Understanding Perceptions of Health Following Hip Fracture: Using a Phenomenological Framework to Explore the Opinions of Patients, Caregivers, and Providers

by

Amy Milena Hoang-Kim

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy

Institute of Medical Science

University of Toronto

© Copyright by Amy Milena Hoang-Kim (2015)
Understanding Perceptions of Health Following Hip Fracture: Using a Phenomenological Framework to Explore the Opinions of Patients, Caregivers, and Providers

Amy Milena Hoang-Kim, Doctor of Philosophy

Institute of Medical Science, University of Toronto, 2015

ABSTRACT

The following study was guided by an overall research question: "What does it mean to have a hip fracture?". Using a phenomenological approach, I interviewed individuals who experienced a hip fracture, primary caregivers, and healthcare providers (HCPs) with the following objectives in mind: (1) to clarify meanings and conceptualization of prognosis for patients and caregivers following hip fracture as compared to HCPs treating them, (2) to enhance our understanding how these perceptions impact healthcare delivery at both ends of the spectrum, and (3) to provide a rationale for these perspectives. 25 participants participated in in-depth interviews that were audio-taped. The transcripts were coded separately for patients and for HCPs. This work was conducted without a-priori hypotheses and through an inductive thematic analysis. Prognosis was the underlying phenomenon with four sub-themes identified for patients and caregivers: forecast, non-knowledge, sense of self-ownership, and enlargement. Four other sub-themes were identified for HCPs: interconnectedness, hip work, embodiment, and forecast. HCPs have the right to assign prognosis; however, patients' perceptions can be affected, not only through words, but also through the actions exerted by those in the healthcare profession. Viewing prognosis as a perspective (a Heideggerian concept) rather than a foreshadowing formed the main theoretical underpinning. Other theories informed this work: embodiment
(Merleau-Ponty, 1962), body-self dialectic (Gadow, 1980), and body work and power (Twigg, 2011). Implications for HCPs consist in aiding the patient to develop insight on his or her symptoms and situation in addition to developing a therapeutic relationship that can effect clinical change. Implications for patients/caregivers emphasize using the patient’s agency to enhance his or her quality of life. Future research in the area of prognosis will consider social context, while exploring variability, perceived value, and the impact on outcomes following discussion on hip fracture interventions between HCPs and patients/caregivers.
ACKNOWLEDGEMENTS AND CONTRIBUTIONS

I would like to acknowledge the support and assistance I received from my supervisor Prof. Dr. Emil Schemitsch and my committee members, Prof. Dr. Scott Reeves, Prof. Dr. Dorcas Beaton, and Prof. Dr. Abhaya Kulkarni. All of your dedication, stimulation, and attention to detail were a critical element in refining my presentations, my thoughts, and personal reflections.

I am thankful to have received support from the University of Toronto and am grateful for having been awarded the Queen’s II Elizabeth Scholarship in Science and Technology. In this thesis, the interviews and analysis were conducted by the researcher alone. Although I coded frameworks, captured additional probes in the interview guide and developed the themes, my committee members reviewed each of these phases. The healthcare professional research team that met to discuss transcripts was comprised of Dr. Jason Busse, Kelly Warmington, Prof. Dr. Dorcas Beaton, and Prof. Dr. Abhaya Kulkarni.

The published manuscript: "Understanding osteoporosis and fractures: An introduction to the use of qualitative research" would not have been possible without the contributions of its co-authors; Kelly Warmington- sorted and classified the collected articles; Dr. Joanna Sale provided qualitative expertise and revised the manuscript; Prof. Dr. Scott Reeves oversaw the direction of the paper and provided invaluable qualitative insights; Prof. Dr. Abhaya Kulkarni, Prof. Dr. Dorcas Beaton and Prof. Dr. Emil Schemitsch contributed to the design of the review and revised the manuscript.

I would like to thank my supervisor, Prof. Dr. Emil Schemitsch for all of his support and Dr. Jeremy Hall for granting access to colleagues and patients. A special thank you to Prof. Dr. Scott Reeves, who even from afar, continued to guide me through the interviewing, coding process, and revisions. I extend my thanks to the team working for the Musculoskeletal Health and Outcomes Research for providing me with moral and professional support throughout my degree. In particular, I am grateful to Victoria Elliot-Gibson-- recruitment would not have been possible without your assistance. I thank my examiners: Dr. Jill Cameron, Dr. Janet Parsons, and Dr. Lora Giangregoriou.

I also feel privileged to have met and interviewed the patients, caregivers, and healthcare professionals who trusted me with their stories and experiences, and helped me to understand the complexities of managing a hip fracture. I need to thank the many individuals who reviewed and lived my work and who so generously gave of their time to provide their helpful comments. In particular: Dr. Joanna Sale, Samantha Bremnar, Hilary Doyle, Emily Chung, and Elizabeth Will. My family has been pivotal in making me proud of my achievements and I'm aware how this thesis has literally shaped and changed our lives. I dedicate this thesis to Hai and Marisa, whose unwavering support pushed me to the finish line. I hope my husband, who has been so patient through this undertaking, and my daughter, who has provided me much joy and relief, will see this perseverance as aptly-managed. It has truly been a journey of sorts.
# TABLE OF CONTENTS

Abstract........................................................................................................................................... ii
Acknowledgements and Contributions ................................................................................................. iv
Table of Contents.................................................................................................................................... vi
LIST OF TABLES.................................................................................................................................... xiii
LIST OF FIGURES.................................................................................................................................... xiv
LIST OF APPENDICES.............................................................................................................................. xv
LIST OF ACRONYMS............................................................................................................................... xvi

CHAPTER 1: Introduction ....................................................................................................................... 1
1.1 Chapter Overview ............................................................................................................................... 1
1.2 Problem Statement and Purpose......................................................................................................... 2
1.3 Potential Significance.......................................................................................................................... 4
1.4 The Use of Theories and General Research Question ...................................................................... 5
1.5 Thesis Overview................................................................................................................................. 6

