential health information it may be possible to engage that individual once they realise their level of susceptibility. The realisation and belief in one's risk of being seriously ill is an assumption that runs throughout this theory in that an individual's behaviour is unlikely to change if they believe they have a low risk of developing an illness. For example, Stretcher and Rosenstock (1997:114) describe that:

> *'For behaviour change to succeed, people must (as the original Health Belief Model theorizes) feel threatened by their current behavioural patterns, (perceived susceptibility and severity), and believe that change of a specific kind will be beneficial by resulting in a valued outcome at acceptable cost, but they must also feel themselves competent (self-efficacious) to implement that change'*

It is therefore a fear of illness or injury rather than the prospect of good health that drives behaviour change, according to the Health Belief Model.

6.3.2 Theory of Self-Efficacy

The Theory of Self-Efficacy (Figure 2, Bandura 1977) describes the ways in which the concept of self-efficacy can be used to explain behaviour. Self-efficacy refers to an individual's belief in his or her own ability to perform a specific task. Schunk and Pajares (2009:34) explain that *'since Bandura (1977) introduced the construct of self-efficacy to the psychological literature, researchers have explored its role in various domains including education, business, athletics,*

careers, health and wellness'. The reason for this cross-disciplinary acceptance of self-efficacy theory is that an individual's belief in their own ability to accomplish particular tasks plays a crucial role in understanding and explaining their behaviour across different contexts (Bandura 1977).

Self-Efficacy theory has been used to understand work-related performance (Stajkovic and Luthans 1998); post-traumatic recovery (Benight and Bandura 2004) and nurse leadership and engagement (Salanova et al. 2011). Self-efficacy theory helps to explain the process individuals go through when trying to ascertain how many resources they should invest in a particular behaviour before abandoning it through perceptions of an inability to accomplish it. For example, when an activity becomes difficult, our cognition begins to process experiential information to determine whether or not it is worth continuing to use personal resources to complete it. For example, '*when routine behaviours are in some way disrupted, thus creating a higher demand on the resources of the individual, cognitive control systems come into play once again'* (McAuley 1992:104). Below is a reproduction model of Self-Efficacy Theory (Bandura 1977) followed by a description of each of its components.
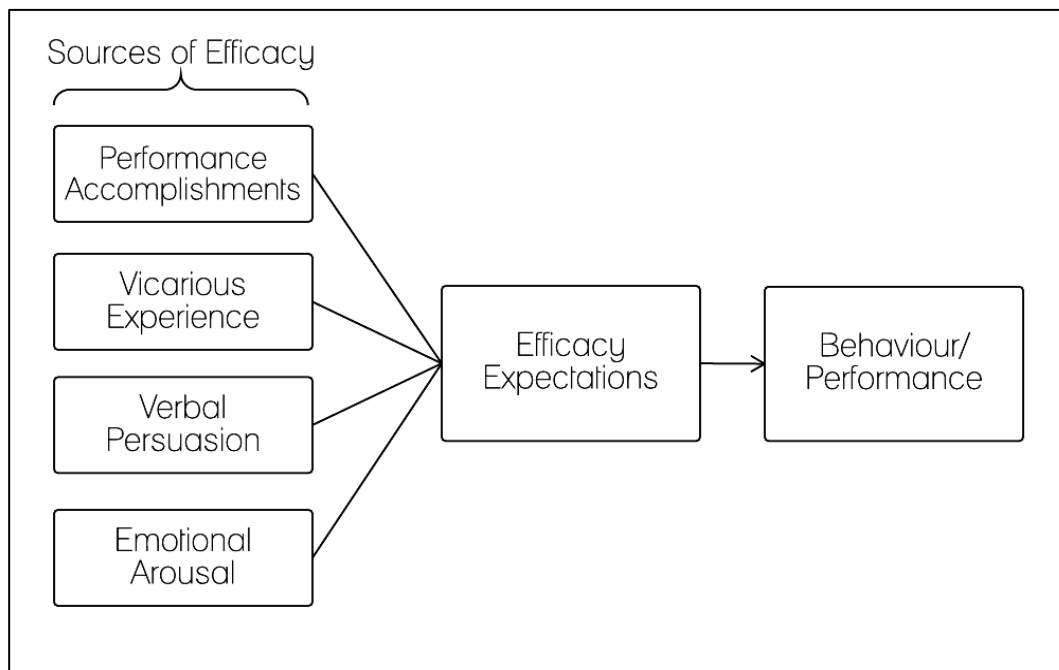
Figure 2: Theory of Self Efficacy (Bandura 1977)

To determine whether an action can be completed, Bandura (1977:195) suggests that individuals look to four main sources, which provide them with efficacy expectations, namely: *'performance accomplishments, vicarious experience, verbal persuasion and emotional arousal'*. According to Bandura (1977:195), *'Personal accomplishments'* are induced by performance exposure and self-instructed performance and this is *'especially influential because it is based on personal mastery experiences'*. Therefore, the self-efficacy expectations that derive from our personal accomplishments are particularly prominent for future behaviour as they are based on our direct experiences of performing a particular behaviour. *'Vicarious experience'* refers to the second-hand knowledge we obtain through other people's actions, for example when others perform a specific task, which influences our own level of self-efficacy. *'Verbal persuasion'* is when others try to persuade an individual that they are capable of accomplishing a particular task. However, *'efficacy expectations induced in this manner are also likely to be weaker than those arising from one's own*

accomplishments because they do not provide an authentic experiential base for them' (Bandura 1977:198). Finally, *'emotional arousal'* is a form of efficacy, which occurs in *'stressful and taxing situations'* (Bandura 1977:198). This is because particularly stressful situations elicit emotions that can affect how competent an individual feels about performing a particular activity. Therefore, the information they gain from this activity may provide them with an important source of experiential knowledge, thus informing the extent to which they feel capable of dealing with fearful situations in the future.

Bandura (1977:192) describes that *'the initial approximations of response patterns learned observationally are further refined through self-corrective adjustments based on informative feedback from performances'.* Therefore, every performance or behaviour enactment an individual completes feeds back into their perception of what the outcome may be, should they enact the same behaviour in the future. To this end, Bandura (1977:192) points out that *'contrary to the common view that behaviour is controlled by its immediate consequences, behaviour is related to its outcomes at a level of aggregate consequences rather than momentary effects'.*

6.3.3 The Patient Activation Measure

The Patient Activation Measure (PAM) in Figure 3 is a framework that enables healthcare professionals to measure service users' level of engagement. It specifically focuses on service users' engagement skills, knowledge and ability to perform self-care behaviours. However, it does include some questions regarding service engagement. Once different factors of service users' engagement have been measured, this then enables suitable interventions to be developed, which

respond to service users' individual needs. Hibbard et al. (2004) use the term 'activated[34]' rather than engaged, although the terms are synonymous.

The PAM is comprised of a range of questions that were developed as a part of an iterative process involving national experts and patient focus groups. The questions are categorised into the following sections: belief that an active role is important; confidence and knowledge to take action; and taking action and staying the course under stress (Hibbard et al. 2004:1017).

Each category of questions on the PAM is developmental and builds upon the last. For example, the first question in the category *'believes active role is important'*, aims to evaluate if the service user thinks self-care is important, thus indicating a basic need for engagement or *'activation'*. As the user of the PAM moves through the categories, the questions start to reveal more *'advanced stages of patient activation'* (Hibbard et al. 2004:1023), for example, whether they are able to maintain lifestyle changes under periods of stress. Logically, one would not expect that a service user can manage lifestyle changes under stress, if they have previous stated that they cannot maintain lifestyle changes at all. The idea is that service users become more advanced over time in their ability to self-care, that this measure can identify where interventions may support activation, and to help design the actual interventions with data obtained from the PAM.

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[34] Activated service users believe that they '*have important roles to play in self-managing care, collaborating with providers, and maintaining their health. They know how to manage their condition and maintain functioning and prevent health declines; and they have the skills and behavioural repertoire to manage their condition, collaborate with their health providers, maintain their health functioning, and access appropriate and high-quality care'* (Hibbard et al. 2004:1010).

	Believes Active Role Important	
1	When all is said and done, I am the person who is responsible for managing my health condition	
2	Taking an active role in my own health care is the most important factor in determining my health and ability to function	
	Confidence and Knowledge to Take Action	
3	I know what each of my prescribed medications do	
4	I am confident I can tell my health care provider concerns I have even when he or she does not ask	
5	I am confident that I can tell when I need to go get medical care and when I can handle a health problem myself	
6	I know the lifestyle changes like diet and exercise that are recommended for my health condition	
7	I am confident that I can follow through on medical treatments I need to do at home	
8	I am confident that I can take actions that will help prevent or minimize some symptoms or problems associated with my health condition	
9	I am confident that I can find trustworthy sources of information about my health condition and my health choices	
10	I am confident that I can follow through on medical recommendations my health care provider makes, such as changing my diet or doing regular exercise	
11	I understand the nature and causes of my health condition(s)	
12	I know the different medical treatment options available for my health condition	
	Taking Action	
13	I have been able to maintain the lifestyle changes for my health that I have made	
14	I know how to prevent further problems with my health condition	
15	I know about self-treatments for my health condition	
16	I have made the changes in my lifestyle like diet and exercise that are recommended for my health condition	
17	I am confident I can figure out solutions when new situations or problems arise with my health condition	
18	I am able to handle symptoms of my health condition on my own at home	
	Staying the Course Under Stress	
19	I am confident that I can maintain lifestyle changes like diet and exercise even during times of stress	
20	I am able to handle problems of my health condition on my own at home	
21	I am confident I can keep my health problems from interfering with the things I want to do	
22	Maintaining the lifestyle changes that are recommended for my health condition is too hard to do on a daily basis	

Figure 3: The Patient Activation Measure (Hibbart et al. 2004)

The PAM was designed in the context of chronic illness and focuses on barriers to self-care, which are grounded in the experiences of chronically ill service users. Its focus is very specific to healthcare engagement amidst chronic illness issues, rather than representing a generic evaluative or health promotion framework. The practical applications of this model are arguably quite fruitful in how they relate attributes such as confidence, knowledge and skills to the literal actions required to self-care. For example, in their study, Ellins and Coulter (2005:3-4) employed Hibbard el al. (2004) PAM and revealed that *'fewer people with chronic conditions had progressed to an advanced level of self-management'* and that *'lower levels of knowledge, confidence and skills for self-management were observed among respondents who were elderly'*. It is therefore clear that this particular framework, with its emphasis on personal ability, knowledge and confidence, provides a valuable insight into some of the issues, which are prevalent within chronically ill and elderly cohorts. These insights have been invaluable when developing a theoretical framework, in that they reveal the subjective and constructed experience of healthcare engagement.

6.3.4 Precede-Proceed Model

The Precede-Proceed Model (Green and Kreuter 2005) was originally designed as an evaluative tool to enable healthcare professionals to identify where the major challenges for health promotion lie within a particular service or system. It also acts as a meta-model: encapsulating concepts from the other models, including the Health Belief Model (Hochbaum 1958), the Theory of Self Efficacy (Bandura 1977). 'Precede' is an acronym for the educational diagnosis part of the framework and stands for 'Predisposing, Reinforcing, Enabling Constructs in Educational Diagnosis and Evaluation'. The 'Proceed' part of the framework was later added to evaluate the 'Policy, Regulatory, Organisational Constructs in Educational and Environmental Development'. The Precede-Proceed model assumes that interventions will be successful if they *'(1) come*

from engagement of the community, (2) are planned thoroughly, (3) are based on data, (4) include interventions the community sees as feasible, (5) include multiple strategies woven into a cohesive program, and (6) rely on feedback and progress evaluation' (Raingruber 2014:72). Figure 4 below depicts the Precede-Proceed model.
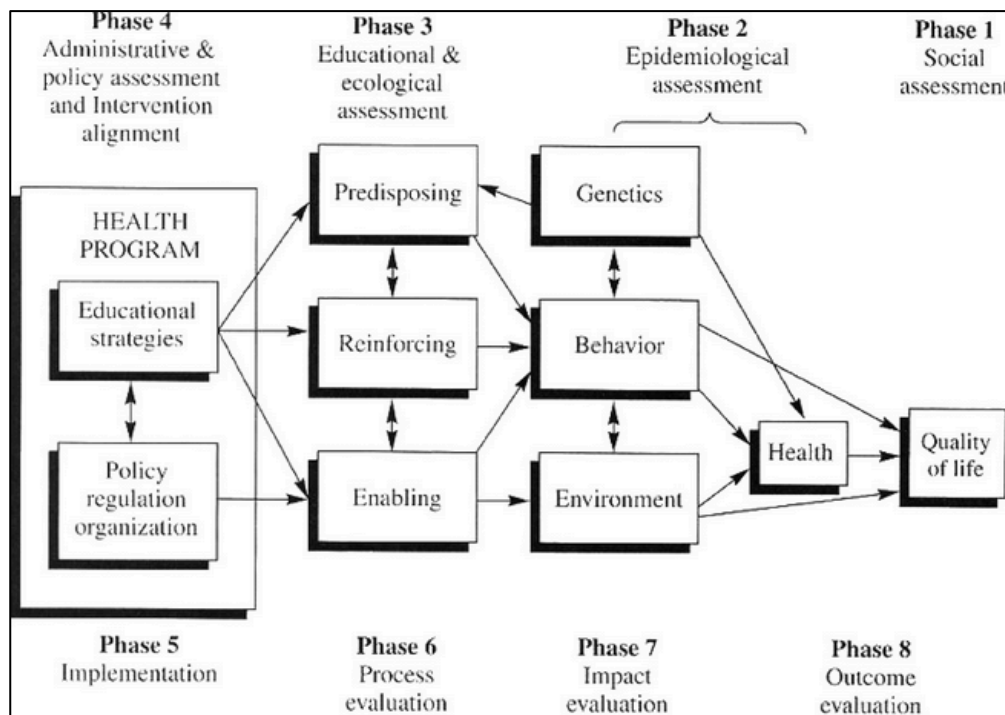

Figure 4: Precede-Proceed Model (Green & Kreuter 2005)

Although the Precede-Proceed Model portrays health as emerging as part of a linear process, Green and Kreuter (2005) recognise the reciprocal relationships between the factors that affect health. For example, they describe that health; lifestyle and environmental problems; and the social problems of poverty are all interconnected, rather than representing independent determinants of health. They explain that *'such categorisation of factors can help planners gather relevant information that will provide the rationale, if not a mandate, for crafting programs directed at health-related factors that are framed within a broader social and ecological context'* (Green and Kreuter 2005:84). The following

sections describe each evaluative phase of the Precede-Proceed Model and how it should be used.

The structure of the model enables one to identify and diagnose a range of possible causes of ill health within a particular population. Through various stages of evaluation it then enables the development of an appropriate health programme (or health care service), which effectively addresses these causes. When viewing the model from left to right, it depicts a number of ordered phases split into factors, starting with the specific features of a healthcare service that influence a number of Predisposing, Reinforcing and Enabling factors, which contribute towards certain health behaviours and a particular quality of life. When evaluating the health problems that are observable within a particular population, the model depicts a number of phases, which run from right to left. The implementation and evaluative phases of the model (phases 5-8) will not be discussed here as the remit of this study does not include the implementation of a new health strategy.

Phase One of the model is a 'social assessment and situational analysis' that evaluates the reasons why a particular group within society may be more susceptible to specific health problems, and the things that affect their quality of life (Green and Kreuter 2005). This phase seeks to reveal the social and cultural conditions prevalent within an identified population of people. This phase should involve the population of people under evaluation, as a means of identifying their own quality of life aspirations.

Phase Two is an 'epidemiological assessment' and evaluates first the health (or lack of health) that affects the social goals or issues that were identified in Phase One. This may be achieved by employing local or national statistical information to evaluate the diseases that are more likely to influence the social group initially identified. The health problems and needs identified in this phase are then graded in accordance with the perceived importance as to how easily they

may be changed. Using this information, it is possible for decision-makers to identify which health concern they will address, given the finite amount of resources at their disposal. A new part of this model evaluates the 'genetic factors' of the population under study and suggests a relationship between one's genetics and the predisposing and behavioural factors that influence one's health. This phase also considers 'behavioural factors' which *'refer to patterns of behaviour (and together with social circumstances, lifestyle) of individuals and groups that protect or put them at risk from a given health or social problem'* (Green and Kreuter 2005:14). These patterns of behaviour may include prevalence towards an inactive lifestyle, as this is considered quite normal within this particular group. Finally, Phase Two evaluates the 'environmental factors' that contribute towards the health and behaviour of this population or individual. These include factors that are external to the person and encapsulate social, physical, and economic factors such as living conditions, geographical, physical landscape, modes of transport, and air quality.

Phase Three is the 'educational and ecological assessment' and evaluates the predisposing, reinforcing and enabling factors that influence the identified behaviours and environmental factors. Predisposing factors include *'a person's or population's knowledge, attitudes, beliefs, values and perceptions that facilitate or hinder motivation for change'* (Green and Kreuter 2005:14). The predisposing factors that influence health behaviour also encapsulate concepts from the health belief model, which were introduced above. Green and Kreuter (2005:158) state that: *'The Health Belief Model relates to the predisposing factors in the Precede-Proceed Model and services as a useful tool to carry out that part of the educational assessment.'* For example, one's beliefs as to what comprises a healthy diet are likely to influence an individual's food choices, which has significant implications for their health. Also incorporated into the predisposing factors part of the Precede-Proceed model is Bandura's (1977) concept of self-efficacy as described earlier. This part of the model exemplifies that service users

are not passively moulded by their environment, but respond to it by *'anticipating the consequences of their actions, represent goals in thought and weigh evidence from various sources to assess one's own capabilities'* (Green and Kreuter (2005:161). Reinforcing factors include the feedback an individual receives as a response to their adopted behaviour. This feedback may be received from friends, family, healthcare professionals and others, and has the potential to encourage or discourage the individual from enacting a particular behaviour. Enabling factors include those that enable a particular behaviour to occur, such as particular skills and resources. Green and Kreuter (2005:15) explain that: *'facilities and personal or community resources may be ample or inadequate, as might income or health insurance, and laws and statutes may be supportive or restrictive'*. Enabling should be thought of holistically; having adequate self-care resources is unlikely to create behaviour change if an individual lacks the skills and knowledge required to use them.