CHAPTER 2: Comprehensive Literature Review .................................................................................... 8
2.1 Chapter Overview ............................................................................................................................... 8
2.2 Introduction ......................................................................................................................................... 9
2.3 Meanings of Illness, Health, Well-Being, and the Pursuit of Health .............................................. 9
2.4 Theorizing Social Determinants of Health ....................................................................................... 12
   2.4.1 Health Belief Model..................................................................................................................... 13
   2.4.2 Health Lifestyle Theory .............................................................................................................. 13
   2.4.3 Population Health Model ........................................................................................................... 14
   2.4.4 Fundamental Cause Theory ....................................................................................................... 17
   2.4.5 Stress Process ............................................................................................................................ 17
2.5 Appraisal of Existing Theories .......................................................................................................... 18
2.6 Historical Context of Body Work: Evolution from bodies to embodiment .................................... 19
<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6.1 Assumptions Underlying the Medical Model of Illness</td>
</tr>
<tr>
<td>2.6.2 Biological Reductionism</td>
</tr>
<tr>
<td>2.6.3 Magic Bullet Approach</td>
</tr>
<tr>
<td>2.6.4 Mind Body Dualism</td>
</tr>
<tr>
<td>2.6.5 Body as Machine</td>
</tr>
<tr>
<td>2.6.6 Body Undergoes a Paradigm Shift</td>
</tr>
<tr>
<td>2.6.7 The Hip</td>
</tr>
<tr>
<td>2.6.8 Embodiment</td>
</tr>
<tr>
<td>2.6.9 Bodies and the Embodiment of Emotion</td>
</tr>
<tr>
<td>2.6.10 Bodies in Space and Disciplinary Power</td>
</tr>
<tr>
<td>2.6.11 The Body and the Pursuit of Health</td>
</tr>
<tr>
<td>2.7 Summary</td>
</tr>
</tbody>
</table>

CHAPTER 3: Searching for a Qualitative Paradigm

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Chapter Overview</td>
</tr>
<tr>
<td>3.2 Introduction</td>
</tr>
<tr>
<td>3.3 Methods</td>
</tr>
<tr>
<td>3.4 Results</td>
</tr>
<tr>
<td>3.4.1 Narrative research: A patient’s experience can improve orthopaedic nursing care following hip fracture</td>
</tr>
<tr>
<td>3.4.2 Phenomenology: Insight gained from a patient’s understanding of their bone mineral density test results</td>
</tr>
<tr>
<td>3.4.3 Grounded theory: Development of a “healthy risk awareness” theory</td>
</tr>
<tr>
<td>3.4.4 Ethnography: Exploration of cultural boundaries affecting hip fracture management</td>
</tr>
<tr>
<td>3.4.5 Case study: Junctures where communication amongst interprofessionals break down</td>
</tr>
<tr>
<td>3.5 Strengths and Weaknesses</td>
</tr>
</tbody>
</table>
Chapter 7: Discussion and Implications ................................................................. 139
7.1 Chapter Overview ......................................................................................... 139
7.2 Introduction ................................................................................................. 139
7.3 Synthesis of Findings .................................................................................. 140
7.4 Impact of Findings for HCPs and Patients/Caregivers ............................... 143
  7.4.1 Exploring Ways to Develop Clinical Insight ........................................ 144
  7.4.2 Developing a Therapeutic Relationship with the Patient ...................... 147
  7.4.3 Interprofessional-Patient Education Initiatives ...................................... 148
  7.4.4 Patient-Centred Care ............................................................................ 151
7.5 The Rationale for These Perspectives ......................................................... 153
7.6 Thesis Contribution ...................................................................................... 155
7.7 Strengths and Limitations .......................................................................... 156
7.8 Future Research and Implications .............................................................. 156
7.9 Conclusions ................................................................................................. 157
7.10 Summary .................................................................................................... 158
REFERENCES .................................................................................................... 159
LIST OF TABLES

Table 1: Foucault’s 4 principles which exemplify power in discourse................................. 30
Table 2: A list of key terms in alphabetical order and their definitions used in this article .................................................................................................................................................. 35
Table 3: Six core questions used to distinguish between the theoretical frameworks .... 37
Table 4: Key features from the qualitative articles that were included in our study on osteoporosis and fracture listed in chronological order by first author's last name ........ 39
Table 5: Nine observational dimensions and their descriptions used by ethnomethodologists .................................................................................................................................................. 52
Table 6: Additional demographics and descriptors for patients and caregivers from medical records ........................................................................................................................................................ 79
Table 7: Additional demographics and descriptors for healthcare providers in southern Ontario who Participated in In-Depth Interviews ........................................................................................................................................................ 80
Table 8: Questions in the in-depth interviews ................................................................................................................................. 81
Table 9: New expansion of hermeneutic prognosis .................................................................................................................................................. 109
Table 10: Characteristics of Healthcare Providers Enrolled in Our Study ......................... 119
LIST OF FIGURES

Figure 1: Health Lifestyle Theory ................................................................. 15

Figure 2: Population Health Model Diagram .................................................. 18

Figure 3: Thematic Drawing Depicting Perceptions of Healthcare Providers, Patients and their Caregivers ................................................................. 85
# LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Search Strategy</td>
<td>180</td>
</tr>
<tr>
<td>B</td>
<td>SMH ethics approval</td>
<td>181</td>
</tr>
<tr>
<td>C</td>
<td>University of Toronto ethics approval</td>
<td>183</td>
</tr>
<tr>
<td>D</td>
<td>Interview Guide: Healthcare providers</td>
<td>184</td>
</tr>
<tr>
<td>E</td>
<td>Interview Guide: Caregivers</td>
<td>188</td>
</tr>
<tr>
<td>F</td>
<td>Interview Guide: Patients</td>
<td>190</td>
</tr>
<tr>
<td>G</td>
<td>Coding Framework</td>
<td>191</td>
</tr>
<tr>
<td>H</td>
<td>Timeline</td>
<td>197</td>
</tr>
</tbody>
</table>
LIST OF ACRONYMS

Bone mineral density .................................................................................. BMD
Common sense model .................................................................................. CSM
Healthcare providers .................................................................................. HCP
International Classification of Functioning, Disability, and Health .............. ICF
CHAPTER 1

INTRODUCTION

1.1 Chapter Overview

This thesis aims to increase clarity and understanding in the field of hip fracture research by asking, "what does it mean to have a hip fracture?" and by investigating ways to close systemic information gaps between stakeholders. Canadian healthcare systems have moved from sociological and medical models dominated either by structure or agency to models centered on holistic care (Strohschein & Weitz, 2013). There is a surge in the pursuit of alternative meanings of health or illness, which encompasses experiential, psychological and social aspects to better understand how to minimize stress and anxiety following interventions (Cohen & Lazarus, 1973; Brownlie et al., 2007). I interviewed patients and caregivers in combination with healthcare providers (HCPs) across different healthcare systems, either with a hip fracture or managing one. It was apparent that each stakeholder group wants to know, "What will happen next?" and I pursued different meanings of prognosis. Prognosis forms the backbone of this dissertation and it was developed through an ongoing analysis of induction and deduction. I will begin this chapter with what led me to explore the nuances of a hip fracture and repair drawing from previous quantitative studies, my personal experiences, and pilot work. In Chapter 2, a comprehensive literature review will form the historical context, the parameters for the overall research question, and how theories such as embodiment, boundary roles, and bodywork have illuminated my findings. The final section in this chapter is an outline of the thesis.
1.2 Problem Statement and Purpose

One of the major challenges for individuals who have recently undergone hip interventions is understanding prognosis. Prognosis is placed between diagnosis and treatment and it is often where medicine is defined. Quantitatively, HCPs map future care pathway of a patient and assess the risk a secondary fracture would pose to the individual. Major factors affecting the functional prognosis of patients with hip fracture include age and pre-fracture function (Kristensen, 2011). Health status, fracture type, pain, anaemia, muscle strength, and early mobility level also playing a determining role (Mishel, 1981, 1984; Kurital et al., 2012). Google scholar yields 54,100 results when combining keywords hip fracture and prognosis; and yet, qualitative evidence is still missing.

Working for many years alongside patients with fractures in a clinical setting of the Rizzoli Orthopaedic Institute in Bologna, Italy, allowed me to better understand what having a hip fracture might entail. As research coordinator, I administered questionnaires to these patients when they were enrolled in a randomized controlled study, and again at various follow-ups. The majority of patients I saw were treated for low trauma fractures, and many who presented with osteoporosis also received adjunct pharmaceutical therapy. I soon realized that the questions I had been asking, including those from patient and physician-reported outcome instruments, did not capture those patients with severe co-morbidities, such as dementia and other outliers. The majority of patients involved in these studies were healthy, elderly females. Subsequently, quantitative research was not going to provide me with the answers I wanted for what it meant to have a hip fracture as a patient in these sub-types.
Pivotal to setting up my qualitative study was understanding the gap in assessing and conceptualizing meanings of health. I conducted a systematic review looking at hip fracture literature focusing on the types of outcome instruments that were used in different studies. I concluded that outcome assessment was heterogeneous across various patient populations all managed for hip fracture (Hoang-Kim et al., 2013).

I conducted pilot work in two phases: two focus groups made up of experts with local and international experience. I sampled views from various sub-specialties i.e. nurses, physiotherapists, and geriatricians, and note that more on the methodology is reported in a published article (Hoang Kim, 2010a). These discussions helped to set up the current qualitative study by informing the type of study approach and sampling criteria I was going to use as well as the initial interview guide. As Cree et al. (2001) reported and Hoang-Kim et al. (2010b) concluded from a survey of the international HCPs, the number and severity of co-morbidities and physical function were the strongest influence on health perception. Current assessments of health status and quality of life lacked clarity and relevancy (Hoang-Kim, 2010a).

Further, the experts attested to problems associated with self-report when patients had insufficient cognitive or communication abilities, when they experienced severe symptom distress, or when they found an interview to be physically or emotionally too burdensome (Sneeuw et al., 2002). For the patient who was unable or unwilling to provide information on his or her health, the significant other or an HCP could be employed as alternative sources (Sprangers et al., 1992; Hoang-Kim, 2010a). In studies of health in the aged, it is not uncommon for more than 20% of elderly and 50% of nursing home residents to be unable or unwilling to participate (Magaziner, 1997). Relying on proxy responders could only be justified if he or she
could identify a range of health domains, including patients' physical and psychosocial functioning, and a variety of physical symptoms. From the second focus group, I understood the subtleties of power existing in the HCP hierarchical system i.e more medical jargon, political overtone, and references to scientific papers were used by the endocrinologist and geriatrician rather than by the research coordinator. I also felt that there were a number of HCPs involved in the patient's life depending on his or her co-morbidities and this led me to choose in-depth interviews as part of the phenomenological approach.

This study was suited to a qualitative approach because it was exploratory, and therefore more suited to understanding perceptions of health research in these contexts (Kuper et al., 2008). In no previously published work are patients, family caregivers, and providers asked directly about what it means to experience a hip fracture.

1.3 Potential Significance

Managing ways to reduce the stress and anxiety following a hip fracture could enhance our current models of holistic care. It is hoped that my findings on the conceptualization of prognosis can produce a transformative effect on the patient, on his or her ability to take control, and on his or her overall experience while recovering from a hip fracture. Monitoring changes in individuals following interventions can aid HCPs in delivering prognoses in ways to alleviate stress for the patient and families alike. Further, my results could inform the development of vignettes to improve the communication around prognosis between these stakeholder groups across different healthcare networks.
1.4 The Use of Theories and General Research Question

Qualitative studies rely heavily on the use of theory drawn from social science and humanities to guide the research process (Reeves et al., 2008b). For the present study, interpretive or hermeneutic phenomenology was used as a theory to illuminate different cultures i.e. the HCPs working environment and social interactions. Theory can influence various phases of the research study: the research questions design, the selection of themes developed from the reading and re-reading of transcripts or observational notes, as well as providing causal explanations for the arising issue and its complexities (Guba, 1990; Reeves et al., 2008b). There is no single solution or perspective (Van Manen, 2014; Sandelowski & Barruso, 2003; De Witt & Ploeg 2006; Reeves et al., 2008).

The application of theoretically informed results in qualitative research can inform policymakers and HCPs in the healthcare domain of the "processes that occur beneath the visible surface" (Reeves et al., 2008b). This contrasts quantitative scopes where generalities are formed. In my study, the use of theories was generated from a continual process of deduction and induction. It is hoped that the underlying processes of the phenomena 'prognosis' found in this thesis would draw upon wider significance and applicability. The thrust of the discussions amongst experts in the focus groups led me to concentrate this study on the experiences of the patient and his caregiver, combined with that of the HCP across different healthcare systems. As I continued to gather preliminary information from in-depth interviews and an overview of the different qualitative approaches (discussed further in Chapter 3), I understood that I needed to gain an in-depth insight into the lived experience of the participants. A focus on a phenomenological framework for my study would thus eliminate the use of focus groups and
allow me to access participants multiple times to understand the full detail of daily routines and relationships and allow me to reach deeper meanings of prognosis. More on how the use of phenomenology affected my findings will be discussed in Chapter 4.