Phase Four is the 'administrative policy assessment and intervention alignment' phase of the evaluation. This is where an appropriate intervention is developed that considers all of the requirements raised in the previous phases. During this phase, policies affecting the availability of enabling resources will be considered, so as to influence behaviours and environmental influences aimed at alleviating or preventing the identified health concern. In this phase, the question is asked whether the health intervention has the organisational capabilities to facilitate the proposed intervention. Due to limited human and physical resources, this phase may also include enlisting the organisational support from other health and social agencies.

The Precede-Proceed Model has been employed diversely across healthcare sectors. For example the model was used in breast cancer screening promotion, which sought to evaluate the unequal use of mammography in low income and ethnic minority groups (Pasick and Burke 2007). It was also employed to identify

the educational needs of stroke survivors (Veenendaal et al. 1996), and to evaluate an educational intervention for the knowledge, attitude and behaviour of epilepsy patients (Zigheymat et al. 2009). The Precede-Proceed Model's flexible structure therefore means it can be employed in a number of diverse settings with varied health concerns, allowing a comprehensive evaluation of a diverse range of influences that influence a particular group's health. Although the framework is predominantly suited to evaluative the healthcare needs of populations, it is also applicable to individual cases. For example, the third and fourth phase of *'the model lends itself to a protocol for the triage and stepped care of patients and the continuing education of health care workers where complex behavioural changes and environmental influences must be taken into consideration'* (Green and Kreuter 2005:430).

An application of the Precede-Proceed Model, which is particularly relevant for this research, is a study by Makrides et al. (1997) who employed the predisposing, reinforcing and enabling factors of the Precede-Proceed Model to model the influences that influence healthcare professional's behaviour. Makrides et al. (1997:207) recognise the important role of healthcare professionals in coronary heart disease prevention, and aimed to develop a framework that accounts for: *'physicians' expectations about their role in prevention; obstacles to providing preventive care; and, mechanisms by which preventive care occurs'.* Makrides et al. (1997) developed a framework, which shows the education of healthcare professionals through counselling sessions informs predisposing, reinforcing and enabling factors that dictate their behaviour, which in turn influences the predisposing, reinforcing and enabling factors that effect service users' health behaviour. Figure 5 presents a partial view[35] of the 'Primary care

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[35] It is beyond the scope of this research to address how healthcare professional's education effects predisposing, reinforcing and enabling factors, which affect their behaviour, and go on to affect service users' predisposing, reinforcing and enabling factors, which in turn affect their

physicians and counselling for coronary heart disease prevention conceptual model'.
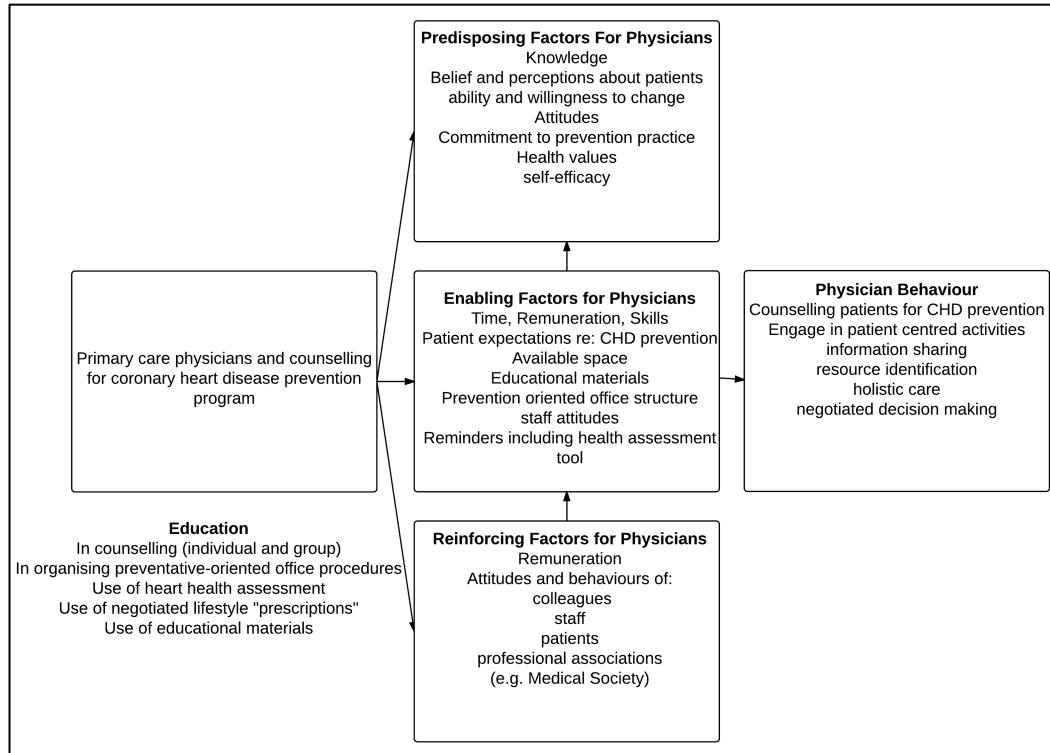

Figure 5: Primary Care Physicians and Counselling for Coronary Heart Disease Prevention Conceptual Model (Makrides et al. (1997)

The predisposing, reinforcing and enabling factors depicted in the above model highlight some of the factors that affect the behaviour of healthcare professionals and their delivery of healthcare. This use of the Precede-Proceed Model therefore expands upon its application to include a broad range of factors that can influence healthcare professionals behaviour.

health behaviour. This is because the data were not collected to account for these particular relationships. A partial view of this model is therefore presented as it highlights some factors that influence healthcare delivery, which is within the scope of this study.

6.3.5 Complex Adaptive Systems Theory

Complex Adaptive Systems Theory describes the ways in which a wide range of diverse and interconnected factors develop and modify their behaviours in response to their local environment. Complex Adaptive Systems Theory was introduced in the 1980s at the Interdisciplinary Santa Fe Institute think tank in New Mexico. It was developed in an attempt to transcend disciplinary boundaries; thus enabling understanding of the dynamic, self-organising, and unstructured systems that cannot be explained and modelled using mechanistic, linear cause and effect approaches. Complex adaptive systems include, but are not limited to, the weather; ecosystems; immune systems and organisational and human behaviour (The Health Foundation 2010). They are defined by the following characteristics, which make them particularly unpredictable:

> *'[Complex adaptive systems] have a large number of elements which interact dynamically; any element in the system is affected by and affects other systems; non linear interactions, so small changes can have large effects; openness, so it may be difficult to define system boundaries; a constant flow of energy to maintain the organisation of the system; a history whereby the past helps to shape present behaviour; and elements in the system are not aware of the behaviour of the system as a whole and respond only to what is available or known locally' (Health Foundation 2010:8)*

The book '*Complexity: The Emerging Science at the Edge of Order and Chaos*' (M. M. Waldrop, 1992) describes the emergence of the Complex Adaptive Systems Theory and the Santa Fe Institute think tank's pursuit of a 'common theoretical approach to complexity'. Waldrop describes how complexity is manifested in complex adaptive systems, which are comprised of multiple interacting factors.

These multiple interacting factors are referred to as 'feedback loops', as the outcome of one part of the system directly inputs others and may also feedback into itself. The concept of 'feedback loops' has been employed by Philippe and Mansi (1998) when they argue that epidemiology cannot be understood as a linear system but functions instead as a series of feedback loops. They point out that *'linearity assumes that the probability of an outcome is always the sum of its component forces and that the outcome is predictable'* (1998:592). Conversely, they argue that linear explanations, although helpful in many contexts for predicting outcomes, ignore complex changes within a system, which are caused by the relationships between component parts. In their work, Philippe and Mansi (1998) use biological cells to describe how the end result of cellular change isn't always a sum of the component parts of the cell, but is a consequence of the relationships between various proteins, which evolve in feedback loops within cells. Similarly, if one were to evaluate each of the factors that influence healthcare engagement, the level of engagement observed as an end result is not necessarily a sum of each influence. This is because the influences of engagement also influence each other, hence, the importance of understanding their relationships and the systems in which the influences develop and interact.

Complex Adaptive Systems Theory is particular appropriate for understanding healthcare systems since they are typically comprised of multiple factors that interact in diverse ways. The following example illustrates that, given that factors within healthcare organisations coevolve in nonlinear ways, there is often the danger that interconnections between factors may not be directly observable, causing them to be overlooked when healthcare services are developed. For example, McDaniel et al. (2013:4) discuss the work of Anderson et al. (1997) and point out that *'when nursing stations are relocated, the ways in which nurses can help each other may be drastically altered'*. This logistical separation can have devastating effects on the work of nurses, as they are no longer able to support each other's work, which may lead to a change in working

practices, limiting healthcare professionals' efficiency as they adjust to local change. The coevolution of this informal support is something developed at a local level as a means of fulfilling local requirements. Therefore, by employing a complex adaptive systems' lens it may be more possible to account for and understand the interdependencies between components in the system, which may lead to more accurate modelling and avoid design recommendations that cause fragmentation and discontent.

Nugus et al. (2010) use a complex adaptive systems perspective in their ethnographic work to explore the boundary work performed by healthcare professionals in an Accident and Emergency department. They found that healthcare professionals dealt with individual cases by asking three broad questions, which were sometimes implicitly indicated in their work: should patients be admitted into hospital under whom should they be admitted, and how might they be discharged safely while considering all of their healthcare needs? These questions acted as an intangible underpinning for the healthcare professionals' work, which spans across organisational boundaries. By taking into account the ways in which healthcare professionals develop nonlinear and emergent relationships within the Emergency department, Nugus et al. (2010) identified that their assessments of patients' trajectory through the department were inextricably tied to their immediate environment. For example, whether there were sufficient healthcare professionals, time and resources to deal with certain patients' trajectories. Consequently, a lack of such resources contributed towards the situational practices and healthcare decisions that were made by the healthcare professionals in the department. Their study revealed a constant negotiation between the patients' needs and the hospital's ability to fulfil those needs. Nugus et al. (2010:2002) also describe how the healthcare professionals operate in a decentralized manner, working across organisational boundaries and in different localities, while constantly negotiating patients' needs:

'A complex adaptive systems perspective advances social scientific accounts of health care, particularly notions of boundary-work and the patient trajectory, by locating [emergency department] work in the constantly shifting spaces between departments and services, rather than referring to boundaries with a primary focus on departments and services on either side of those boundaries'

As Nugus et al. (2002) report, a complex adaptive systems lens enabled them to observe various instances of boundary work and patient trajectory work, which emerged across time and space. Employing this approach, Nugus et al. (2002) were able to observe interactions, which occurred across boundaries rather than making assumptions about where these boundaries exist. To build on the work discussed in this section, the next section discusses how these can be drawn together to support better healthcare service engagement.

6.4 Discussion of Theoretical Frameworks

This section discusses the extent to which the above theoretical frameworks provide relevant and useful insights, which may support the conceptualisation of the process of healthcare service engagement. Table 2 below lists all the theoretical frameworks outlined in this chapter. It details all of the theoretical constructs that were identified within each theoretical framework, and summarises how these concepts may be applied to a healthcare service engagement context. Each theoretical framework is then discussed in detail.

Theoretical Framework	Identified Concepts	Applying the Concepts a Healthcare Service Engagement Context
Health Belief Model	Perceived seriousness, susceptibility and	The Health Belief Model provides further insight into how the beliefs of service users

(Hochbaum 1958)	inevitability of illness, perceived benefits and barriers to health behaviour, cues to action, motivating factors & self-efficacy.	affect their inclination to engage with service and self-care behaviours.
Theory of Self-Efficacy (Bandura 1977)	Self-efficacy, performance accomplishments, vicarious experience, verbal persuasion and emotional arousal	The Theory of Self-Efficacy describes four main sources of self-efficacy, which may be related to those experienced by service users and also healthcare professionals in a falls prevention context. For example, whether falls prevention skills are explained by healthcare professionals or enacted by service users has implications for their level of self-efficacy to perform these self-care behaviours.
The Patient Activation Measure (Hibbard et al. 2004)	Self-care, self-efficacy, self-care management.	The PAM offers insight into the developmental nature of healthcare service engagement and the need for different levels of motivation, self-efficacy, skills and knowledge to deal with some of the complexities of chronic illness, for example to ability to self-care under times of stress.
Precede-Proceed Model (Green and Kreuter 2005)	Health, social, environmental, predisposing, enabling and reinforcing determinants of health behaviour, health promotion, health policy, health education.	The Precede-Proceed Model's adaptability to diverse data sets makes it a suitable theoretical framework, within which other concepts found in this review may be incorporated.

	Multiple interacting variables, outcome of the system is unpredictable, systems develop over time in iterations, outcome dependent of the systems beginning state, complex adaptive systems are dependent on resources and develop through interactions with their environment.	The Complex Adaptive Systems Approach provides insights, which enable one to consider the process of healthcare service engagement as functioning within a wider healthcare context, as observed in the data. This approach also reflects some of the characteristics of the factors that affect healthcare service engagement as observed in the data in that they exemplify coevolving and unpredictable characteristics.
Complex Adaptive Systems (Waldrop 1992)		

Table 2: Summary of Theoretical Frameworks

6.4.1 Health Belief Model

This Health Belief Model provides the theoretical underpinning to understand why some of the users' beliefs affected their engagement with the falls prevention service; in particular, my findings show how many service users do not believe that falls can be anticipated or prevented and they therefore attribute a low level of *seriousness* to their *susceptibility* to falls. The belief that falls cannot be anticipated influences service users' willingness to engage in falls prevention activities. This belief also represents a disjoint between the world of the service user and that of the healthcare professional, who has seen first-hand that falls can in fact be prevented. The *susceptibility* concept from the Health Belief Model therefore supports the understanding and representation of the barriers related to health beliefs, which ultimately influence healthcare service engagement.

The Health Belief Model also reflects a number of the factors that have emerged from the analysis undertaken in previous chapters, such as the perceived *susceptibility* and *seriousness* attributed to falling; the perceived *barriers* and benefits of engaging with the falls prevention service; service users' *self-efficacy* towards engagement behaviour; and whether there exists an effective *cue to*

action (HochBaum 1958). These ideas account for some of the factors that influence healthcare service engagement and, in doing so, offer insight that may be incorporated into a framework that reflects the process of healthcare service engagement. However, there are a number of limitations to this conceptual framework that should be considered to ensure that it reflects the concepts and relationships found in the data.

The concepts outlined in the Health Belief Model illustrate the complexity of healthcare service engagement and the number of processes involved in an individual's assessment of their current health situation. The Health Belief Model therefore accounts for multiple levels of self-reflection, which enable individuals to evaluate whether or not a particular health activity is worth enacting, thus offering a useful account, which may be used to understand healthcare service engagement.

One limitation is that the Health Belief Model does not indicate or consider the relationships between these beliefs. For example, the ways in which service users' *perceived benefits* of performing a self-care behaviour interact with their *self-efficacy* for that behaviour. Champion and Skinner (2008:50) point out that *'analytical approaches to identifying these relationships are needed to further the utility of the Health Belief Model in predicting behaviour'*. Furthermore, the framework doesn't take into account the environmental factors that influence health behaviour. Therefore, the relevant concepts identified in the Health Belief Model would need to be applied to healthcare service engagement as part of a more comprehensive model.

6.4.2 Theory of Self-Efficacy

The Theory of Self-Efficacy (Bandura 1977) is particularly insightful when evaluating service user's level of engagement as it facilitates the deconstruction of their various sources of efficacy. This helps one to understand how different

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experiences of healthcare, whether first or second-hand, suggested or emotionally induced, may influence their engagement. Self-efficacy theory accounts for and values the internal cognitive processes, which influence human behaviour, and their relationship with the social influences that evoke these cognitive processes. By understanding how the human mind reacts to specific stimuli or *'sources of efficacy'* (Bandura 1977:195), one might be able to design interventions that harness these sources of efficacy in an attempt to increase self-efficacy towards specific self-care activities. Bandura (1977:195) points out that *'performance accomplishments'* or activities physically enacted by individuals, if performed successfully, provide them with high self-efficacy to complete these activities in the future. In the falls prevention context, this is seen when the falls team encourage service users to perform exercises in their home before attending the strength and balance exercise class, which produces a greater source of efficacy towards exercise than simply telling them how to complete the exercise.