The following study was guided by an overall question: "What are the nuances associated with hip fracture?" Using an exploratory interpretive framework, I interviewed individuals who experienced a hip fracture, primary caregivers, and HCPs with the following objectives in mind:

1. to clarify meanings and conceptualization of prognosis for patients and caregivers following hip fractures as compared to HCPs treating them

2. to understand how these perceptions impact healthcare delivery at both ends of the spectrum

3. to provide the rationale for these perceptions

1.5 Thesis Overview

In Chapter 1, an introduction and background to the current studies and central research questions were provided. In Chapter 2, contemporary ‘theories of the body’ in relation to how social roles influence perceptions of health and illness were the parameters for my research question. This dissertation will investigate different phenomenological realities, such as the meanings of illness, health and disability, the social determinants of health, and bodies in action. The purpose of the comprehensive review presented in Chapter 2 is to provide a historical context, documenting research that presently exists and to provide a rationale for my
own study based on an examination of what is missing and needed in the existing literature with theories that will illuminate my findings. I present an overview of different qualitative approaches in Chapter 3, using examples from the osteoporosis and fracture literature. I decide to use phenomenology as it best adheres to answering Patton's core questions about the researcher conducting the qualitative study.

In Chapter 4, I include what led me to include study participants and I explain the criteria I set for selecting participants. I discuss how the studies were conducted, and how my own professional history influenced my assumptions while planning the study. Finally, I discuss my ultimate re-structuring of the interview guide.

We can begin to appreciate what prognosis means to patients and HCPs (discussed in Chapter 5). We can open ourselves to the narratives provided by healthcare providers concerning their 'lived experiences' and we can understand how these narratives influence the delivery of prognosis and what impact this has across different healthcare systems. I cover this in Chapter 6. Stakeholder perspectives tend to conflict with the dominant theme so I will discuss shifting stakeholder alignments, and possible sub-group differences, as well as the perceptions held by stakeholder groups. In Chapter 7, I will combine my overall theoretical findings together with empirical evidence to shed light on the experiences felt by both patients and their providers, positing ways in which these could positively impact the delivery of healthcare.
CHAPTER 2
COMPREHENSIVE LITERATURE REVIEW

2.1 Chapter Overview

In this chapter, I will provide meanings of illness, health, and disability as found in the literature. An overview of the theories behind social determinants of health will be explored: the health belief model, health lifestyle theory, population health model, fundamental cause theory, and the stress process. These models help illustrate alternative perspectives where one’s agency may not always produce change should social patterns be established and be affected by different political and geographical influences. Following this, I will discuss the assumptions embedded within the medical models related to illness contrasting in turn the practitioner's perspective with that of a sociologist. Indeed, physicians acknowledge shortcomings with these models while not all elements are rejected by sociologists (Strohschein & Weitz, 2013). Rather, from a sociological perspective such a model exists to situate and understand our predispositions towards health-related concepts such as, illness- either acute or chronic, the burden of disease or fracture and its concomitant flux of complications associated with age. I will highlight the literature supporting the concept of body work--- one of the central themes in medicine with heavy-laden sociological and global implications. Body work provides the context in which HCPs manage hip fractures: the hierarchies that are embedded in these spheres, the embodiment of emotion that accompanies both high and low status positions within institutions, and the spatial as well as temporal considerations that may influence prognoses.
2.2 Introduction

A comprehensive literature search was conducted to understand the boundaries and intersections of the meanings of health that participants could draw upon following a hip fracture. I searched the databases Google scholar, Pubmed, and Scopus as well as the University of Toronto library catalogue up until March 2014. I used search terms exploded and used singly and/or in combination: embodiment, body work, fracture, hip, prognosis, patient-provider interactions, patients as consumers, outcome predictors, boundary roles, cultural diversity/awareness, socio-political theories, recovery, sick role, disability, illness, health, qualitative, and postmodernism. I conducted a handsearch of article reference lists and qualitative and phenomenology research texts for publications in the English language. The primary source for medical and social models was based on my readings from "The Sociology of Health, Illness, and Health Care in Canada" by Lisa Strohschein and Rose Weitz (2013). Postmodernism and transformation of the body to potential meanings for the hip arose from my reflections upon reading, "Reassessing Foucault: power, medicine, and the body" by Colin Jones and Roy Porter (1994) as well as from the text by Linda McDowell (2009), "Working bodies".

2.3 Meanings of Illness, Health, Well-Being, and the Pursuit of Health

There is an overwhelming surge in wanting to evolve current meanings of illness, health, and well-being. Researchers have noted that these terms are heavily-used in clinical settings and in the media, and re-visited within sociological and medical models uncovering true specific
meaning necessitates the use of hermeneutic phenomenological studies that can support alternative perspectives and add value to the present understanding of health and well-being (Healey-Ogden & Austin, 2011). Relatively few attempts have been made to provide meaning for having a hip fracture (Archibald 2003; Huang & Acton, 2009; Koskenniemi & Suhonen, 2010; Robinson, 2010; Taylor et al., 2010; Toscan et al., 2012). No previous attempts have been made to uncover meanings of prognosis for those individuals who have fractured their hip and living with chronic illness, like back pain, which is often associated with their hip disability. I gathered from the current literature that those with chronic illness and disability often view themselves as failures and are often pressured by how society views his or her situation (Strohschein & Weitz, 2013).

Healey-Ogden et al. (2011) conducted a qualitative study in response to the many uses of the term 'well-being'. Historically, well-being and health share the concept of wholeness, where 'well-being' shares the special qualities of including a personal drive to exist (Guralnik, 1984; Healey-Ogden et al., 2011, p. 91). This hermeneutic phenomenological study revealed how this lived experience and journey of well-being continued when individuals returned home 'losing themselves to a new way of dwelling and being' (Healey-Ogden et al., 2011, p. 93). The authors concluded by stating the need to change discussions, in nursing practice, to focus on home dwelling as the center of one's well-being. This shift in focus would gain access to the patient as well as fulfilling the HCP's professional duty.

Another few studies focused on how patients diminished or enhanced distress at different points in their illness trajectory. As seen in Xuereb and Dunlop's study (2003), in undergoing
treatment one's initial sense of threat could be mitigated by circumstances that preclude many individuals from feeling overwhelmed. Nissim et al. (2012) conducted a qualitative study exploring traumatic stress in individuals with acute leukemia. Trust and reassurance (beliefs about healthcare providers providing a sense of ‘safety’), surrendering control (beliefs about benefitting emotionally by feeling detached from and less anxious about the treatment), and preference for limited information (beliefs about allowing the medical team to decide how much they should know about their illness and treatment) could in turn lead to a less dehumanizing experience (Nissim et al., 2012). The sense of being ‘abducted’ by the illness, “being suddenly removed from one’s present life and being transported into that of a hospitalized patient” was the most commonly mitigated negative experience in this study (Nissim et al., 2012, p. 500). For some patients this occurred with an incomprehensible incapacitating physical injury which precipitated the loss of physical well-being. Physical well-being, which had previously been taken for granted, as well as for the traumatic stress set forth by other co-morbidities. Some patients, “focus on getting through the immediate inpatient treatment and avoid thoughts about the next steps or overall prognosis” (Nissim et al., 2012, p. 498). As a result, healthcare providers were responsible for “speaking honestly” (Nissim et al., 2012, p. 500). In retrospect, when there were complications some patients subsequently regretted their lack of informed participation in treatment decisions.