Despite the insights offered by Self-Efficacy Theory, it only accounts for the self-efficacy factors as observed in the findings, which, although important, is only one factor in the process of healthcare service engagement. Like the Health Belief Model, Self-Efficacy Theory doesn't account for the relationships between concepts that have emerged from the data. For example, the findings show that having low self-efficacy for specific self-care behaviours is interconnected with other factors of engagement such as (1) service users' rapidly changing health status; (2) beliefs, attitudes and values; (3) perceptions of how falls occur and their personal susceptibility to falling; (4) previous experiences with healthcare services; (5) access to informal care and support; (6) the communicational skills, responsiveness and experience of healthcare professionals; (7) and the organisation of the falls prevention service, all of which have important implications for service users' engagement. Section 5.2.4.4 describes husband and wife John and Jen's low self-efficacy for using escalators, stepping over curbs and getting in and out of the car. The findings show that their health conditions,

previous experiences, knowledge of their own ability, and each other's beliefs inform their low self-efficacy. John and Jen's statements reveal that their fear of falling, and low self-efficacy for being in unknown environments, are at least in part reinforced by each other. Jen stated that *'I've always been very wary of curbs, you know if I see a high curb I try and miss it',* and John explained, *'I've got to be very careful stepping over those stones that are at the side of the flower beds'.* Therefore, to accurately reflect the findings from this study, a theoretical framework would need to show the relationships between self-efficacy and other factors that affect engagement.

Furthermore, Kate's self-efficacy for leaving her home had an emergent and accumulative onset, in that her decrease in physical mobility and mental health caused her to increasingly doubt her ability to leave her home independently. Therefore, although self-efficacy theory provides an understanding of how self-efficacy may be affected through different interactions, it doesn't account for the ways in which self-efficacy is affected by other determinants of engagement as part of a temporal and emergent process. The employment of self-efficacy theory may be complemented by also using concepts found in the complex adaptive systems approach so that the emergent nature of self-efficacy may be considered and will better reflect the process of healthcare service engagement.

6.4.3 The Patient Activation Measure

The 'Patient Activation Measure' (PAM) by Hibbard et al. (2004) supports the understanding and analysis of the process of engagement as it indicates a number of ways in which self-care behaviours can be defined and quantified. It also offers a shorthand way to evaluate service users' self-efficacy for specific tasks to ascertain where support may be required. The PAM highlights that the engagement process may be defined in sequential stages, because service users' ability to engage strengthens and become more resilient as they develop their repertoire of skills, knowledge and self-efficacy. Although it was observed in the

data that engagement amongst service users with complex healthcare needs is characterised by non-linearity, some linear features of the process were also noted, which relate to the stages outlined in the PAM. For example, the findings of this study indicate that service users need to engage with the service before they can engage with the self-care behaviours that are prescribed by the service. This is because service users must first of all believe that they are susceptible to falling and also believe that their health would benefit from engagement with the falls prevention service. Similarly, the initial stages of engagement as described in the PAM also point to the role of belief by asking service users if they believe themselves to be *'responsible for their health'* and that their *'active role is important'* (Hibbard et al. 2004:1017). As these concepts reflect findings that were observed in the data, they could therefore be employed as part of the conceptualisation of the process of healthcare service engagement.

The specificity of evaluating self-care behaviours in this way also represents a limitation in that it pre-defines different scenarios rather than allowing services users to define which self-care activities are important to them and which things affect them. For example, accounting for the ways in which service users' symptoms of chronic illness, social support and the resources available influence the service users' ability and self-efficacy to self-care, which the PAM doesn't account for. In this sense, the measure is too restrictive, as it predefines influences of engagement, rather than allowing new findings to inform these categories. For example, one of the questions on the PAM model states *'I am confident that I can follow through on medical treatments I need to do at home'* (Hibbard et al. 2004:1017). Without considering the influence that other factors have on service users' ability to self-care, it is difficult to properly evaluate whether or not they may actually perform self-care behaviours. For example, a service user may have high self-efficacy for performing self-care such as a home exercise as part of the falls prevention programme. However, if they have yet to receive the exercise booklet and other instructional resources from the district

nurse they will not be able to perform this self-care behaviour. The performance of self-care behaviours therefore extends far beyond whether a service user has a strong belief in their personal ability.

Another important influence the PAM does not account for are the individual practices employed by healthcare professionals. For example, the findings presented in Section 5.3 illustrate how the falls prevention team individually tailored and communicated healthcare information; built trust; employed empathy; and made local adaptations of the service to meet service users' needs, which had important implications for service users' engagement.

6.4.4 Precede-Proceed Model

The Precede-Proceed Model (Green and Kreuter 2005) is well-suited to support the conceptualisation of the process of engagement, as it offers a comprehensive framework, comprised of factors that reflect those found in this study. The model identifies several factors that were also identified in my findings for example, predisposing, reinforcing, and enabling constructs allow one to consider belief and attitude, support and the resources available to service users as means of conceptualising their engagement. The Precede-Proceed model also indicates some of the relationships between constructs, for example, that the availability of resources and ways in which healthcare is delivered influence service users' predisposing views towards healthcare services and can affect their access to healthcare. This relationship between factors was also revealed in the data in Section 5.2.4.4 where John felt disenfranchised by the NHS, which had implications for his willingness to engage with new healthcare services. For example, he said, '*I got the impression that they weren't gonna be doing anything more for me'*.

The flexibility offered by the Precede-Proceed Model allows one to incorporate data from this study to identify relationships between factors that

affect engagement. There is therefore an increased likelihood that users of the model (healthcare professionals) will be able to relate to the models' contents. Finally, the Precede-Proceed Model acknowledges that different groups of people require different types of support to engage with healthcare services, and that healthcare interventions should therefore be tailored towards the specific needs of its users. As healthcare service engagement has been observed as a highly subjective process, affected by service users' local environments and personal experiences, a model that individually develops recommendations to their specific needs is particularly valuable.

The application of the Precede-Proceed Model by Makrides et al. (1997) provides useful insights, which highlight the predisposing, reinforcing and enabling factors that influence healthcare professionals' behaviour. For example, healthcare professionals' beliefs and perceptions about service users' willingness to make health change is particularly insightful, as it enables one to understand their practices and the ways in which they deliver healthcare. Other factors that Makrides et al. (1997) application of the Precede-Proceed Model highlighted include time, skills and the attitudes of other staff, service user and professional associations.

Given the Precede-Proceed Models' ability to house other theoretical frameworks and individual concepts, it will be employed as a means of providing structure to the new theoretical framework. The full details of how this will be achieved are described in the following chapter, Chapter 7.

6.4.5 Complex Adaptive Systems Theory

The characteristics within complex adaptive systems as described by the Health Foundation (2011) reflect many of the dynamics that have been identified in the falls prevention service. For example, the Complex Adaptive Systems Approach recognises complex systems as being comprised of several factors that

interact with each other in different ways. What makes this a feature of a complex adaptive system, however, is that these factors co-evolve as a result of the present, 'in-the-moment', and historical conditions. These conditions both influence and are influenced by interactions within the system and have the potential to create several different outcomes.

'*Health care organisations are an ideal setting for the application of complexity science due to the diversity of organizational forms and interactions among organisations that are evolving*' (Begun et al. 2003:252). The falls prevention service arguably exemplifies this level of complexity in that the practices of the falls prevention team co-evolve in interactions with service users. For example, the attitudes' of service users, their historical and in-the-moment experience of healthcare services, self-care practices, healthcare professionals, and their belief in their need for healthcare all affect and are affected by the healthcare delivery that is provided by the falls prevention team. The occupational therapist illustrates this interconnection when she conducts a situated evaluation of service users' objections to assistive equipment. She points out that: "It's about pitching it right for every person, you can't just be the same person all the time, in fact you've probably got to be different people each time so you've got to be able to do that, you've got to suss it out pretty quickly".

Identifying the emerging objections that service users have about suggested equipment is just one of the factors that influence the occupational therapist's presentation and delivery of the equipment. Other influences include her knowledge of the equipment, which is also emergent through interactions, her experiences of other service users' feedback about equipment, her understanding of the aims of the service, her mood that day, motivation to work and so on. It is therefore evident that engaging service users with equipment is an emergent process that is produced by a wide range of both observable and invisible conditions that fluctuate over time. Analysing healthcare service engagement in

this way may therefore provide a useful insight into how engagement occurs or is produced.

Healthcare service engagement as a non-linear process is something that was observed in the data, and therefore is concurrent with a complex adaptive systems approach. Tsasis et al. (2012:5) state that *'because elements change and behaviour is emergent in complex adaptive systems, cause and effect relationships are not directly evident or linear'*. Instead there exists a constant interplay between the influences that affect healthcare engagement as described above, therefore engagement can be better represented as occurring in cycles or feedback loops (Philippe and Mansi 1998), rather than occurring in a linear and controllable way. As the complex adaptive systems approach acknowledges the importance of historical events in a patient's history, it shows how conditions that have emerged from different places and points in time influence the system at present. If one considers the emergent ways in which components of the healthcare service engagement co-evolve, and the influence that historical conditions have on engagement, it becomes apparent that the process of healthcare service engagement is inherently non-linear. This is because influences such as illness, disability, self-care needs, social support, access to healthcare information and resources are variable and constantly evolve as they interact. Subsequently, healthcare engagement cannot be understood using a linear framework. Yet, despite the clearly non-linear interactions between influences on engagement, there are aspects of healthcare engagement that display linear tendencies. For example, the healthcare information, resources and information about self-care practices service users systematically receive along the falls prevention service pathway are produced in a linear way; however their subsequent interactions with other variables create non-linearity.

Complex adaptive systems are typically embedded within other systems. Employing this understanding to the process of engagement is useful in that

healthcare service engagement also occurs within other complex adaptive systems. For example, a number of service users described how, in addition to interacting with healthcare professionals within the falls prevention service, they also interact with a number of other professionals and services outside falls prevention. In this sense, the falls prevention service exists as part of a wider healthcare context, within which various healthcare services interact and evolve continuously.

The components of complex adaptive systems are not aware of the system as a whole, but instead co-evolve in relation to their environment to ensure the most suitable fit (Health Foundation 2011). This feature can be seen reflected in the thesis findings where healthcare service engagement is not controlled and organised centrally but emerges in accordance with the local needs of the system. This feature of healthcare engagement was exemplified by the local and situated practices of the triage nurse. For example, in Section 5.3.5 describes how the triage nurse utilises the unused appointments of service users who have been discharged from the service as a means of enabling high-risk service users faster access to the service. This process takes place at a local level and in response to the situational needs of service users without consulting the wider service system.

Nugus et al.'s (2010) complex adaptive systems work in an emergency department is also reflected in some of the complexities that have been observed in the falls prevention service. Their approach enables one to consider healthcare practices as emergent, highly dispersed, and a reaction to real time events. It also enables one to understand the interconnection between the decisions being made by healthcare professionals in relation to their environment and the resources available to them at that time. Nugus et al. (2010:2002) bring to our attention the temporal nature of emergency departments as complex adaptive systems suggesting that healthcare professionals both *act and react in real time*. This characteristic of emergency departments is also useful in understanding the ways

in which the falls team provide care to, and support the engagement of, service users as they respond to different barriers and objections as they emerge, the cause of which is multifaceted and dispersed. Nugus et al. (2010:2002) point out that a complex adaptive systems approach is *'well-suited to examining the interactions of parts "between" systems rather than merely "on" the boundary of two services or units in an organization'*. This particular approach may therefore be useful as a means of better understanding the relationships between the components of engagement, while considering how they extend beyond systemic and organisational boundaries.

6.5 Conclusions

The goal of this chapter was to provide a theoretical context for the factors and behaviours that were observed in the process of healthcare service engagement. Identifying and discussing relevant theories and insights to ground the construction of a new model in the next chapter achieved this. To ensure that they are suitable and generalisable in a meaningful way, this chapter used the discussion to import them into the context of healthcare service engagement. The insights will directly inform the development of a new theoretical framework in the next chapter; one that more completely reflects the process of healthcare service engagement.

As a theoretical basis for the new model, the Precede-Proceed Model (Green and Kreuter 2005) offers a suitable meta-theoretical framework that resonates with many of the factors found in the data. These factors include: (1) service users rapidly changing health status; (2) beliefs, attitudes and values; (3) perceptions of how falls occur and their personal susceptibility to falling; (4) previous experiences with healthcare services; (5) access to informal care and support; (6) the communicational skills, responsiveness and experience of

healthcare professionals; (7) and the organisation of the falls prevention service; (8) interconnections between the aforementioned factors; (9) interconnections between the process of engagement and a wider healthcare context (10) non-linearity.

Self-efficacy Theory and the Health Belief Model[36] will also be drawn on while conceptualising the process of healthcare service engagement, as they provide further insight into the predisposing factors component of the Precede-Proceed Model. Relevant concepts from the PAM (Hibbard et al. 2004) and Complex Adaptive Systems Theory (Waldrop 1992) will also be incorporated into a new theoretical framework. The PAM (Hibbard et al. 2004) is relevant as it describes the accumulative skills, knowledge and the development of beliefs that support engagement, which are also reflected in the stages/types of engagement that were observed in earlier chapters, for example service and engagement and self-care engagement. Complex Adaptive Systems Theory (Waldrop 1992) is drawn upon in the following chapter as it provides relevant insights into the behaviours of the factors that effect engagement. For example, by highlighting their coevolving interconnected and non-linear nature, their interactions with other systems that operate outside of the boundaries of the falls prevention service, and that small changes of factors that occur in response to local requirements can cause large effects to the process of engagement as a whole.

The following chapter introduces the new Healthcare Service Engagement Model, describing each of its factors and how it should be applied in practice.

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[36] For other healthcare research that combines the Precede-Proceed Model, Health Belief Model and the Theory of Self-Efficacy see Khorsandi et al. (2012).

Chapter 7. Towards a New Healthcare Service Engagement Model

7.1 Introduction

This chapter introduces the Healthcare Service Engagement Model, its conceptual underpinnings, and introduces a series of steps that describe how healthcare professionals should interpret and apply it. The development of the Healthcare Service Engagement Model directly responds to the research question: *'How can healthcare service engagement be conceptualised for service users with complex healthcare needs?'* The analysis in Chapter 5 revealed a wide range of interconnected factors that interact and evolve in accordance with service users' individual circumstances. Stepping back, Chapter 6 noted that, although existing theoretical frameworks model one or more particular factors, the community lacks a framework, which models all of the features of the engagement process among service users with complex healthcare needs, as they were observed in this study.

The Healthcare Service Engagement Model presented in this chapter is therefore intended to represent and conceptualise the nature of healthcare engagement for service users with complex health needs. The Healthcare Service Engagement Model is an evaluative framework that is designed to help healthcare professionals to identify how and where service users' engagement may be more effectively supported, and how they might adapt their practices to achieve this. It does this by capturing and articulating the interconnected factors that affect the

process of healthcare service engagement into a single cohesive model. The Healthcare Service Engagement Model can be classed as a meta-model and has a theoretical basis informed by Precede-Proceed (Green and Kreuter 2005) and others described in Chapter 6. Although validity in the traditional scientific sense has been argued to be ill-suited to models constructed through grounded theory, this chapter demonstrates the relevance, workability, and modifiability (Strauss & Corbin 1990) of the Healthcare Service Engagement Model, by describing its links to the findings of this research, and providing guidelines for its application, which demonstrate its flexibility to respond to service users' varying engagement needs.

The chapter is split into three main sections. Section 7.2 illustrates the Healthcare Service Engagement Model and provides a high-level description of how it models the process of healthcare service engagement. It systematically describes each factor of the model, connecting each to key insights revealed in the findings. These are highlighted in boxes that separate them from the main text. Section 7.3 makes the model available to healthcare professionals by providing a step-by-step guide of how to use it in practice. This section includes information about the model's target audience (healthcare professionals from the falls prevention service) and details the ways in which using the model can inform their practice to more effectively support healthcare engagement. Lastly, section 7.4 presents a critical reflection of the Healthcare Service Engagement Model, outlining both its key qualities and limitations.

The overall function of this chapter and the Healthcare Service Engagement model is thus threefold: (1) it aims to better conceptualise the process of healthcare service engagement, which is grounded in the data; (2) it describes a reflective tool for healthcare professionals, and (3) it offers evidence that the model is relevant, workable, and suitable for practitioner use.