Society is responsible for shaping the injured person's journey of self-reconstruction. In one article examining perspectives of personhood, following traumatic brain injury, embellished the feelings of being 'lost' or 'shattered' in the recovery phase (Gelech & Desjardins, 2011). The authors added aspects of stability, recovery, transcendence, and moral growth as part of the
discussions on personhood. The self was deeply entrenched in processes involving delegitimation, invalidation, negotiation, and resistance in the complex phases of reconstruction.

Historically, the evidence upon which theoretical frameworks have been built, both in social and medical spheres, shows how much more we need to evolve meanings of health and the pursuit of health through studies of lived experiences. The present focus of Canada's healthcare system is on putting the patient back into models of care (Strohschein & Weitz, 2013; Sidani & Fox, 2014) and to expand current measurements of outcome that de-limit meanings of health (PROMIS, http://www.nihpromis.org/default.aspx?AspxAutoDetectCookieSupport=1#6, last accessed July 11, 2014). Sidani and Fox (2014) critically analyzed 175 articles in order to clarify what constituted patient-centered care that could facilitate its integration across different professions. Three components were identified: holistic, collaborative, and responsive care. Holistic care involved assessing patients in their entirety in order to better address their needs (Smith et al., 2010; Stewart et al., 2000). Collaborative care involves shared decision-making between healthcare provider and the patient (Adams & Drake, 2006; Smith et al., 2011; Wilson, 2011). Responsive care is defined as recognizing patients' individual needs, expectations, and knowledge in relation to their illness (Lauver et al., 2002; Reid Ponte & Peterson, 2008).

2.4 Theorizing Social Determinants of Health

In the following section, different theories determining social patterns and meaning of health are outlined. An overview of these models help further discussions on causes of mortality and morbidity, and place the meaning of health within an historical context.
2.4.1 Health Belief Model

The health belief model postulates that both individual and social factors were involved when making health decisions. In this model according to Rosenstock (1966) and later Becker (1974, 1993), individuals were influenced by four factors in adopting preventive health behaviours: Individuals must believe that 1) they are susceptible to a particular health problem, 2) the problem is serious, 3) adopting preventive measures will reduce their risks significantly, and 4) no significant barriers make it difficult for them to adopt these measures. In turn preventive health behaviours were influenced by demographic variables, such as age and gender, or psychosocial variables (Strohschein & Weitz, 2013). For example, if patients are aware of the mortality rate following a hip fracture they may feel more vulnerable fearing another fracture. The patients' behaviour may also be shaped by advertisements concerning osteoporosis, which may prompt them to ask questions to their family physician about their condition. One arguably finds it challenging to then distinguish between life's chances (structure) and one's ability to make choices in life (agency) -- which prompts counterarguments from those who believe that all human behaviour is affected by agency and structure, in particular one sociologist by the name of Cockerham.

2.4.2 Health Lifestyle Theory

Cockerham (2005) proposed the health lifestyle theory which predicted why groups adopted patterns of healthy versus unhealthy behaviour indicating that demographic circumstances, cultural memberships, and living conditions were contributing factors to a person's actual behaviour (Figure 1).
However, this model looked at group behaviour rather than looking at an individual's agency. Compared to the Health Belief Model, this one also explained why healthy behaviours were endorsed when compared to unhealthy ones. For example, in Figure 1 you can note how life chances were brought together with life choices simultaneously to bring about almost spontaneous habits and routines.

2.4.3 The Population Health Model

In Canada, the Lalonde Report was published in 1974 presenting a framework to improve the health of the Canadian population (O'Neill & Pederson, 1994). One of the main proponents was to suggest that the health of the Canadian population should not be treated as equivalent to the quality of its medical care because medical care was only one determinant of health. The term 'health promotion' encouraged people to be more active in making positive lifestyle choices and individuals should accept more responsibility for their health. And in 1986, a meeting took place in Ottawa and was attended by world researchers and policy makers culminating in the Ottawa Charter:

Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to
identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but
It was not long before this model was superseded in part by reflections that it neglected social factors influencing one's perception of health. Rather, it promoted an individualistic action of obtaining control over one's health rather than empowering bodies and organizations to aid an individual seeking better health (Bunton, 1995). These negative views prompted the development of the population health model, which situated both health and disease as unique constructs, whereby health was really an absence of disease (Figure 2, Evans et al., 1994).

The population health model postulated that healthcare systems that exerted high expenditures would have consequentially a weakened economy. Thus how society allocates resources and power, across populations, would in turn affect the health of the population (Frank, 1995). The relations built in the Evans and Stoddart model was sustained by knowledge in both health and economics and is certainly of analytical value i.e. creating associations between socioeconomic status and health (Evans & Stoddart, 1990; Coburn et al., 2003). This was helpful in my reflection of patients undergoing hip fracture treatment with limited access to resources. Because of these financial restrains, one's chance of survival was greatly diminished. Critics of the population health model sustained that these were mere excuses at explaining governmental cutbacks in the healthcare system and again in this model there was an emphasis on structure rather than on agency -- how people felt, thought, and acted would affect a change in their environment and improve their health.
2.4.4 Fundamental Cause Theory

The fundamental cause theory came about since it became apparent that social conditions remained constant despite one's risk. A fundamental cause could be identified when certain social conditions were met: a social condition must 1) influence a wide range of health conditions, 2) operate through a number of different intervening mechanisms, 3) be associated with resources that could be used to protect health, and 4) maintain a persisting association with health over time even as intervening mechanisms were superseded by old ones (Link & Phelan, 1995; Phelan, 2010). In this scenario, the socioeconomic status as a measure of one's relative location within the stratified structure of society, operated as a fundamental cause of disease.