7.2 Model Structure and Illustration of Terms

The Healthcare Service Engagement Model (Figure 6) is reflective tool that can help healthcare professionals holistically assess the process of healthcare service engagement. It distinguishes itself from other models by virtue of considering the whole process (a non-linear complex system) and a reflective design that is conducive to changeable external factors.
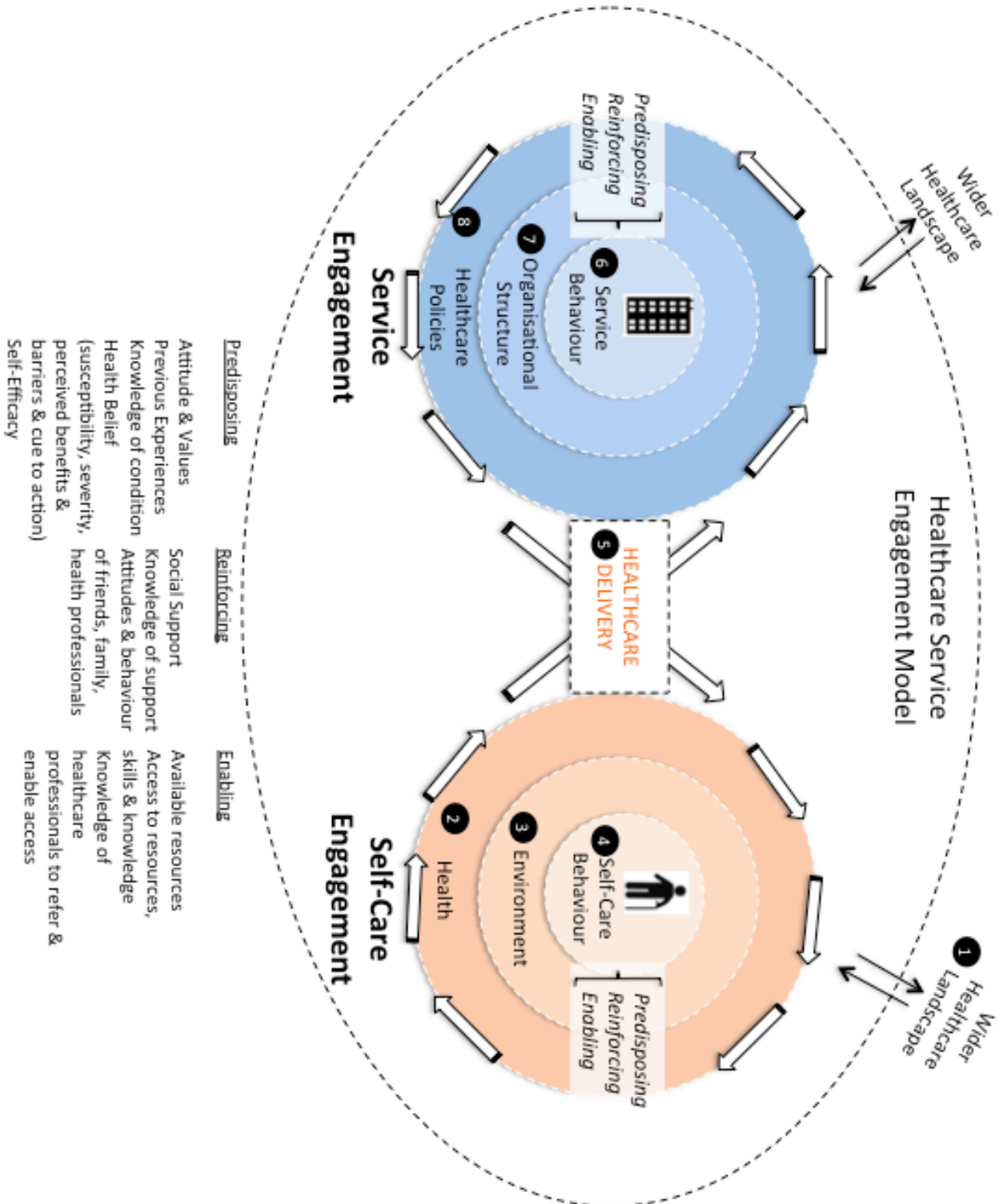
Figure 7: Healthcare Service Engagement Model. Descriptions of the factors comprising the model are described in Section 7.2.

The structure of the Healthcare Service Engagement Model follows the Precede-Proceed Model (Green and Kreuter 2005), in that takes a healthcare problem (i.e. engagement with the falls prevention service) and follows a series of steps that ultimately inform healthcare practice. Steps 1-4 reflect on the self-care engagement behaviour of service users, and steps 5-8 develop recommendations, designed to support those behaviours through the practices of healthcare professionals. Each of the numbered factors depicted on the model enables healthcare professionals to reflect upon different aspects of service users' engagement in a holistic way.

Immediately apparent is the cyclic nature of the visualisation; mirroring the cyclic nature of engagement among service users with complex healthcare needs (depicted by the arrows in a figure of eight). This is because the findings indicate that the engagement process has no start or end point, but rather continually emerges whether service users are recipients of healthcare or not (see Section **Error! Reference source not found.**). Another major feature within the model is the two sets of concentric circles. These represent the two different stages/types of healthcare service engagement: Service Engagement (left) and Self-Care Engagement (right). This is because the model is grounded in how engagement occurs in the falls prevention service and thus to an extent mirrors its pathway of care (see Section 4.3). The two translucent boxes that overlap both of the concentric circles depict that both service users' engagement with the falls prevention service and self-care behaviours are influenced by a number of predisposing, reinforcing and enabling factors listed on the model (Green and Kreuter 2005). These factors (expanded upon respectively in Section 7.2.12) typically emerge in preceding interactions with healthcare professionals[37], which have occurred prior to the service user's referral into the falls prevention service

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[37] For example, with a wide range of healthcare professionals who refer service users into the falls prevention service. These healthcare professionals are described in Section 4.3, Figure 1 'Referrals into the Service'.

(see Section 5.2.4.4). The entire process of engagement is depicted as occurring within a wider health and social care context (large oval that encases the model, number 1).

The model reflects the process of healthcare service engagement: following the first stage of engagement (Service Engagement), healthcare is delivered by the falls prevention team that encapsulate a wide range of healthcare practices. Through various assessments,[38] the falls prevention team prescribe a range of self-care behaviours[39] the service user must engage with and perform as a means of reducing their risk of falling. The second stage of engagement (Self-care Engagement), like the first, is also subject to a range of predisposing, reinforcing and enabling factors that influence service users' ability and inclination to perform self-care behaviours.

The following subsections describe each factor of the Healthcare Service Engagement Model, detailing how they were informed by the findings of this study, and by existing theoretical frameworks.

7.2.1 Cyclic Arrangement of Factors

The Healthcare Service Engagement Model is illustrated to reflect a non-linear and cyclic arrangement. Its cyclic format represents the continuous way in which engagement emerges from multiple interacting factors within the system. This cyclic arrangement is illustrated by the fourteen white arrows that symbolise no definitive entry or exist point from the engagement process (see Section 5.2.4.4). By depicting healthcare service engagement as occurring in this cyclic manner, it became possible to illustrate complex interconnections between factors of engagement, which also act as 'feedback loops', creating evolution within the

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[38] These assessments may be referred to in Section 4.3.1 'Falls Risk assessment'.
[39] These self-care behaviours are dependent on the service users' individual needs and the healthcare professionals' specialism and are described in Sections 4.3.2 through 4.3.7.

system (Philippe and Mansi 1998). This encourages users to reflect on one of the key findings of this study: the necessity for continuous evaluation.

The cyclic and non-linear nature of engagement was observed when service users described how multiple factors affected their engagement continuously and simultaneously, and often extended across space and time. The following example presents some factors from a particular case that also refers to different parts of the model. In Section 5.2.4.4 a service user named John described how (1) disenfranchising healthcare service encounters, which prompted perceptions that the NHS have a lack of commitment to the elderly; (2) his poor physical health; (3) dangerous physical environment (steep and uneven pavements for example); and (4) complex self-care routines all have a continuous influence on his engagement.

7.2.2 Interconnections between Factors

The blurred boundaries between the factors within the Healthcare Service Engagement Model are depicted by semi-permeable lines and faded boxes as a means of illustrating that *'boundaries are not necessarily naturally-occurring but are foregrounded by the researcher to understand the system and its dynamics'* (Nugus et al. 2010:2002). In this sense the model acknowledges that factors do not influences healthcare engagement in isolation, but are instead inextricably connected to all the other factors. This depiction of the process of healthcare service engagement therefore employs insights from the Complex Adaptive Systems theory by *'recognising complexity, patterns, and interrelationships rather than focussing on cause and effect'* (The Health Foundation 2010: 6). By emphasising the importance of interconnections between the different factors, it is

possible to identify and better support key relationships, which are particularly transformative for engagement. For example, McDaniel et al. (2013) note the importance of identifying valuable interconnections within healthcare systems and in particular the informal supports provided among nurses whose work is enacted across organisational boundaries. McDaniel et al. (2013) describe that a failure to recognise these relationships resulted in understaffing when nursing stations were relocated and the informal support, which responded to local service requirements was no longer accessible.

By focusing on the relationships between factors rather than the output of engagement, it is also possible to identify that some interconnections exemplify more of a transformative effect than others. For example, Section 5.2.2 describes how a service user's suddenly changing health status, and the influence this has upon her level of self-efficacy is particularly transformative for her engagement at this point in time.

7.2.3 Self-Care and Service Engagement

The Healthcare Service Engagement Model depicts healthcare engagement as occurring in two stages/types: Service Engagement and Self-care Engagement. In the first stage, service users physically engage with the service by allowing the triage nurse to enter their home to conduct an assessment, read appointment letters and other service information that has been provided to them (see Section 4.3.1). This enables them to access relevant self-care skills and resources in the second stage of engagement (self-care engagement). Both stages of engagement are influenced by the service user's predisposing values, beliefs and attitudes that emerge as potential barriers for their engagement (see Section 5.2.4.4). These two

stages of service and self-care engagement were not directly reflected in the theoretical frameworks that were reviewed; however the Patient Activation Measure (Hibbard et al. 2007) did account for some of the factors that comprise these two stages. For example, Hibbard et al. (2007) describe that to engage with self-care behaviours service users must first believe that they are *'responsible for their health'* and that their *'active role is important'* (Hibbard et al. 2004:1017). By accounting for and addressing these beliefs at a service stage of engagement, service users are more likely to engage at the self-care stage of engagement.

The two stages of engagement were exemplified in Section 5.3.3, which describes the falls prevention nurse thoughtfully providing relevant and accessible information during an assessment. By explaining the service users' health condition in a way that could be easily understood and acted upon at the service stage of engagement, the service user was then able to perform specific self-care behaviour, for example:

> *'We learned more off her about what's not right with me in about 2 hours than off anybody'* (Len)

> *'She described it as all the electrical currents in Len's brain and some of them are cut off and when that electrical current is going across those particular blood vessels it stops, and that's when he freezes, so she said don't panic, stay where you are which we haven't had to do, and we don't wanna have to do it, but at least she understood'* (Sally- service users' wife and carer)

7.2.4 A Wider Healthcare Landscape

The entire process of engagement is depicted as taking place within a wider health and social care landscape (1). This is illustrated by the large oval ring that encases the model. This signifies on-going interactions between both service users and healthcare professionals, and other healthcare services, knowledge, practices, resources, attitudes and beliefs that lie outside the falls prevention context. This part of the model is particularly important to acknowledge among elderly, chronically ill service users given their increased and varied use of other healthcare services (DH 2012). Not surprisingly then, service users with complex healthcare needs, also tend to exemplify complex healthcare service engagement needs, which is characterised by multiple appointments across services, across various lengths of time, and which occur with multiple (not always connected) healthcare professionals (see Section 5.3.6).

Also informing this factor of the model are insights from Complex Adaptive Systems theory (Waldrop 1992). For example, The Health Foundation (2010:8) describe that complex adaptive systems are defined *'openness, so it may be difficult to define system boundaries' and that 'any element in the system is affected by and affects several other systems'*. Similarly, the process of healthcare service engagement is also open to other service systems, thus, a semi-permeable line depicts the boundary of the process (1). Therefore, by considering the engagement process as taking place within a wider health and social care context, it is possible to identify how other services and interactions have implications for engagement within the falls prevention service.

This interconnection between service users' engagement with the falls prevention service, and the wider healthcare landscape was detailed in Section 5.2.4.4, when a service user named John described how previous service encounters informed his perception that the NHS have a lack of commitment

towards the elderly. This perception of healthcare service then contributed towards his willingness to report his health conditions and interact with healthcare services:

> *'I think that the fact that they were giving me these painkillers*
> *I got the impression that they weren't gonna be doing*
> *anything more for me' (John)*
>
> *'They don't spend much time with you' (John)*
>
> *'I think that I should have had an X-ray to find out what was*
> *happening… and I just got the impression that they've spent*
> *all they were gonna spend on me' (John)*

7.2.5 Health

The Health feature (numbered 2) lies on the right-hand side of the model and refers to the service users' health status in relation to their engagement. Service users' health 'status' is traditionally used as a measure of service users' engagement as was observed in the data (Section 5.2.2), and a strong connection has also been made in existing literature (Ellins & Coulter 2005; Fortin et al. 2007; Bayliss et al. 2007; Lehnert et al. 2011; Baumann & Dang 2012). Like all the other factors in the model, service users' health is not something that can be assessed in isolation, as it shares reciprocal relationships with all other factors. For example, elderly, chronically ill service users' health is closely related to their healthcare literacy (Baker et al. 2000); the role played by healthcare professionals (Dickenson et al. 2011); and their environment and ability to stay mobile (Metz 2000). These three factors are described in the self-care behaviour (4); healthcare delivery (5); and environment (3) parts of the model.

When service users' health deteriorates, their ability to perform self-care behaviours and to engage with the service correspondingly declines. This correlation was discussed in Section 5.2.2 where a service user named Kate was unable to leave her home, attend appointments, perform home exercises or even cook for herself as a result of her diminishing health. Also Section 5.2.1 described illustrative examples whereby healthcare professionals explained the low capabilities of service users as a result of their age and poor health:

> *'Sometimes they just, they haven't got the energy, sometimes people's daily life is such a struggle that they just can't summon up the energy so no matter how you explain it' (OT)*

> *'Some people are obviously quite poorly… so everything is a struggle' (Physiotherapist)*

Therefore, attempts to support self-care behaviours are intrinsically linked with the service users' physical and mental state of health and must therefore be considered.

7.2.6 Environment

Environment (numbered 3) refers to a service user's physical and social environment and encircles the self-care behaviour factor on the right side of the model. The environment factor in the model refers to a service user's physical, social and economic environment, which include their physical location, physical living conditions and transportation; loneliness and social isolation; and their income to name a few. This part of the model borrowed insights from the Precede-Proceed Model (Green and Kreuter 2005) as they reflect some of the findings from this study, which are described in the example box below. Reflecting on the physical, social and economic environment of a service user

helps to understand the ways in which these broad influences interact with service user's ability and inclination to perform self-care behaviours.

Section 5.2.3 described the some of the ways in which the occupational therapist addressed service users' physical environmental conditions by them with assistive equipment and suggesting home modifications. Service users' engagement with self-care behaviours is thus intrinsically linked with their physical environment and its suitability to perform such behaviours.

The findings also indicate some for the ways in which service users' social environment has implications for their engagement. For example, Section 5.2.2 describes that a service user named Kate never married, has no children and also has no living relatives who live near to her. Kate's social environment therefore presents particular challenges for her to engage with self-care behaviours, namely isolation and loneliness for which she relies heavily on the social support of her friend (see Section 5.2.5).

7.2.7 Self-Care Behaviour

The self-care behaviour part of the model (numbered 4) is at the centre of the concentric circles on the right-hand side. Self-care behaviours encapsulate behaviours that are performed by the service users for the 'prevention of illness or accidents; care for minor ailments or long term conditions' (The Department of Health 2005:1). This part of the model represents the action or inaction of service users that leads to specific self-care behaviours. It also represents the types of self-care behaviours that should be performed in response to the health and environmental factors that were outlined in step 2 and 3 of the model. This may involve taking medication, eating healthily, doing home exercises, using assistive

equipment or performing any other action that promotes their health and wellbeing.

The model uses the predisposing, reinforcing and enabling factors from the Precede-Proceed Model (Green and Kreuter 2005), which all inform service users' Self-Care Behaviour. These factors are depicted in three separate lists underneath the model and are also presented later on in Table 4. The predisposing, reinforcing and enabling factors, which inform self-care behaviour include attitudes and beliefs of service users and the behaviour and attitudes of others towards specific self-care behaviours. They also include the resources that are available and can be accessed by service users, which may support or thwart the enactment of specific self-care behaviours.

As with other factors of the model, self-care behaviour, health, and the environment are separated by semi-permeable lines to indicate their interconnectedness. By representing fluidity between service users' health and environment, and their self-care behaviour, the model acknowledges that all factors are subject to constant change due to illness, disability, and changes in both their physical and social environment (see Section 5.2.2).

The following example illustrates how a service user's fear of losing her independence, and belief in the benefit of exercise motivates her engagement with self-care behaviours. This example represents the service users' predisposing view towards self-care behaviours, as she see's them as a means through which she may maintain her independence.

> *'I shouldn't live alone but I refuse to go into sheltered accommodation yet, I'm not ready for it yet, it would kill me that, it would kill me, I'd give up, so as long as I can keep going lovey and I will go back to the fall clinic, I will ring 'em and get these exercises' (Kate)*

> *'I still do my things when I remember; you know what she*
> *taught me at hospital for my shoulder, I still do that' (Kate)*

7.2.8 Healthcare Delivery

Healthcare Delivery (the various processes that connect service users to the falls prevention service) is depicted in the centre of the model to reinforce (1) its pivotal role in interactions that affect healthcare service engagement and (2) healthcare professionals' ability to influence other factors within the system through their delivery of healthcare.

The Healthcare Delivery feature of the Healthcare Service Engagement Model is informed by Makrides et al.'s (1997) application of the Precede-Proceed Model, in which they highlight the predisposing, reinforcing, and enabling factors that affect the behaviour of healthcare professionals. For example, they account for healthcare professionals' knowledge, beliefs about service users' willingness to change their health behaviour, time, skills, and the influence that their colleagues, service users and other professional associations have upon their behaviour. The full list of factors offered as guidance for those interpreting the healthcare service engagement model is described in Section 7.3.5. Accounting for these factors, users of the model are able to identify the relationships between healthcare delivery and other influencing factors. By acknowledging the multiple contributors of healthcare professionals' behaviour, it may be possible to develop targeted recommendations as a means of better supporting healthcare service engagement.

> Healthcare professionals are able to influence service users' engagement through their delivery of healthcare in a number of ways. These include;

tailoring health information for each service user (Section 5.3.1); building trust with service users (Section 5.3.2); effectively communicating health information (Section 5.3.3); their experience and knowledge of mental health (Section 5.3.4); prioritising high risk service users (Section 5.3.5); and managing long term illness (Section 5.3.6).

7.2.9 Service Behaviour

The Service Behaviour part of model is labelled on the left (6). The Healthcare Service Engagement Model borrows the 'behavioural factors' element from the Precede-Proceed Model (Green and Kreuter 2005) to inform the Service Behaviour factor. The Service Behaviour part of the model represents both the actions and inactions of service users, which leads them to engage with the falls prevention service. These behaviours may include a service user accepting a health professional into their home; taking part in an assessment; attending a healthcare appointment; self-referring themselves into the service; asking a healthcare professional about falls prevention; or reading healthcare literature to better understand which services are relevant for their healthcare needs (see Section 4.3.1). Essentially, Service Behaviour refers to any behaviour that represents the bureaucratic stage of engagement before self-care behaviours are prescribed. The service engagement factor is important for understanding the various influences service users may encounter at this stage of engagement, which may differ from self-care engagement. For example, service users may have negative predisposing views towards healthcare services which prevents them from engaging at a service level; but positive predisposing views of self-care behaviours, which supports their engagement at the self-care stage (see Section 5.2.4.4).

To represent the influences that affect service users' behaviour at the service stage of engagement, the predisposing, reinforcing and enabling factors from the Precede-Proceed Model (Green and Kreuter 2005) are also depicted as influences on service behaviour (see Table 4). These factors account for the attitudes, support and resources that enable or hinder service engagement behaviour. These three factors are later described in Section 7.2.12.

Service behaviour was exemplified in Section 5.3.2 when the falls prevention nurse sensitively elicited information from a service user, who was reluctant to fully participate in the assessment process. During this assessment the nurse needed the service user to acknowledge her excessive alcohol consumption so that she could provide her with appropriate self-care support:

> *"It comes out eventually...only because I'd not gone to her*
> *and said I know you drink because this person's told me, I go*
> *round the houses, ask her other questions... so it takes a lot of*
> *time, it's the confidence, I need to gain that confidence and*
> *it's very difficult when you've got such a short time to see the*
> *person" (Nurse)*

As illustrated in this example, the nurse works hard to build trust and confidence by taking time and seeking the acknowledgement from the service user that she actually needs to modify her self-care behaviour. Without this acknowledgement from the service user, it is unlikely that any self-care advice or resources would be utilised by her.

7.2.10 Organisational Structure

The Organisational Structure (7) is depicted in the ring around Service Behaviour to signify that service behaviour is also partially determined by the

organisational structure of the service. Employing the service's organisational structure as a means of reflecting upon healthcare service engagement draws on Precede-Proceed (Green and Kreuter 2005), in that it accounts for organisational protocols, culture, time, personnel, skills, and space afforded to healthcare services. The service's organisational structure therefore influences the types and number of healthcare professionals who work within the service, the ways in which service users are bureaucratically processed, and the amount of time allocated to each interaction between the service and service users.

The organisational structure of the falls prevention service, while offering multidisciplinary assessments, knowledge and resources to service users (Section 4.3.1), also represents a source of confusion because service users find it difficult to keep track of the role of each healthcare professional on the falls prevention team. For example, some of the service users displayed confusion and even exasperation at the number of service encounters they must participate in:

> *'They can never remember people's names, who's been out, they'll say like a nurse is coming tomorrow and when you actually look it's the OT or I've seen a nurse before and when you look it's a physio' (Physiotherapist)*

> *'And that's another talk with somebody else, I'll have lost my bloody mind by the time…oh my' (Kate)*

7.2.11 Healthcare Policies

Healthcare Policies (8) are depicted as visually encasing both service behaviour and the organisational structure of the service as a means of illustrating

their influence upon both these factors. Green and Kreuter (2005) informed the healthcare policies factor with their 'policy and regulation' part of the Precede-Proceed Model as discussed in Section 6.3.4. However, this study did not find that national level policies and guidelines created specific challenges for healthcare engagement within the falls prevention service, but instead provided healthcare professionals with specific ways in which they may support it. For example, *'older people [aged 65 and over] in contact with healthcare professionals should be asked routinely whether they have fallen in the past year and asked about the nature and frequency of the falls'* (NICE 2013:10). Therefore, this part of the model refers specifically to the ways in which national healthcare policies are translated into local healthcare policy, and the extent to which this supports healthcare service engagement. In this sense it is not expected that healthcare professionals on the falls prevention team will have the power to change national healthcare policy, but will instead have the autonomy to inform policy and practices within the falls prevention service at a local level.

The findings of this study revealed a number of instances where healthcare professionals on the falls prevention team have adapted national guidelines to support service users' engagement at a local level. For example, the NICE (2013:10) guidelines stipulate that a multidisciplinary approach must be taken by falls prevention services to reduce falls (see Section 4.2). However, as the team recognise that multiple service encounters can be both distressing and confusing for service users, they make every attempt to merge appointments, whilst still adhering to a multidisciplinary approach (see Section 5.3.6).

Furthermore, in Section 5.3.6 the triage nurse describes that the national falls prevention guidelines do not stipulate that there should be an urgent pathway for service users who present a high risk of falling. However, her practices at a local level have created an informal urgent pathway, so that service users can access healthcare more quickly, which helps to support their

engagement:

>*'so if I've got somebody that I've got concerns about, rather*
>*than them waiting 2 weeks I know that I've got slots, I know*
>*Amy will have slots in clinics' (Nurse).*

There are, therefore, a number of opportunities to translate local practices into local healthcare policy, as it is evident that they support healthcare engagement in a number of ways. Whether it is reducing the confusion experienced by service users or facilitating quicker access into the service, the falls prevention team exemplified a level of autonomy that responded appropriately to the engagement needs of service users, and may therefore help to inform policy at a local level.

7.2.12 Predisposing, Reinforcing, and Enabling Factors

The Healthcare Service Engagement Model depicts predisposing, reinforcing, and enabling factors as influencing both Service and Self-care Behaviour. These three factors are depicted in two translucent boxes to signify their reciprocal relationships with each other as well as illustrating their reciprocal relationships Service and Self-care Behaviour.

The **predisposing factors** part of the model refer to the attitudes, knowledge, values, experiences and perceptions that predispose service users' behaviour towards engaging with the falls prevention service and self-care needs. As described previously in Chapter 6, the predisposing component from Green and Kreuter's (2005) Precede-Proceed Model also encapsulates concepts from Bandura's (1977) Self-Efficacy Theory and Hochbaum's (1958) Health Belief Model.

These concepts are incorporated into the Healthcare Service Engagement Model to provide additional insight into the service and self-care engagement behaviour of service users. For example, Banduras' (1977) Self-efficacy Theory enables one to better understand where service users' sources of efficacy originate, and therefore why certain aspects of healthcare delivery may be more effective than others at eliciting behaviour change. Connecting this to the thesis findings this theoretical lens highlights that support and advice offered by the falls prevention team that is conceptualised as *'verbal persuasion'* is not as influential as when service users physically perform self-care behaviour (Section 5.3.1). This is because, as Bandura (1977:198) argues, *'verbal persuasion is weaker than those arising from one's own accomplishments'*.

For example, in Section 5.3.1 the occupational therapist explained to a service user that their rug was a potential trip hazard; they were not inclined to act upon this information as they had never tripped over it before and therefore did not believe that it was a hazard at all:

> *'They can agree just to shut you up and they might roll the rug up and stick it somewhere but if they're not, if they don't take on board what you are saying then they will just put it back when you are not looking' (OT)*

> *'Obviously they have lived with your 'potential hazards' for years, and been fine' (OT)*

Concepts incorporated from the Health Belief Model (Hochbaum 1958) include how *susceptible* to falling service users perceive they are and how *severe* a fall may be to their health. It includes the perceived *benefits & barriers* that service users believe they will receive and encounter when engaging with the service and with self-care behaviours, and whether they believe the benefits of

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taking action outweigh the barriers they believe they will encounter. The Healthcare Service Engagement Model represents some of the ways in which health belief concepts relate to other factors of a service user's engagement. For example, how *susceptible* a service user believes they are to experiencing a fall is influenced by their attitudes, values, knowledge of their condition, which have all been influenced by their temporal interactions with a wider healthcare landscape (Section 7.2.3).

The findings revealed several instances where service users' engagement with self-care behaviours was influenced by their belief in their risk of falling (Section 5.2.4.3). These self-care behaviours included minimising their falls risk by avoiding what they perceived as dangerous activities:

> *'I know because of the arthritis that I've got to be very careful stepping over those stones that are at the side of the flower beds, because sometimes my leg just does that and if I step on that leg it means I'm gonna fall and fall badly' (John)*

> *'Also I think when you get older you're more aware of it, you're more aware of falling so you do try to eliminate things and you do tend to think about things, you tend to think more about going over steps…' (Jen)*

> *'I've always been very wary of curbs, you know if I see a high curb I try and miss it and that's in my mind all the time' (Jen)*

The **reinforcing factors** part of the model represents the influences that reinforce service users' service and self-care engagement behaviours such as the attitudes of friends, family, social networks and healthcare professionals. These are inherently interlinked with other environmental factors and ultimately

consider the amount of social support service users currently receive and the extent to which this influences their ability to engage with the service and with self-care behaviours.

The importance of reinforcing factors was observed in a number of cases in this study as the attitudes and support from family members and friends had a significant influence on service users' engagement both with the service and with self-care behaviours. For example, in Section 5.3.3, one case described a service user named Len, whose wife Sally demonstrated her crucial role in reinforcing self-care information[1]that had been provided by the nurse. As Len suffered with cognitive health problems, he relied tremendously upon his wife to recall all of his self-care behaviours, appointments and service encounters. The reinforcing role played by friends, family, and healthcare professionals is therefore a significant factor within the process of healthcare service engagement.

The **enabling factors** consider the extent to which appropriate healthcare provision and resources enable service users to engage with service and self-care behaviours. For example, whether they have access to adequate service and self-care engagement skills, knowledge, instructions and resources to support each stage/type of engagement.

In Section 5.3.1 the falls prevention occupational therapist describes how she always presents her assistive equipment in a positive way to service users, whilst also tailoring her presentation of the equipment to each service user. For example,

> *'From an OT point of view, your equipment is a real tool to*
> *what you can offer, so it helps if you've got your own positive*

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view of it, it helps if you understand that people might not want something, but you can sell it in a positive way, and generally I talk about what it is and kind of prepare them, and then…you leave it in the hallway for a period of time' (OT)

In addition to tailoring her presentation of equipment to address service users' concerns and creating a positive view of it, the occupational therapist also employs the practice of leaving equipment in the service user's hallway, while she prepares them and thus increases the likelihood that they will accept and use the equipment as intended. The enabling factor part of the model therefore not only refers to the availability of skill, knowledge and resources, but the ways in which healthcare professionals present them.

7.3 Guidance for Interpreting the Healthcare Service Engagement Model

The following sections describe a step-by-step approach on how to interpret and apply the model when reflecting upon the process of healthcare service engagement within a falls prevention context. Each of the steps described below corresponds to numbers on the model. For example step one refers to the 'Wider Healthcare Context' and is labelled with a round black circle with the number one in it. By reflecting upon healthcare service engagement through a step-by-step process, healthcare professionals are able to consider how the services users' engagement is accumulatively influenced by a number of interconnected factors. It also enables them to methodically consider how each stage and type of influence has implications for the next, which will assist them in the development of multifaceted design recommendations that aim to better support healthcare service engagement through healthcare professionals practice. In this sense, the

factors that affect service users' engagement in each stage of the model should not be considered in isolation, but should instead be understood in terms of their relational influence on engagement. For example, when health conditions are severe but social and healthcare support is in abundance, one should reflect upon service users' engagement based on this interconnection, rather than assuming that ill health equates to poor engagement.

The steps themselves describe high-level considerations rather than prescribing specific research tools (questionnaires, surveys etc.). This is because of the changeable nature of the significance of different factors, and that, when applied to different cases, healthcare professionals require the flexibility to work within the limitations of what they can change. Furthermore, the goals to support healthcare service engagement are likely to change over time, and therefore prescribing too early may be restrictive. The Healthcare Service Engagement Model is therefore described as a reflective tool rather than a prescription and methodical evaluation of service users' healthcare engagement as a way of offering this required level of flexibility.

The Healthcare Service Engagement Model is an adaptation of the Precede-Proceed Model (Green and Kreuter 2005); however, rather than developing a strategy, which is focussed on service users' healthcare needs, the Healthcare Service Engagement Model enables healthcare professionals to reflect on the engagement needs of service users and ways in which their practices can support them. It achieves this by cumulatively reflecting upon ways in which service users' engagement may be better supported whilst considering each step of the model, and as a means of ascertaining the most effective course of action.

Given the central role played by healthcare professionals in the process of engagement (Section 5.3), it became apparent that healthcare professionals on the falls prevention team would benefit the most from this tool. This is because they act as a mediator between the service users and the service, and actively respond

to the other factors that affect engagement, as observed in the findings (see Section 5.3). The benefits of using the model include enabling healthcare professionals to better understand each of the factors that affect healthcare service engagement, and also how they relate to each other. By better understanding the complex dynamics of the engagement process, healthcare professionals will be able to adapt their practices to support engagement by focussing on the most transformative factor or factors and their relationships.

The findings indicate that factors affecting healthcare service engagement are subject to continuous change; therefore, the repeated use of this model is advised as a means of highlighting fluctuations within the process (Simpson 2004). The model should be used at regular intervals during the course of the intervention, for example once at the beginning, middle and end. If healthcare professionals identify any changes in service users' health status, the model can be reapplied to reflect upon how their change of health may influence their engagement. The model was designed to be integrated into existing healthcare assessments, with the intention of reinforcing healthcare engagement as a central factor of healthcare service provision.

7.3.1 Step 1: The Wider Healthcare Landscape

The first step of evaluation includes an assessment of service users' historical interactions with health and social care services. This can be performed alongside the service users' healthcare assessment, as their healthcare history is generally assessed as a matter of standard healthcare protocol. However, the specific intention of this assessment is to focus on how interactions with health and social care services have influenced service users' ability and inclination to engage with the falls prevention service. For this part of the assessment, users of the model should ask service users about their current and previous healthcare service encounters to highlight instances where they felt particularly supported or under supported in terms of access to care, resources, skills and knowledge. By

reflecting upon service users' previous service encounters it may be possible to highlight attitudinal barriers to engagement that developed as a result of these interactions. The occupational therapist described that '*quite often they've got their own tale to tell, so you need to hear that first before you can start chipping in*' (OT). Therefore by encouraging service users to tell their stories about memorable service encounters, it may be possible to develop a contextual understanding of their engagement and the ways in which it relates to a wider health and social care context.

7.3.2 Step 2: Health

Step two reflects on the ways in which service users' health influences their ability and inclination to engage with self-care behaviours that are associated with reducing their risk of falling. Healthcare professionals should focus their attention on the health conditions that influenced service users' engagement in the most transformative way. For example, if a service user is unable to leave their home, for fear of having an epileptic seizure, then this is a health concern, which could entirely disengage them from the service and should be prioritised. In this regard, by focusing on the health conditions, which pose the greatest challenge for service users' engagement, one is encouraged to consider the psychological implications of health conditions, which is described in Self-care Behaviour part of the model (step 5). The purpose of this is to develop a more complete understanding of how certain health conditions have implications for various other aspects of their engagement, such as their self-efficacy for example.

Assessing a service user's risk of falling is already a standard part of their health assessment[40]; however these results should reflected upon in relation to how they affect the service user's ability to engage with self-care behaviours.

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[40] Service users' falls risk is determined by employing the 'Falls Risk Assessment Tool (FRAT); the '180 degree turn' (Simpson el al. 2002); the functional reach (Duncan et al. 1990) and the 'timed up and go' (Podsiadlo and Richardson 1991).

Key health concerns that have important implications for service users' engagement include mental health conditions such as dementia, memory loss and cognitive impairments. Service users' physical capabilities also present immediate barriers for engagement with self-care behaviours, as their mobility tends to be quite poor, thus creating challenges for attending appointments. During step 2, healthcare professionals should take into account the individual ways in which health conditions are experienced by different service users and how this effects their engagement. For example, Section 5.2.2 describes a service user named Kate who was distraught when her memory started to fail, as she is very independent desperately wants to live independently. Conversely, in Section 5.3.3 service user Len was very much accustomed to his wife recalling events on his behalf and has twenty-four hour support given that they live together. It is therefore crucial for healthcare professionals to consider service users' health in relation to other factors, which are respectively introduced in the following sections.

7.3.3 Step 3: Environment

Step three reflects on the physical, social and economic factors that affect service users' ability and inclination to engage with self-care behaviours. The following list is not exhaustive but provides healthcare professionals with the types of environmental influences, which may influence service users' engagement with self-care behaviours. For example, Section 5.2.4.2 discussed some aspects of service users' physical environment, which service users' believed could cause them to fall. Service users are therefore less active and avoid 'dangerous' social spaces, which influences their health and wellbeing. Some of the factors in Table 3 have been labelled with a section number, which links them to the findings of this study. The factors not labelled with a section number have been borrowed from Green and Kreuter's (2005) 'Environmental

Diagnosis' of the Precede-Proceed Model as the data indicates that these factors are also important when reflecting upon service users' engagement[41].

Physical Environment	Physical location and distance/accessibility to health and social care (4.3.5) Physical living conditions in the home (5.3.1) Pavements and streets (5.2.4.3) Parks and social/recreational spaces Transportation (5.2.5)
Social Environment	Loneliness Social isolation (5.2.1 and 5.2.2) Access to social groups Community cohesion
Economic Environment	Employment Income Income inequality Economic change Education

Table 3: Environmental Diagnosis (Green and Kreuter 2005:131) alongside relevant references to the findings of this study.

The aim of this stage of evaluation is to identify factors of the service users' environment that create the most significant problems for healthcare engagement, and that have the potential to be changed through the falls prevention service intervention. For example, it would not be possible within the remit of falls prevention to offer better housing as part of the intervention; however, it might be possible to recommend home modifications or mobile healthcare services as a means of improving service users' safety and their mobility in their home. In this regard, efforts to support service users' engagement at an environmental level should be realistic and attainable given the time and resources that are available to the healthcare professionals.