2.4.5 The Stress Process

In the beginning paragraph of Section 2, Nissim et al. (2012) provided insights into the process of how patients diminished or enhanced distress at different points in their illness trajectory. Stress is a natural, unavoidable, and sometimes beneficial part of life. The stress process, a theoretical model developed by Pearlin et al. (1981), differentiated between three components: stressors, moderators, and health outcomes. Stressors were either stressful life events that had an identifiable moment of onset or were a chronic strain, which typically developed slowly over time. Moderators were critical and the type and amount of resources used affected one's health. Again, this model offered unique insights but was unable to provide a complete account of the causes of disease or death.
2.5 Appraisal of Existing Theories

I have provided a brief overview in order to provide a social epidemiological background that may facilitate discussions around hip fracture mortality and morbidity. From a sociological perspective, these models rationalized patterns across populations that were influenced by factors such as gender or social class. The underlying assumptions, which will be explored more
in the following section, also formed the cognitive basis of health that were considered to influence content and wording of any subsequent measurement of health outcomes in hip fracture. Even these models needed to account for how emotions and perceptions influenced expressions of health.

2.6 Historical Context of Body Work: Evolution From Bodies to Embodiment

Body work is central to healthcare in that it involves many professions such as doctors, nurses, dentists, hygienists, paramedics, and physiotherapists (Twigg, 2000a). The concepts that were sociologically useful in body work could be drawn across these trades despite the various differences noted in the contexts within which these HCPs operated in, the expertise and knowledge the HCPs were familiar with, and the embedded hierarchies that were present in their work (Twigg, 2000b, 2006; Wolkowitz, 2002, 2006). Understanding these existing connections that were shaped also by social and economic contexts can helped us see where research was needed and where sometimes the socio-political relations between HCPs and patients cannot be otherwise altered.

2.6.1 Assumptions Underlying the Medical Model of Illness

Today, other reasons, not so dissimilar from the past, exist for needing to explore the traditional biomedical meaning of the 'body' or in this dissertation, the 'hip'. According to Strohschein and Weitz (2013), there were four popular assumptions of a medical model that I needed to be cognizant about:
• biological reductionism
• magic bullet approach
• mind body dualism
• body as machine

2.6.2 Biological Reductionism

In biological reductionism, illness was an objective biological condition. Physicians were trained to focus on the bodies of their patients neglecting to consider the social context in which illness occurs.

2.6.3 Magic Bullet Approach

Further, the notion that illness was a consequence of a specific mechanism or agent often led to a magic bullet approach whereby curing illness was about finding the right drug or therapy. In an article by Coleman et al. (2009), the authors exploited interventions around disease management as concocted by commercial vendors. These focused on the patient and targeted infrastructure that surrounded issues of patient self-management. Patients were passive recipients of care whose perspectives were considered irrelevant by the physician; diagnostic tests are heavily relied upon to detect illness. These professions depend on 'their ability to define what is normal and abnormal, and thereby offer a remedy' (Nicholls & Gibson, 2010, p. 499). New voices and commentaries emerged about what the body might mean to people given the upheaval, both socially and culturally, of the 1960s where ethnic minorities, bodies of women and disabled persons pushed forward their political agendas exposing the groups' marginalization. These political movements created a path for a more complex 'postmodern'
view of the body, which was driven by public funding, allowing for more of a heterogeneous understanding of what constitutes 'normal' (Nicholls et al., 2009; Nicholls & Gibson, 2010).

2.6.4 Mind Body Dualism

This notion does not stand alone within the medical model of illness and allowed me to explore the third assumption, mind body dualism. Dualists, stemming from Descartes (1984), perceived their minds to be separate and often overruled the physical body since 'experience and agency are considered to be essential characteristics of a living human being' (Gray et al., 2007, 2011).

2.6.5 Body as Machine

The experience of burden felt from a hip fracture could be reduced to the physiological outcome without acknowledging the interplay between mind and body. This brings us to the fourth assumption, of body as machine. The feeling that the medical field treated the fracture and not the person was echoed in this assumption. It might be that any potential harm or injury done to the body was negligible should one believe that the body was a tool that helped the mind interact with its environment (Forstmann et al., 2012). The body was comparable to a machine in that when broken, functioning parts can thus be replaced and fixed. Moreover, responses to treatment should occur likewise, with an average rate of recovery or response to treatment. Patients who took longer than the average patient faced unwanted complications. For example, the average length of stay in hospital for newborns following birth should be two days. A report several years later showed that the average length of stay subsequently decreased from 4.1 to 2.7 days; however, the report also revealed that provinces with the
shortest average length of stay for newborns also had the highest readmission rates (Liu et al., 2000).

2.6.6 Body Undergoes a Paradigm Shift

The relationship that existed between the mind and body, whether a dichotomy or complementarity, has never been explored in the context of a hip fracture. Perhaps we can better understand the experiences of having a hip fracture by drawing on experiences of the lower limb trauma patients and amputation. In a study, focused on decision-making processes involved in amputation and reconstruction of the lower limb, Aravind et al. (2010) examined patient responses using a grounded theory approach. The reasons supporting reconstruction seemed to be dictated by the more desirable approach being favoured over the other options. In contrast, patients who preferred an amputation stated reasons based more on practical and external factors; whereas those in favour of reconstruction, chose this care pathway because of more personal or theoretical reasons (i.e. “I don’t want to lose my leg because it’s mine”) (Aravind et al., 2010). This statement indicated a strong coherence with the philosophy built upon a more postmodern view of the body (embodiment) rather than on the mind-body dualism.

The aforementioned assumptions in the medical model situated the illness within the body itself and allowed for very little understanding about the social context in which it fundamentally operated in. The ICF was a powerful framework, endorsed by the World Health Organization since 2001, that has reshaped notions of healthcare revitalising the differences in what constitutes 'normalcy'. In this respect, the person who was disabled was considered to be
'different' or 'other' rather than connecting all individuals together in an embodied way (Gibson, 2006; Shildrick & Price, 1996, 2002). Embodiment was a theoretical lens that looked at the person in its entirety, with the richness of the individual’s lived experience, while rejecting the notion of the biomechanical view of the body, typical in the medical discourse (Agdal, 2005; Mizrachi et al., 2005).