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[41] Data were collected to support the use of these factors to better understand engagement; however they were not included in the findings due to the size of the thesis.

7.3.4 Step 4: Self-Care Behaviour

Given the service users' wider healthcare service encounters, their current health status and the environmental influences that were identified in steps one to three, step four reflects upon both the actions and inactions of service users that influence their self-care behaviour. For this to take place, self-care is defined by *'the actions people take for themselves'* and involves *'prevention of illness or accidents; care for minor ailments or long term conditions'* (Department of Health 2005:1). This step can be achieved by using the adapted extract below (Table 4) from Green and Kreuter (2005) that considers the predisposing, reinforcing and enabling factors that influence self-care behaviour. The table is labelled 'Factors affecting Self-Care and Service Engagement' as it is also employed in Section 7.3.6 to support the evaluation of service engagement. Each of the factors affecting engagement in Table 4 (below) is labelled with a section number, which relates it back to the findings of this study. For example, the 'attitudes' factor relates back to Section 5.2.4, which discussed service users' attitudes towards healthcare, falls prevention and self-care.

Factors affecting Self-Care and Service Engagement	
Predisposing Factors	Attitude (5.2.4) Values (5.2.4.1) Previous Experiences (5.2.4.4) Knowledge of condition (5.2.4.3and 5.3.3) Health Belief (susceptibility, severity, perceived benefits & barriers, self-efficacy & cue to action) (5.2.3) Self-Efficacy (performance accomplishment; vicarious experience; verbal persuasion; physiological arousal) (5.2.2)
Reinforcing Factors	Social Support (5.2.5 and 5.3.3) Knowledge of support (5.2.4.1) Attitudes & behaviour of friends, family, health professionals (5.2.4.4)

Enabling Factors	Available resources (4.2) Access to resources, skills & knowledge (5.3) Knowledge of healthcare professionals to refer & enable access (0, 4.3.2 and 5.2.4.4)

Table 4: Extract from the Precede-Proceed Model (Green and Kreuter 2005) alongside relevant references to the findings of this study.

Based on this reflection a number of recommendations should be developed, which aim to support service users' engagement with self-care behaviours. These recommendations should be identified collaboratively between service users and healthcare professionals[42] and include anything that improves the service users' engagement with self-care behaviours. For example, it could be their knowledge of, or attitude and low self-efficacy towards, specific self-care behaviours, or their lack of specific skills or resources, which makes performing certain self-care behaviours particularly difficult for them.

Using the above predisposing, reinforcing and enabling factors as a guide, the healthcare professional should prioritise several key influences which have the most transformative influence on service users' ability and inclination to perform self-care behaviours, and are also changeable given the available time and resources.

7.3.5 Step 5: Healthcare Delivery

Step five serves to develop recommendations to address the holistic engagement needs identified through stages one to four of the reflection process. This includes recommendations to address relevant attitudinal barriers towards healthcare more generally, the service users' healthcare needs, environmental influences and the predisposing, reinforcing and enabling factors that influence their ability, inclination and support to perform self-care behaviours. This

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[42] This approach is in keeping with NICE (2013:6) guidelines, which suggest that *'patients should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professional'*.

strategy should consider the continuous interconnections between factors that affect service users' engagement, rather than one that attempts to address each factor in isolation. In addition to considering the individual engagement needs of service users, healthcare professionals should also reflect upon how predisposing, reinforcing and enabling factors affect their own ability to effectively support these needs. Table 5 contains some of the factors that influence healthcare professional's delivery, and should therefore be reflected upon by healthcare professionals to highlight and address them. These factors may also be found throughout Section 5.3 of the findings chapter.

Factors effecting Healthcare Professionals Delivery	
Predisposing Factors	Knowledge Beliefs and perceptions about patients ability and willingness to change Attitudes Commitment to prevention practice Health values Self-efficacy
Reinforcing Factors	Remuneration Attitudes and behaviours of colleagues Staff attitudes and beliefs Patients attitudes and beliefs Professional associations (i.e. British Geriatrics Society)
Enabling Factors	Time Remuneration Skills Patient expectations re: falls prevention Educational materials Prevention oriented office structure Staff attitudes Reminders to use falls risk assessment tools

Table 5: Factors effecting Healthcare Professionals Delivery. Extract from Green and Kreuter (2005:421)

At this stage of the evaluation, a level of complexity may emerge, which appears to be difficult to respond to, however, it is important to note that only the

factors of engagement indicating the most prominent factor should be addressed at this point[43]. The reason for this targeted approach is because evidence indicates strong interconnections between the factors that affect engagement. Therefore, by addressing pivotal determinants of engagement[44] that have important implications for other factors within the engagement process, it may be possible to address multiple factors simultaneously. For example, a service user's knowledge of appropriate self-care information may be particularly low, as they don't know where they can assess it. Consequently, they've been unable to utilise their high self-efficacy to self-care, strong family support, and belief in the benefits of self-care. Therefore, by teaching the service user how to access relevant self-care information for their specific needs, the potential of other factors of the service user's engagement may be unleashed, enabling them to reinforce the service user's engagement behaviour.

At this point the evaluator might consider enlisting the support of other health and social care services to address the engagement needs that have been identified. This is because healthcare services typically exemplify limitations in how they are able to cater to multiple influences, particularly in cases as varied and complex as chronic care. Green and Kreuter (2005:15-6) point out that *'some of these limitations can be offset by cooperative arrangements with other local agencies or larger organisations at state, provincial, or national levels or through the development of coalitions and political alliances at the local level'*. For example, if a service user's self-efficacy to self-care is particularly low they may benefit from specific self-care support such as that offered by the Expert Patient Programme (for example see Kennedy et al. 2006). Similarly, if the service user is assessed as requiring social support to perform self-care behaviours, the healthcare professional may refer them to social, recreational and rehabilitation

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[43] It may be appropriate to address other factors that affect the service users engagement during later evaluations of their engagement needs.

[44] These key determinants will be evident by this point in the assessment, given that the user has thoroughly reflected upon steps one to four.

services. In this sense, the healthcare delivery practices employed by the healthcare professional should be particularly responsive to the self-care behavioural needs of service users.

7.3.6 Step 6: Service Behaviour

Considering the individual recommendations outlined in step five, step six reflects upon the types of service behaviour that will be required given the services users' self-care needs. For example, service users will be required to attend appointments, accept healthcare professionals into their homes and read healthcare literature. Therefore in this step of the model healthcare professionals should consider the predisposing, reinforcing and enabling factors (see Table 4) that influence service users' ability and inclination to engagement with service behaviours. For example, service users may require specific information about the purpose of the falls prevention service, and why it is appropriate for their needs to engage at the service stage. Service users may have expressed opposing attitudes, beliefs or low self-efficacy to engagement with the falls prevention service; therefore healthcare professionals should address these emergent factors to promote service engagement.

7.3.7 Step 7: Organisational Structure

Given the requirements for service behaviour outlined in the previous steps, step seven reflects upon how the falls prevention service's organisational structure may accommodate these requirements. For example, the varied and complex engagement needs exemplified by elderly, chronically ill service users may require increased organisational flexibility, and autonomy for healthcare professionals to responsively allocate time and resources in accordance with their fluctuating needs (see Section 5.3.2). In step seven, healthcare professionals must reflect upon the organisational structure of the falls prevention service, and

develop recommendations that are directed at local adaptations of the service to better support the engagement needs of service users.

7.3.8 Step 8: Healthcare Policies

Given the identified organisational needs of the service in step seven that are required to support the service users' engagement, step eight reflects upon the extent to which existing local healthcare policy supports these needs.

In step eight, healthcare professionals should reflect on the ways in which national healthcare policies such as the NICE Falls Prevention Guidelines (2013) may be adapted locally to individually support the engagement needs of service users. Some national guidelines can be applied directly to a falls prevention context without causing problems for engagement, for example to *'provide relevant, timely and individually tailored information for people with long term conditions'* (DH 2009:4). However, providing service users with multidisciplinary assessments (NICE 2013) can be confusing, overwhelming and disengaging for service users and so healthcare professionals should reflect upon how national polices may be more effectively adapted to support service users' engagement within local healthcare settings.

When reflecting upon both upon the organisational structure of the service (step seven) and healthcare policies (step eight) one should consider the ways in which these effect service users' service behaviour, and the organisational and local policy changes that could be made to better support. The purpose of this is to feedback to managers and decision makers to inform the ways in which engagement is supported at both of these levels.

7.3.9 Summary: Application of the Model

The Healthcare Service Engagement Model consists of 8 steps: (1) Wider healthcare context; (2) Health; (3) Environment; (4) Self-care behaviour; (5) Healthcare delivery; (6) Service behaviour; (7) Organisational structure; and (8)

Healthcare policies. The first three of these steps (Wider healthcare context; Health and Environment) are intended to reflect the individual circumstances of service users to better understand both their self-care needs and the interconnected factors that influence their ability to self-care. Step four (Self-Care Behaviour) encourages healthcare professionals to reflect upon several predisposing, reinforcing and enabling factors that are specific to each case (Table 4), whilst also considering the previous three steps. Step five (Healthcare Delivery) encourages healthcare professionals to reflect upon the factors that influence their ability to respond to service users' self-care needs (Table 5), and also the types of engagement support required in individual cases. Step six (Service Behaviour) encourages healthcare professionals to consider the predisposing, reinforcing and enabling factors (Table 4) that effect the types of service behaviour that service users should perform given their self-care needs. Finally rather than directly informing healthcare professionals practice, step seven (Organisational Structure) and eight (Healthcare Policy) encourage healthcare professionals to reflect on the service's ability to support service users' engagement at both an organisational and local policy level. The combination of these steps ensures that the whole process of engagement is accounted for, and that the approach is targeted at the needs of individual service users.

This section aimed to provide guidance for healthcare professionals regarding how the Healthcare Service Engagement Model can be used. It achieved this by breaking down the model into its component parts, and describing how each factor refers to a particular aspect of service users' healthcare engagement. When applying the model, healthcare professionals are encouraged to consider the reciprocal and indirect relationships between and among the factors. This should enable them to identify where their time and resources may be applied to support service users' engagement in the most effective ways. This approach employs the view that employing a universal or blanket approach cannot properly support

engagement, but instead should be user-centric and consider the individual circumstances of people.

7.4 Reflection on the Model

This section provides a reflection of the Healthcare Service Engagement Model and describes its key contributions and limitations. The Healthcare Service Engagement Model illustrates healthcare engagement as non-linear, emergent and situated process that is comprised of multiple highly interconnected social, environmental, organisational and health related factors that are dependent on the quality of human interactions. The nature of these features makes it difficult to apply structure without losing important detail. However, this was achieved by developing a model that is sensitive to these complexities by using structured reflection.

The model is a reflective tool that encourages healthcare professionals to draw on their vast experiential knowledge of their area of expertise. Although there are other outputs that could have emerged using a grounded theory approach, this strikes a balance between a usable framework and the complexities that were observed within the data; that is to say the model fits the phenomena. This fit is exemplified by the diverse data that was employed to directly inform the development of the model. For example, the social, environmental and organisational factors, which influence the process of healthcare service engagement. The model is a suitable tool for developing recommendations to more effectively support engagement as it is derived from the context within which it is to be applied and is thus relatable to those using it. Its features are also abstract enough to be applied to other healthcare settings. One of the advantages of modelling the framework on the Precede-Proceed Model (Green and Kreuter

2005) is that it is a well-recognised and thoroughly tested health promotion framework, which has been applied to multiple contexts.

As both the researcher and the developer of the model, there is an inherent risk that its development is subject to one's preconceptions. However, as discussed in Section 3.6.4, subjectivity is embraced as an unavoidable part of the research process, and so care has been taken throughout to be mindful of this when developing the model. In this regard, one's experience of working with elderly, chronically ill service users strengthened the validity of the model within this particular context.

The non-prescriptive nature of the model was an intended feature, as a means of enabling healthcare professionals to reflect flexibly on the engagement needs of individual cases; this, however, has several of limitations. For example, by not defining specific questions in a questionnaire or survey style evaluation, use of the model relies to an extent on the experience of healthcare professionals and their knowledge of how service users' engagement may be influenced by social, environmental and organisational factors. This may leave less-experienced healthcare professionals unable to benefit fully from using the model. Conversely, by permitting healthcare professionals the flexibility to focus on factors and their relationships that are significant in particular cases, it avoids the collection of unnecessary data and may also save time. Furthermore, by giving healthcare professionals the freedom to determine which factors and their relationships have the most transformative influence on a particular service user's engagement; this relies on healthcare professionals' intelligent employment time, as well as their empathy and sensitivity to elicit valuable experiential information from service users. Although the healthcare professionals who participated in this research exemplified these characteristics, other healthcare professionals may not. This is not necessarily a limitation of the model but more a limitation in the skills of those using it.

One of the limitations of modelling the process of engagement while trying to portray false boundaries (the falls prevention service) is that there are many individuals who do not fit within these boundaries. For example, although it has been discussed in Section 5.2.4.4, the model doesn't illustrate service users who were never referred into the falls prevention service, which means that it cannot be applied to them. The model would need to undergo development so that it can be applied to service users who exist both inside and outside of the service system.

Given the style of this ethnographic enquiry, it was inevitable that large amounts of data could not be presented in the findings in Chapter 5, as there had to be boundaries imposed on the topics covered. Consequently, there are insights, which in hindsight revealed evidence, which supports different features of the Healthcare Service Engagement Model. For example, the economic factor in Table 4 relates to a particular service user who described how she could not afford a personal alarm although she would like to have one.

7.5 Conclusion

The process of healthcare service engagement was conceptualised in the first part of this chapter (Section 7.2), and was grounded in relevant existing theoretical frameworks. The second part of the chapter (Section 7.3) explained how the Healthcare Service Engagement Model should be employed in practice by describing a step-by-step process of evaluation. This section laid out questions healthcare professionals should ask, and issues to for them to reflect upon, at each stage of evaluation to better understand the influences that affect service users' ability and inclination to engagement with the falls prevention service. Section 7.4 argued that using the Healthcare Service Engagement Model as an evaluative reflection tool enables healthcare professionals to better understand the

relationships between factors that affect engagement, whilst highlighting the most effective point at which engagement should be supported. The third part of the chapter (Section 7.4) discusses and reflects on the model as a whole and discusses the strengths and weaknesses of its design choices.

By thinking about healthcare service engagement in a non-linear, emergent and interconnected way, it is evident that attempts to support engagement using a universal approach are inadequate. Instead, as the factors that affect engagement are unique to each service user, they should therefore be assessed and supported in a user-centric manner.

Chapter 8. Conclusions and Recommendations for Design

8.1 Thesis Summary

This thesis responded to an increasing need for chronically ill, elderly service users to engage more effectively with healthcare services. The need for increased levels of service and self-care engagement responds to demographic changes that anticipate the number of individuals in the UK over the age of sixty-five to increase by 65% in the next twenty-five years (Age UK 2013:13). As elderly, chronically ill service users have complex healthcare needs that extend across different healthcare services, this change in demography has contributed to the need for more coordinated and integrated care (Bayliss et al. 2007). This thesis therefore addressed the question *'How can healthcare services be better designed to support healthcare engagement for service users with complex needs?*

To deal with the complex healthcare needs of an ageing and chronically ill population, researchers, policy makers, and healthcare professionals have established the foundations for a better-equipped healthcare landscape. This has several forms: increased focus on patient centredness (Mead and Bower 2000); personalisation (Lloyd 2010); and healthcare service engagement (Coulter 2002). However, despite much needed increasing attention on healthcare engagement, the actual engagement processes and ways in which the chronically ill experience them remain under-researched (Coulter 2011:102).

A lack of recent holistic empirical studies provided an opportunity to model the process of healthcare service engagement: accounting for its complexity,

understanding its barriers, and developing design recommendations, which illustrate how to support it most effectively. However, as a complex, multi-faceted system, the breadth and depth of healthcare service engagement issues are difficult to capture using a single method or perspective. As such, this thesis adopted an interpretive theoretical position: using a grounded theory approach to inductively reason about findings generated through targeted mixed methods. This enabled the observation of the varied and interconnected factors that influence healthcare service engagement, and synthesis through deductive reasoning grounded in the collected data.

The specific targeted research methods included conducting semi-structured interviews with healthcare professionals in the falls prevention service. Additional interviews were conducted with users of the falls prevention service, and others who were at risk of falling but were never referred to the service. Ninety-two qualitative street surveys were conducted to collect and understand the public attitude toward, and knowledge of, the falls prevention services. By employing a grounded methodological approach and embracing the systemic complexity of the falls prevention service and its users, the thesis documented and analysed the factors that affected engagement across several diverse cases[45]. The grounded theoretical approach (Corbin and Strauss 1990) employed included the collecting and analysing data in an iterative way, which involved affirming, checking and refining the themes that were generated from the research process (Charmaz 1990). This led to the description of healthcare service engagement as a process comprised of multiple interacting and coevolving factors. These factors [46] were presented in Chapter 5, in the form of the participants' experiences of

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[45] This part of the research process responded to the first research question '*What is the nature of healthcare service engagement for service users with complex healthcare needs?*'

[46] The factors that were observed in the data include service users health status; beliefs, attitudes and values; perceptions of how falls occur and their personal susceptibility to falling; previous experiences with healthcare services; access to informal care and support; communicational skills, responsiveness and experience of healthcare professionals; and the organisation of the falls prevention service.

engagement within the falls prevention service. The accounts described in Chapter 5 revealed a level of complexity[47] that could not be properly understood using thematic analysis alone. Several available theoretical frameworks were discussed in Chapter 6, and relevant insights were used to inform the new model in Chapter 7[48]. In addition to conceptualising the process of engagement, the development of the Healthcare Service Engagement Model also informed design recommendations, which describe how engagement may be more effectively supported[49]. The model is also intended to provide healthcare professionals with an evaluative tool to inform their practice.

The findings from using the Healthcare Service Engagement Model suggest that healthcare service engagement is better supported[50] if healthcare professionals focus on the non-linear relationships between the social, environmental, organisational and health related factors that affect engagement. This is in contrast to conceptualising engagement as a linear mechanistic process with a strong focus on its outcomes. Instead, the Healthcare Service Engagement Model conceptualises healthcare engagement as a non-linear, emergent and situated process that is comprised of multiple, highly interconnected social, environmental, organisational and health related factors that are dependent on the quality of human interactions.

This conclusion has two main sections. Section 8.2 is split into three and describes the core thesis contributions; framed in response to the three research questions posed in Chapter 2. These include a description of the nature of

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[47] The complexity found in the data was understood in terms of the reciprocal, quickly changing, non-linear and emergent relationships that were observed among the factors affecting healthcare service engagement.

[48] This model responded to the second research question '*How can healthcare service engagement for elderly, chronically ill service users be conceptualised?*'

[49] Developing the model enabled one to answer the third research question '*What are the design recommendations for the future development of healthcare service engagement?*'

[50] 'Better-supported' refers directly to the types of support afforded by both the healthcare professionals and the service system as a means of enabling engagement with the service and with associated self-care behaviours.

healthcare service engagement (8.2.1); how it can be conceptualised (8.2.2); and a discussion of the design recommendations for its future development (8.2.3). The last section (Section 8.3) provides a reflection of the thesis's main findings, a discussion of the study's limitations, and identified opportunities for future work.

8.2 Contributions and Key Findings

Table 6 summarises the research questions posed at the beginning of the thesis in conjunction with the titles of the key findings. Each key contribution is explained thereafter.

Research Questions	Key Findings and Contributions
1. What is the nature of healthcare service engagement for service users with complex healthcare needs?	8.2.1 Healthcare service engagement in the context of service users' with complex healthcare needs is defined by: 8.2.1.1 Dependent on highly interconnected factors operating at different levels 8.2.1.2 Non-linear and Iterative Nature 8.2.1.3 Situated and emergent 8.2.1.4 Dependent on the quality of human interactions
2. How can healthcare service engagement for elderly chronically ill service users be conceptualised?	8.2.2 A non-linear, emergent and situated process that is comprised of multiple highly interconnected social, environmental, organisational and health related factors that are dependent on the quality of human interactions.
3. What are the design recommendations for the future development of healthcare service engagement?	8.2.3.1 Assessing for interconnectedness and situatedness 8.2.3.2 Evaluating the requirements of the two emergent stages of engagement 8.2.3.3 Adopting a holistic engagement approach that considers the wider healthcare system

Table 6: Key Findings and Contributions

8.2.1 The Nature of Healthcare Service Engagement among Service User with Complex Healthcare Needs

The findings presented in this section respond to Research Question One, which is '*What is the nature of healthcare service engagement for service users with complex healthcare needs?*' The findings from this study show that healthcare service engagement embodies four main characteristics. It is: dependent on highly interconnected factors operating at different levels; iterative and non-linear; situated and emergent; and dependent on the quality of human interactions. Each of these findings is described in the following four subsections.

8.2.1.1 Dependent on Highly Interconnected Factors Operating at Different Levels

The findings of the study revealed that the factors affecting healthcare service engagement interconnected as they exemplified reciprocal relationships with each other. As described in previous chapters, the term 'factor' refers to the social, environmental, organisational and health-related factors that influence healthcare service engagement. The interconnected factors found to influence healthcare service engagement include: the service users' health status; their social and physical environment; the predisposing (attitudes, belief, self-efficacy, experiential knowledge), reinforcing (social support, knowledge of support, attitudes and behaviour of peers) and enabling (availability and access to resources) factors; healthcare delivery; the organisation of the service and underlying healthcare policy. Interconnections between the above factors were exemplified when engagement was adequately supported through healthcare delivery, for example by building trust, rapport, employing empathy, sensitivity and delivering accessible health information to service users. These practices that were delivered through the 'healthcare delivery' factor created new conditions for service users' 'predisposing' attitudes factor as they were more informed about their healthcare needs, which affected their ability and inclination to engage with

the service and perform self-care behaviours. Similarly, when service users'
'health' suddenly changed, this created a reduction in the service users' self-
efficacy and motivation (predisposing element), which created new requirements
for their social support (reinforcing element), and also the need for an increase in
'healthcare delivery' and 'organisational structure' changes to ensure that the
service user doesn't disengage from the service.

This study therefore found that small changes affecting one factor ultimately
create evolution and new requirements to support engagement throughout the
system.

8.2.1.2 Non-Linear and Iterative Nature

The way a person engages with a healthcare service can be described as a
process. This process is non-linear in the sense that there is no prescribed pattern
of actions that need to be undertaken for an effective or transformative level of
engagement. Instead the circumstances surrounding different service users (their
health, environment, predisposing views etc.) create different conditions for
engagement, which emerge in non-linear ways. The process of engagement in
this context is characteristically non-linear in that service users' healthcare needs
and thus their engagement needs are subject to constant, and often, sudden
change. In this sense, the service users' volatile healthcare needs act as a catalyst
for other factors within the system, creating a series of feedback loops, which
create a wide range of unique conditions for engagement. This is exemplified
when a change occurs within the process of engagement; rather than affecting
other factors in a systematic linear way, it creates different intensities of change
that affect all of the other factors and it also feeds back to itself. For example,
when healthcare information is communicated in an effective way through the
'healthcare delivery' element, rather than directly improving service users'
engagement, this improves service users' understanding of their health condition,
develops the skills they need to self-care and improves their level of self-efficacy

for the self-care behaviours, which fall under the remit of the provided healthcare information. Now that the service users' feel more informed, with appropriate skills and self-efficacy to self-care, they may be more amenable to healthcare information in the future, on account of the feedback loop that occurred between healthcare 'delivery' and the service users' 'self-care behaviour'.

Concurrent within this non-linear process, the findings also indicate some iterative or linear features that suggest that healthcare engagement occurs in distinct stages. For example, the process of engagement mirrors the organisational process of the falls prevention pathway, which creates recognisable stages of the engagement process. This was observed when service users were required to engage with numerous organisational factors of the service[51] before they were required to engage with multiple self-care behaviours.[52] Addressing the barriers that emerge during the service stage of engagement was therefore found to be crucial before introducing self-care behaviours, skills and resources. Given the non-linear feature of the engagement process described above, it was also found that these stages are iterative in that they are also subject to change if, for example, the service users' circumstances change.

The findings also revealed different levels of complexity between these two stages of engagement. For example, the predisposing, reinforcing and enabling factors that affect service users' engagement with one part of the service (occupational therapy or physiotherapy for example) may be different to others. Similarly, the predisposing, reinforcing and enabling factors that influence service users' self-care behaviour may be different for different self-care behaviours. Another variation found in the study is that service users may have a positive attitude and high levels of self-efficacy to self-care (taking medication for

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[51] For example, they were required to read healthcare information, accept healthcare professionals into their home, partake in healthcare assessments and attend healthcare appointments.

[52] These self-care behaviours included but are not limited to performing home exercises, taking prescribed medication and using assistive devices and home modifications.

example); however they may have a negative attitude and low self-efficacy for engaging with new healthcare services. The process of healthcare service engagement therefore exemplified both non-linear and iterative stages, thus characterising it as a particularly complex process.

8.2.1.3 Situated and Emergent

In this study healthcare service engagement was found to be a situated process, whereby conditions for engagement are emergent and are intrinsically tied to individual environments and interactions. This means that service users' engagement cannot be prescribed in a universal manner, as its situated nature means that it constantly emerges and is therefore difficult to predict in advance. This insight shifts the focus of studies of healthcare service engagement from the outcome of engagement to the process itself. The findings indicate that the practices of healthcare professionals, and ways in which they respond to a given environment define engagement in that particular situation. This is because the factors that affect engagement only emerge as barriers within specific situations and are dependent on several factors. For example, when the nurse was assessing a service user to ascertain how her alcohol consumption related to her recent falls, the service user's reluctance to speak only became apparent within that specific situation. The service user's reluctance to reveal information about herself induced the nurse to employ a great deal of empathy, understanding, support and a non-judgemental approach to complete the assessment. The nurse could not have predicted that the service user required this type of support to engage, as the barrier emerged within that particular interaction.

The ways in which healthcare professionals on the falls prevention team respond to the emergent needs of service users in terms of their vulnerability, lack of healthcare knowledge and health belief therefore exemplify the situated nature of engagement. These interactions between healthcare professionals and service users are also highly dependent on: the level of support that service users' need

and have access to engage; service users' healthcare literacy; the availability of appropriate resources; and the healthcare professionals' ability to identify and respond to these situated factors.

With this in mind, the nature of healthcare engagement is defined on an individual and situated basis, as the influence of different factors varies significantly from one service user to the next. This emergent and situated process therefore provides evidence for the perspective that patient centeredness (Mead and Bower 2000) and personalisation (Lloyd 2010) are essential components of effective healthcare.

8.2.1.4 Dependent on the Quality of Human Interactions

The role of the healthcare professionals acts as a pivotal point for healthcare service engagement in that they have a unique ability to make intentional local changes that support better healthcare engagement. In this sense, the healthcare professionals are both responsive and adaptive to changing healthcare requirements that emerge within this complex process of engagement. As part of this central role, healthcare professionals: educate service users; elicit health information; empathise with previous experiences; address beliefs and attitudes; and support the development of self-efficacy to self-care (predisposing factors). They also provide and facilitate social support (reinforcing factor) and provide access to skills and resources (enabling factors). As healthcare service engagement is a non-linear and highly situated phenomenon, the role of healthcare professionals is key in interpreting and responding to other factors at different stages of engagement.

As engagement emerges as part of an interconnected process and as highly situated, the falls prevention team is constantly presented with emerging understandings of barriers that affect individual service users' engagement. This study found that instances where the falls prevention team was given the

organisational freedom to respond quickly and appropriately to service users' engagement needs were conducive to service users' engagement. For example, Section 5.3.2 describes how the nurse employs empathy, sensitivity and specifically tailored healthcare education delivery, to respond to emerging barriers at the service stage of engagement.

Other examples include the physiotherapist (discussed in Section 5.3.6) regularly endeavouring to merge her home assessment with those of the occupational therapist, as a means of reducing the confusion and inconvenience caused to service users. Also, the triage nurse (Section 5.3.6) regularly utilises cancelled clinic appointments as a means of enabling high-risk service users to move along the falls prevention pathway more quickly. In this sense, the healthcare professionals not only respond to potential sources of disengagement as they emerge, but also respond to known organisational factors within the system that are perceived as problematic.

8.2.2 Conceptualising Engagement and its Theoretical Implications

In response to the research question *'How can healthcare service engagement be conceptualised for service users with complex healthcare needs?'* the Healthcare Service Engagement model was developed. The model was explained fully in Chapter 7 and is displayed below as a reminder of its structure (Figure 8).

Traditional conceptualisations of healthcare service engagement describe it as a linear process with the influence of different factors directly dictating the outcome. They also place significant emphasis on improving or supporting individual factors, assuming that this would improve service users' overall level of engagement[53].

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[53] For example, strategies in falls prevention include *'tailored exercise or physical therapy to improve gait, balance and strength; medication management; and other elements such as education about fall risk factors, referrals to health care providers for treatment of chronic conditions that may contribute to fall risk'* (Stevens 2005:410).

Conversely, this thesis conceptualises healthcare service engagement, as a non-linear, emergent and situated process that is comprised of multiple, highly interconnected social, environmental, organisational and health related factors that are dependent on the quality of human interactions. By conceptualising healthcare service engagement in this way, one supports the move away from a cause and effect mechanistic approach, which is not well suited to this level of complexity, and a move towards an approach that accounts for the dynamic and continuously evolving relationships between the social, environmental, organisational and health-related factors that affect engagement.
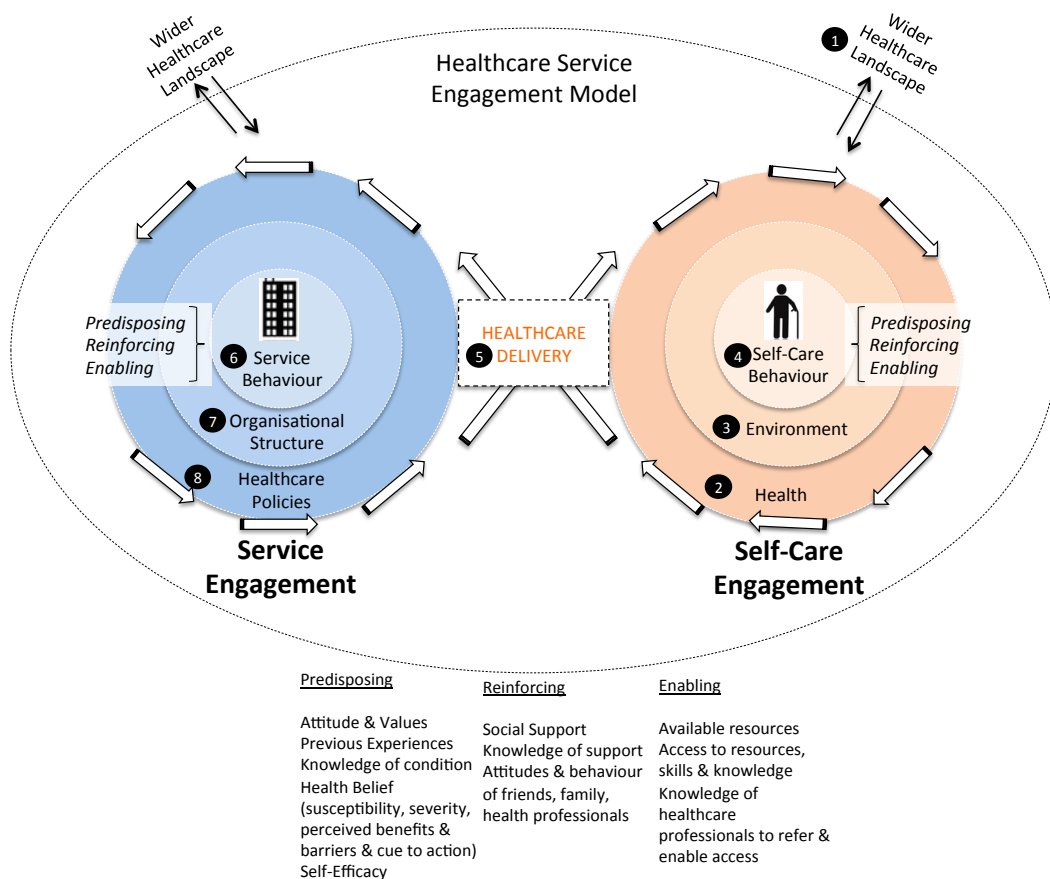

Figure 8: Healthcare Service Engagement Model.

The way in which the Healthcare Service Engagement Model conceptualises engagement is particularly valuable as it acknowledges that engagement is an on-going process, rather than something that can be defined and measured in terms of the timeframe of a specific intervention. This has implications for the ways in which skills and knowledge are developed over time and across health and social care services, rather than limiting their development to the timeframe of short-term interventions.

The conceptualisation of the Healthcare Service Engagement Model is also different to existing approaches to healthcare service engagement in that there is widespread emphasis on the output of the engagement process. For example, Evidence Based Practice (Sackett et al. 1996) and Pay-For-Performance (Doran et al. 2006) both place a great deal of value on health outcomes and the extent to which departmental targets have been achieved. Furthermore, *'the on-going academic debate seems to focus principally on patient engagement's impact on clinical and economical outcomes, seeing patient engagement as a static rather than as a dynamic condition'* (Barello et al. 2014:5). This preoccupation with measuring the output of engagement conflicts with its organic non-linear emergence as was found in this study. The findings therefore challenge the assumption that the measurement and output of engagement should be the study's central focus. Instead, healthcare service engagement may be better supported if we identify and support key determinants of engagement, account for their influence on other factors and overall function within the complex system. By changing the focus to the process rather than the output, the output will improve, as engagement will be more effectively supported.

The Healthcare Service Engagement Model is based on the Precede-Proceed Model (Green and Kreuter 2005) and also encapsulates several other relevant theoretical frameworks, which help to accurately model the process of healthcare service engagement. These frameworks include the Health Belief Model

(Hochbaum 1958), Self-efficacy Theory (Bandura 1977), the Patient Activation Measure (Hibbard et al. 2004) and Complex Adaptive Systems Theory (Waldrop 1992). Each of these theoretical frameworks contributed towards the development of the model in different ways. For example the Precede-Proceed Model (Green and Kreuter 2005) provided an evaluative structure and a means through which the different factors could be related to each other, such as service users' health, environment, self-care and service delivery. The Health Belief Model (Hochbaum 1958) enabled to the conceptualisation of service users' beliefs about the relevance of the service for their perceived health concerns. Self-efficacy Theory (Bandura 1977) provided insights regarding how self-efficacy develops, and the types of interactions that produce different levels of self-efficacy for different engagement behaviours. The Patient Activation Measure (Hibbard et al. 2004) accounts for the cumulative way in which service users must develop skills and knowledge to engage at both the service and self-care stages of engagement. Finally, the Complex Adaptive Systems Theory (Waldrop 1992) helped to produce insights by accounting for the coevolving relationships between the service users' health status; beliefs, attitudes and values; perceptions of how falls occur and their personal susceptibility to falling; previous experiences with healthcare services; access to informal care and support; the communicational skills, responsiveness and experience of healthcare professionals; and the organisation of the falls prevention service.