Some scholars argued that the mental experience, although subjective and qualitative, was still measurable using empirical sciences (Baker, 2000). Mental experience constituted a set of sensations, feelings, thoughts, memories, desires which occur in an individual (Antonietti, 2008). Meanings were constructed based on the perceptions of the possibility of action (Antonietti, 2008). We comprehended action using a holist and functional interpretation. The meaning was construed when the movement led to a particular goal. The close relationship between perception and action were understood better when an individual watched another individual (Antonietti, 2008). These movements come about almost instinctual rather than ‘theoretical’ as one selected action amongst a repertoire of pre-existing set of strategies (Rizzolatti & Senigaglia, 2006). In this case the psychological meaning, attached to the comprehension of one’s movement, should supersede trying to differentiate between what occurred at the level of the brain from what happened at the level of the mental experience (Antonietti, 2008). According to Chalmers, “a new ontology might be needed where it is assumed that the mind is a fundamental entity of the world like mass, space, time. Science would need... new psycho-physical principles which, even if they do not interfere with the well-established physical laws, introduce some supplements indispensable to explain the
relationships between physical process and mental experiences.” (Chalmers, 1995; Antonietti & Iannello, 2011, p. 316)

2.6.7 The Hip

If our understanding of the body is shaped by discourse and thus was at least partially socially constituted, so too will each part of the body be imbued with meaning(s), which are social. Hips were often looked on as functional tools, with injured hips commonly viewed by clinicians as broken body parts—perspectives consistent with the mechanistic Cartesian view of the body. Practitioners tended to focus on (and perceive to be most important) those aspects of a hip condition whereby the treatment interventions were meant to address, primarily the relief of symptoms and improvement of function. In other words, whether the hip “hurt”, whether it “worked”, and what it “looked like” were dominant concerns. Departing from the Cartesian point of view, we can start to see the hip evolving from the idea of functioning as a tool to becoming more of what becomes the ‘lived’ experience of the patients—a term frequently spoken of in phenomenological studies (Freund, 1998). The work of Freund (1990), who wrote in detail about the relationship between social interactions, emotions, and the 'expressive body', offered some insight into the metaphoric potential of a disease or injury affecting the hip. For Freund, "A sense of being in touch with others, of being validated by them and other emotional modes of being emerge out of social interaction." (p. 460). Interactions with others, which were associated with "being affected, upset, touched, moved, struck, shocked, alarmed, overwhelmed" suggested these as emergent emotional modes of being (Buyltendijk, 1970, p. 124; Freund, 1990, p. 458). Freund was speaking metaphorically when he used the term
'touched' to imply a sense of connection to others, and yet it was striking that the sense of physical mobility, transferring, and ability to act as part of the community was also an inherent and essential characteristic of the human hip. Thus touch, as both a physical trait and a symbol of social connectedness, communication, gender, and emotionality, was a part of the meaning(s) attached to the hip.

2.6.8 Embodiment

Human embodiment was the experience of both having and being a body (Lupton, 2000; Nettleton & Watson, 1998). The term ‘embodiment’ was used instead of ‘body’ to emphasize the body as a site of meaningful experience, rather than a physical object somehow separate from the self or mind (Baron, 1985). Embodiment, in relation to perspectives of health and illness, was approached from at least three different aspects: (1) an awareness of the objective reality of a person’s illness (the anatomical, physiological, and pathological fact of sustaining a hip fracture, for example); (2) an orientation towards the subjective meaning given to the person’s lived experiences of health and illness; and (3) a consideration for social ‘institutions’ (political, social, structural, etc.) that mediated people’s bodily experiences and behaviours (Fox, 1999; Williams, 2003, 2006, p. 10; Nichols & Gibson, 2010). The concept of embodiment was more encompassing than a pure biomedical perspective, which focused only on the physical body. According to Nichols and Gibson (2010), the emergence of embodiment, in fact, came about in response to the reinvigoration of the mind-body split by the sociologists:

The embodiment theory is an attempt to reconcile the seeming differences between naturalistic views of the body (common to both biomedical
health professions and first-wave sociologists of the body), and the
second-wave ideas of the body as an effect, or product, of social discourses
(p. 503)

The integration of both body and mind was fundamental in creating a successful interpretation of the meaning of one's lived experience. The following study examined the concept of embodiment. Reventlow et al. (2006) explored women’s bodily experiences after a bone scan and analyzes how the scan affects women’s self-awareness, sense of bodily identity, and integrity. The authors explored meanings based upon Merleau-Ponty’s perception of the body as shaped by the culture that surrounds us, in the way we live in our bodies and with our bodies (Merleau-Ponty, 1962). Women perceived their bodies as fragile, among other things, because of the cultural perception of risk (Reventlow et al., 2006). According to phenomenology, we do not normally experience our body, or pain, as objects. Pain was only objectified when we pay attention to it, talk about it, and try to make sense of it (Reventlow et al., 2006). These findings were informative about the person’s special cultural context. I explored more fully the notion of embodiment with respect to the HCP managing patients with a hip fracture (Chapter 5).

Postmodernism builds a bridge between the medical and social models, which were otherwise very disparate. Impairment was not included in the social model, so it failed to challenge the medical world (Hughes & Patterson, 1997). Authority on medical discourse remained with the surgeon, whose knowledge about the hip condition (pain and function) can condition the patient's perspective for his or her health. Failure to acknowledge impairment as part of the social model would in fact negate experiences people felt tied to their 'disabled' or 'recovering'
body part. For instance, someone who is blind will have a different lived experience than someone in a wheel chair. Cartesian dualism is accepted both by sociologists and practitioners; however by placing the concept of impairment within a social model of disability, this postmodern view indicated that both do not exist separately but rather they belong to a continuum.

2.6.9 Bodies and the Embodiment of Emotion

"Work on patients’ bodies can be elaborated to include adornment, pleasure, discipline, and care of others’ bodies" (Wolkowitz, 2002, p. 497). Macdonald and Sirianni (1996, p. 4) examined how the service worker ‘inhabits his job’ by putting his whole self into it, and in turn derives pleasure from caring for others (Bolton & Boyd, 2003; Erikson, 2004). It was debatable whether caring for others in fact was a true genuine act or not (Ashforth & Humprey, 1995; Mann, 1999; Bolton & Boyd, 2003; Erikson, 2004; Sanders, 2005). However whether the emotional connection was manipulated or authentic, emotions could be embodied by those working both in low and high status positions (McDowell, 2009). Often those working closely with bodies would feel empathy and sympathy towards those who were facing life and death events (Twigg, 2011). Emotional sensitivity can be deemed as unprofessional even though it was a much desired and necessary part of medical work (Nettleton et al., 2008a). Thus, the emotional component of one’s job needs to be managed carefully as one often does not leave these experiences behind at work.

Emotions could be a source of frustration but could also lead to motivation buffering the stresses of bureaucratic routines (Bolton & Boyd, 2003; Cohen, 2010). Several studies
supported the notion that managed emotion leads to the alienation of certain individuals and used instrumentally by organizations (Hoschschild, 1983; Leidner, 1993; Pierce, 1995). Perhaps this claim could be seen in "the association of low financial rewards with embodied bodies of service providers and service purchasers" (McDowell, 2009, p. 49). Often in those services that involve bodily strength, men tend to occupy high-level positions and were dependent on women’s support services that consequentially were constructed as ‘out of place’ in workplaces (Acker, 1990).