Some of the Healthcare Service Engagement Model's key features depict the process of engagement as occurring within wider service systems. Although some existing models account for the influence of other healthcare services, this is often framed as something that occurred in the past, and which has a compartmentalised and definitive effect on service users' engagement. Given the service users' prominence of ill health and accidents that often result in injury, the Healthcare Service Engagement Model considers interactions with other healthcare services

as having a continuous influence on service users' engagement and should thus be considered as part of an evaluation of their engagement needs.

Another insight conceptualised in the model is that healthcare service engagement occurs in two interrelated stages, namely service and self-care engagement. By conceptualising healthcare service engagement in this way it enables one to consider the service users' engagement as subject to particular influences at each stage. For example, by using the Predisposing, Reinforcing and Enabling concepts[54] from the Precede-Proceed Model (Green and Kreuter 2005), it was possible to distinguish the types of barriers that might arise at each stage, thus providing important insights of how engagement may be better supported.

The cyclic depiction of the model illustrates that there is no start or endpoint to healthcare service engagement, as the factors, which affect it, continue to do so across time, services and even when a service user is not accessing healthcare. The semi-permeable lines between each factor in the model illustrate that they share reciprocal relationships, which are subject to constant change, and are not isolated to one factor but affect the entire process of engagement.

This section reflects on some of the limitations of the Healthcare Service Engagement Model. Because elderly, chronically ill service users are prone to sudden illness and injury, which may disrupt them from engaging with the falls prevention service, evaluating their engagement over time may be challenging. A way to overcome the challenges imposed by sudden illness or injury would be to have protocols in place, which would enable healthcare professionals to continue to support service users' engagement, enabling them to re-enter the service when they are fit to do so.

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[54] These concepts refer to the predisposing attitudes, reinforcing support offered by peers and healthcare professionals and enabling factors that refer to the skills, knowledge and resources that enable service users to engage with the service and with self-care behaviours.

Another symptom of ageing service users is that they may not be able to recall all of their service encounters or even the services they are currently interacting with. It may therefore be necessary to enlist the support of an advocate to account for the services they are receiving, and the self-care behaviours they have been asked to perform.

8.2.3 Design Recommendations for Future Healthcare Service Engagement

This section translates the conceptualisation model and related insights from the previous sections into specific policy recommendations. These recommendations inform existing healthcare practice to support better healthcare service engagement that uses the model as a tool for reflection on the process and the individuals involved. The findings of this thesis support the view that healthcare service engagement may be effectively supported if we focus on the nature of the relationships between components of engagement, rather than on what we assume will be their cumulative influence on engagement.

Each design recommendation employs the Healthcare Service Engagement Model as a means of understanding key characteristics of the engagement process. The first two recommendations are specifically directed towards the assessment of service users' engagement needs, while accounting for the interconnected, situated, emergent nature of engagement and its need for quality human interactions. The third recommendation is directed towards some of the organisational issues, which cause problems for healthcare service engagement. Each recommendation is summarised below and then further explained in the subsections thereafter.

1) Assessing for Interconnectedness and Situatedness

➢ Employ the Healthcare Service Engagement Model to identify interconnections between the factors that affect engagement.

➢ Prioritise service users' engagement needs alongside their healthcare needs.

➢ Build on healthcare professionals' capacity to respond to the interconnected and situated nature of healthcare service engagement.

2) *Evaluating the Requirements of the Two Stages of Engagement*

➢ Service engagement needs should be anticipated and planned as part of an emergent and cyclic engagement process.

➢ Barriers to engagement with the service should be addressed before introducing self-care resources and practices.

3) *Adopting a Holistic Engagement Approach that Considers the Wider Healthcare System*

➢ Developing a holistic awareness of how engagement is supported across healthcare services may highlight opportunities for better communication channels between services. This may also enable services to reduce the observed complexity by reducing the number of service encounters.

➢ Integrating the Falls Risk Assessment Tool (FRAT) into healthcare assessments which are given higher priority may increase the number of service users being referred into the falls prevention service.

8.2.3.1 Assessing for Interconnectedness and Situatedness

The findings of this study show that, although the falls prevention service effectively respond to service users' immediate healthcare needs by referring them to other services or providing them with healthcare, the service users' engagement needs were left under supported, which caused disengagement with the service and consequently influenced service users' health. One of the causes of this oversight is the lack of attention attributed to the interconnections between the factors that affect service users' engagement. Therefore when a service user's healthcare needs suddenly change, there is currently no formal assessment to understand how this change may affect the service user's engagement with the service and with self-care behaviours, thus allowing disengagement to occur.

To account for this oversight, and the interconnected and situated nature of engagement, the Healthcare Service Engagement Model may be employed to holistically evaluate the engagement needs of service users. The Healthcare Service Engagement Model enables healthcare professionals to identify the most prominent relationships between the social, environmental, organisational and health-related factors that affect engagement as a means of supporting engagement at the most transformative point. For example, if social support is identified as having transformative effect on other factors of engagement (such as their ability to leave their homes and access healthcare and the ability to self-care), then healthcare professionals should focus on service users' access to social support as a means of supporting their engagement more generally. The findings support the view that when healthcare professionals are given the organisational freedom to respond to the situated engagement needs of service users; their engagement is better supported.

Adding the evaluation of service users' engagement needs to the falls prevention team's existing assessments may increase the complexity of their role. However, by holistically accounting for the engagement needs of service users

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alongside existing healthcare assessments, it may be possible to alleviate sources of future disengagement, which could reduce the complexity of their role. For example, by maintaining service users' engagement both with the service and with their prescribed self-care behaviours, service users may be less likely to fall. Therefore, the complex physical and psychological consequences of falling may also be averted, which may reduce the number of service encounters and the different levels of support (social, emotional, physical) service users may require following a fall.

8.2.3.2 Evaluating the Requirements of the Two Emergent Stages of Engagement

This study found that healthcare service engagement occurs in two iterative stages that exist as part of a non-linear interconnected process. By conceptualising healthcare service engagement as being comprised of two stages, namely service and self-care engagement, it is possible for healthcare professionals to address different types of engagement needs, which may arise at each stage of engagement. For example, service users may have specific beliefs and attitudes that affect their engagement with the falls prevention service that are different to their beliefs about self-care behaviours. This was revealed in the findings when service users happily conducted self-care behaviours but were reluctant to engagement with healthcare services as a result of negative service encounters. Furthermore, a service user may have specific objections about engaging with different aspects of the service such as occupational therapy or physiotherapy. Similarly, service users may show high levels of engagement with some self-care behaviours such as taking medication, but low levels of engagement for independently performing home exercises.

Therefore to better support service users' engagement during both stages (and for different aspects of these stages), healthcare professionals should properly address service users' attitudes and beliefs that negatively affect their engagement

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at the service stage before introducing equipment and self-care skills, and resources that are likely to go unused at the self-care stage of engagement. Healthcare professionals must also consider that each of these stages of engagement is emergent, and is therefore subject to change along with service users' circumstances. For example, a service user may be able to independently engage with the strength and balance exercise class part of the service; however when their health changes, so does their ability to engage at the service stage.

By employing the Healthcare Service Engagement Model to regularly assess service users' engagement needs, it may be possible to identify the specific ways in which their engagement may be better supported throughout both stages of engagement. By identifying specific engagement needs, healthcare professionals may find that more time and resources may be required to address service users' attitudes and beliefs towards both the service and self-care behaviours. However, once these issues have been resolved, service users may be more likely to perform self-care behaviours independently, which may reduce falls and prevent readmissions into the service.

8.2.3.3 Adopting a Holistic Engagement Approach that Considers the Wider Healthcare System

This study found some evidence of an under-assessment of elderly people's falls risk by other healthcare professionals. The NICE (2013) falls prevention guidelines stipulate that service users over the age of sixty-five should be frequently asked about falls; however, findings from this study indicate multiple occasions where service users were not asked about their falls. This study also revealed that service users found the number of service encounters they experience as overwhelming and confusing, which had negative implications for their engagement. This is because they often struggled to comprehend and remember which service each healthcare professional was from, and which self-care behaviours they must perform for different parts of different healthcare

services. The findings also revealed confusion about who had referred them into the service, and why they were sent several different appointment letters once referred into the falls prevention service. Therefore, oversights in conducting falls risk assessments and the current level of complexity caused by multiple service encounters represent two barriers that affect healthcare service engagement at an organisational level.

It may be possible to reduce the number of service encounters and assessments that service users are required to partake in by developing communication channels between the falls prevention service and other health and social care services. The occupational therapist explained in Section 5.3.6 that communication between the falls prevention team and social services was particularly difficult, as social services store their assessments of service users on databases, which are not accessible to the falls prevention service. This means that a service user may have recently received an occupational therapist assessment from another service prior to being referred. By developing communication channels with other health and social care services, it may be possible to identify some of the overlaps of assessments and treatments to reduce the level of complexity that represents significant problems for service users' engagement. This may enable healthcare professionals to slightly expand on their current assessment or the support, skills and resources that they deliver in a particular service encounter, to reduce service encounters and better support engagement.

To increase the number of 'at risk' service users being referred into the falls prevention service, it is also recommended that the 'Falls Risk Assessment Tool' (FRAT) be integrated into other assessments that are used more frequently to assess elderly, chronically ill service users. By integrating the FRAT into assessments for conditions that service users are more likely to report, it may be easier for healthcare professionals to identify more individuals who are at risk, as

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the assessments are integrated. For example, when services users visit their general practitioner for conditions, which increase their risk of falling, such as diabetes, arthritis and chronic pain, their risk of falling should be assessed as part of the same assessment. This physical integration of assessments may also contribute towards increasing the level of importance that is attributed to falls, and may help to increase referrals into the falls prevention service.

8.3 Reflection

This thesis aimed to understand how engagement among service users with complex healthcare needs may be better supported. It responded to this problem by reconceptualising what is known about the engagement process; and adopting a grounded and developmental research approach. Reframing the process of engagement so that it more accurately reflected phenomena observed in the data was a crucial step towards identifying ways it can be better supported within the falls prevention service.

The Healthcare Service Engagement Model (See Chapter 7) was therefore a key output of this study as it represents an alternative insight regarding the engagement process as defined by interconnectedness, non-linearity, and situatedness. The Healthcare Service Engagement Model is presented as a conceptual visualisation of the engagement process, while also offering healthcare professionals a functional evaluative framework that invites their reflection.

A more accurate model of the engagement process (Section 7.2) contributed towards the view that a universal and blanket approach to healthcare engagement does not adequately meet the complex engagement needs of elderly, chronically ill service users. Instead, supporting healthcare service engagement within this context requires a service user-centric approach with a clear understanding of how engagement emerges through interaction. This perspective proposes that

engagement is better supported when specific factors, which have the most detrimental implications for engagement, are identified and addressed.

This counters accepted strategies to support healthcare engagement, which assume that if the relevant factors affecting engagement are improved, service users' overall engagement will also improve. Instead, this study found that some factors affect engagement more significantly than others, as they emerge as part of a unique and largely unpredictable process. It is therefore recommended that strategies to better support engagement employ a service user-centric approach to properly determine service users' engagement needs.

Underpinning the key findings is a contribution towards a growing body of literature calling for greater importance to be placed on the process of healthcare service engagement, particularly for service users' with complex healthcare needs. The findings also contribute towards the view that fundamental to the success of any healthcare engagement intervention are healthcare professionals; with their multifaceted knowledge of the healthcare and engagement needs of service users and their unique ability to create positive change within the process of engagement. Harnessing the skills of healthcare professionals and creating flexible working conditions for them to respond consciously to the emergent engagement needs of service users is therefore crucial in order for engagement to be better supported. Whether a healthcare professional is completing an assessment, providing healthcare information, or instructing service users how to perform self-care behaviours, the factors that affect their engagement should always be a central concern as they represent a key driver in order for healthcare interventions to succeed. In line with the shift in academic and healthcare policy rhetoric regarding personalisation, user-centric care and healthcare service engagement, this thesis also calls for a shift in organisational and healthcare professional practice to make engagement an integral priority across all aspects of healthcare work.

The Healthcare Service Engagement Model provides healthcare professionals with a cohesive evaluative tool, which enables them to better understand how they can adapt their practices to more effectively support healthcare service engagement. This may allow them to focus their time and the resources available to them on specific social, physical, organisational factors that may have the most transformative influence on service users' engagement.

8.3.1 Limitations

A key methodological perspective underpinning this research is that actors generate knowledge as they interact. By employing this highly interpretivist perspective, it was possible to both recognise and value that healthcare service engagement occurs as part of an interactive process involving multiple participants. One might argue, however, that this perspective, while focusing on the engagement needs of service users, paid less attention to those of healthcare professionals, who also play a significant role in the engagement process.

A limitation of researching elderly, chronically ill service users is that it was quite difficult to recruit them because of their ill health. It took several months to recruit enough service users for the project, which caused a significant delay.

The selection of service users was conducive to answering the above research question in that their varied circumstances and the uniqueness of each case provided a rich base from which the Healthcare Service Engagement model was developed. Some of the characteristics observed among this cohort were particularly important for the study of engagement in complex healthcare systems because factors such as their health were subject to constant and often abrupt change. This characteristic alone was different to that of other sample groups; their quickly changing health status and complex array of diverse health concerns posed wide-ranging challenges for their engagement with healthcare services.

As the Healthcare Service Engagement model was developed as part of an emergent process after data collection, it was not possible to fully utilise the model as a means of guiding data collection. Consequently, it was only possible to illustrate how some of the features of the model may be employed to better understand the dynamics of healthcare engagement. Given additional research time, it would be beneficial to re-interview the participants to obtain a holistic account of their engagement experiences, which considers the multiple factors of engagement and their relationships as illustrated in the Healthcare Service Engagement model. However, such research would be difficult to scope and it is hoped that the engagement model described in this thesis can assist with this process.

Applying the Healthcare Service Engagement Model to data that was used to develop it was more likely to show insights regarding the nature of healthcare service engagement. It is therefore a limitation of this research that time restrictions prevented one from applying the Healthcare Service Engagement Model to new data as a means of validating it. Until the model has been applied to other healthcare contexts one cannot know its usefulness outside of a falls prevention context.

8.3.2 Future Work

This study found that the process of engagement for users with complex needs has an important temporal dimension, and develops over long periods of time. A longitudinal approach may therefore prove particularly valuable to investigate the engagement of those who are chronically ill, since their service encounters are numerous as they interact with different types of service for their complex healthcare needs. Further work may therefore involve expanding engagement research to account for significant service encounters and life events, which service users' believe may have influenced their current levels of engagement. This would involve a shift of research focus, bringing service

encounters and life events into a more central focus of engagement research. For example, the findings indicated that when service users' felt disenfranchised by one healthcare service, this experience still influenced their current inclination to engage with healthcare, despite a lapse in time and other successful healthcare interactions. It would therefore be valuable for engagement research to better understand how encounters that occur over time influence current levels of engagement. A longitudinal approach would enable one to refocus the factors that influence service users' engagement, rather than generating dramatically different results.

To test and develop the Healthcare Service Engagement Model and to demonstrate its applicability to other healthcare contexts, future research should be conducted to evaluate service users' engagement needs using the model. This would enable one to highlight any development requirements so that it can be employed in healthcare contexts where service users have complex healthcare needs other than falls prevention. This approach may include an action research element, whereby some changes to the process of engagement are implemented to see how this affects other factors in the process of engagement.

This study found that healthcare service engagement emerges across different times and service encounters. This insight therefore creates an opportunity for healthcare engagement studies to consider the ways in which components of engagement transcend across interactions, services, and among healthcare professionals as a means of better understanding how engagement may be effectively supported. Future research may therefore involve interviewing healthcare professionals from different healthcare services to further develop how engagement occurs across different contexts.

This study found the falls prevention service represents a unique context that is particularly advantageous for studying service users with continuously changing and complex healthcare engagement needs. The falls prevention service

is unique in that it does not respond to one disease or condition in particular, but instead responds to a wide range of health conditions that are thought to contribute towards a service users risk of falling. In this sense, the falls prevention service may be thought of as a triage service, which responds to a wide range of complex and interconnected health conditions, educating, preparing and referring service users to other healthcare services accordingly. Future research may therefore include identifying other health and social care services that are characteristically similar to the falls prevention service, with the aim of investigating how these services facilitate engagement by educating and referring service users to specialist services. By understanding the unique role of these cross-disciplinary services in a number of different contexts, it may be possible to better utilize the foundational work that they achieve for healthcare service engagement, and the extent to which this supports engagement with other services.

Within the scope of this research the Healthcare Service Engagement Model is intended to offer support to healthcare professionals in their assessment of service users engagement; however there are a number of potential applications of the model that should be explored in future work. These applications include using the Healthcare Service Engagement Model to inform the design of self-care technologies for example. The Healthcare Service Engagement Model could be employed as a design tool that enables a wide range of users (i.e. designers, policy makers and healthcare professionals) to consider the interconnections between the factors that influence service users engagement in order to inform the design of a particular self-care application or intervention. For example, to consider the ways in which various attitudes and beliefs towards self-care may be addressed through the design of technology or as an intervention prior to using the technology.

Given that the theoretical underpinnings of the Healthcare Service Engagement Model have been validated in a number of contexts (i.e. education,

health promotion and policy making), viable future research may include applying the model to engagement studies that extend beyond healthcare. For example, one may use the model in order to identify the factors and their interconnections that affect individuals' engagement with community services.

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