Finally, we need to note how different social meanings were attached to different bodies. For instance the frailty of older bodies may acquire different bodily care i.e. physiotherapy regimens. Widding Isaksen (2002, p. 802, 792) described associations with the elder body somewhat as ‘polluting and dirty’. Those stigmatized bodies that were recipients of body care could also differ not only in physicality but also in social class. The treatment that bodies received was implicated in the structure of body care itself prescribed by governments and healthcare systems. The performance of body work itself was often dependent on migrant workers (Twigg, 2011). Harris (2011) called it a ‘moment of mismatch’ when overseas doctors began to practice in a new environment and took for granted their embodied tactile learning that was embedded in medical practice.

2.6.10 Bodies in Space and Disciplinary Power

Bodies, in order to be worked upon, needed to co-exist and needed to be situated in the same place at the same time. Furthermore, bodies needed to be ready and in challenging situations can be fundamental for time-pressed individuals (Twigg, 2011). The concept of distribution of
power stemmed originally from Foucault and his digressions on ‘biopower’- the power over bodies was noted through discourses and practices (Jones & Porter, 1994; Foucault, 1979). Disciplinary power, a theme explored by Foucault, focused on details, as well as on timing and rapidity of the execution (Taylor, 2011). Bodies were coordinated and their effect is maximized according to size, performance, age, and sex thus ensuring the best possible performance (Taylor, 2011).

Discussions that revolved around power could be noted in the positioning of the bodies. For instance, the patient's injured body was in a compromised position in order to be examined by the HCP and prescribed further treatment recommendations. The HCP was often in a position of power, which was either in a standing position in contrast to the body, which was lying down or made passive with pain killers, for instance. Twigg (2011) commented on how these frequent encounters, between HCP and patients, developed into strategies whereby the patient bodies were made compliant to treatment.

“It seems to me that ‘power is always already there’, that one is never outside it,” said Foucault in an essay entitled, *Discipline and Punish* (Foucault, 1980, p. 141). Adopting this post-structuralist view meant incorporating the goal of power into his or her actions, aims, and habits (Taylor, 2011). Foucault listed a number of practices used to control discourse: “exclusion, prohibition, banning of themes, ritualization of speeches, legal incapacitation of the insane, establishing boundaries between what is true and false” to list a few (Taylor, 2011, p. 42). Foucault discussed the practice of discourse control using 4 principles, which can be seen in Table 1 (Fink, 1992, p.43; Table 1).
Post modernists believed in multiple truths which could be understood through discourse. One of the criticisms faced by postmodernists was the inexistence of a non-authoritative voice; fundamentally, the locus of one's identity was always embedded in discourse.

Post modernists did not seem to find a point of convergence on the strategies used to analyze discourse. Lyotard emphasized multiple views, justified *le différend*, and the impossibility of reaching consensus (Poster, 1989).

Table 1. Foucault's 4 principles which exemplify power in discourse

<table>
<thead>
<tr>
<th>Contrasting Principles</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creation vs. inversion</strong></td>
<td>In place of the creative authority arise incidents that diminish and exclude discourse</td>
</tr>
<tr>
<td><strong>Evolutionary uniformity vs. discontinuity</strong></td>
<td>Historical events are embedded within a contingent and discontinuous 'series', which simply duplicate and multiply</td>
</tr>
<tr>
<td><strong>Originality vs. specification</strong></td>
<td>In place of an inherent meaning for the world appears a system of rules that are forcibly imposed upon existence</td>
</tr>
<tr>
<td><strong>Meaning vs. externality</strong></td>
<td>In place of meaning that is imminent within discourse, there appear only the external conditions that make discourse possible</td>
</tr>
</tbody>
</table>

For many patients, the experience of modern medicine, involved not only pain but also a dislocation, objectification, and a denial of their sense of embodiment (Twigg, 2006, p. 98). Diseases were ‘fabricated’ by medicine and so were the bodies that contained the diseases and this production of bodies extended not only in prisons but also through schools, workshops,
barracks, and hospitals (Jones and Porter, 1994, p. 32). The body was therefore seen as changeable and unfinished, often requiring constant monitoring and being taken care of.

2.6.11 The Body and the Pursuit of Health

The pursuit of health meant recognizing that the body carried aesthetic value and transmitted cultural norms to express identity (Strohschein & Weitz, 2013). Postmodernism deconstructed what was meant by being healthy allowing for both health and illness to co-exist—such that, health became a subjective awareness of oneself (Strohschein & Weitz, 2013). Health also became commodified, something that could be bought and sold—underlying concepts in body projects. For example, buying new running shoes was a claim to others that the product would have health-promoting benefits, regardless of the quality. Questionable were medical technologic advancements that could aid individuals in exceeding their present capabilities (transhumanism).

2.7 Summary

Conceptualising body work in frontline workers from different knowledge and healthcare systems highlights areas, which capture the most interest for research and call to action. In this section, I highlighted the historical context in which dualists first separated mind from the body to one where Cartesian notions of separation were brought together and embraced once again through the embodiment of emotion and the connections formed with patients. Often these emotional ties were what transcended boundaries in the professional world and contributed to the different constructions of meaning given to the work and the bodies on which HCPs work on. Gender attributes and embedded hierarchical systems that permeated in the working
environment would establish power roles evident through discourse as pointed out by Foucault and others. Literature supported its role in negotiations between patients, caregivers, as well as with other professions, involved in the care of hip fractures.
CHAPTER 3
SEARCHING FOR A QUALITATIVE PARADIGM


3.1 Chapter Overview

Qualitative research has been recognized in recent years as a field of inquiry used to understand people’s beliefs, attitudes, behaviours, culture or lifestyle. While quantitative results are challenging to apply in everyday practice, the qualitative paradigm can be useful to fill in a research context that is poorly understood or ill-defined. It can provide an in-depth study of interactions, a way to incorporate context, and a means to hear the voices of participants. Understanding experiences, motivation, and beliefs can have a profound effect on the interpretation of quantitative research and generating hypotheses. This chapter reviews five prominent approaches (narratives, phenomenology, grounded theory, ethnography, and case study) that may be used in conducting and interpreting qualitative data in the field of osteoporosis and fracture. Many different approaches exist and need to be studied carefully before implementing the study, as methodologies will affect what is applied in practice. This chapter has been published in a clinical journal intended to orient readers, such as healthcare providers and researchers, to qualitative concepts that they may find useful to implement in future study designs, specifically in the context of osteoporosis and fracture (Hoang-Kim et al., 2014). Further, we will provide insight into the qualitative paradigm gained from the
osteoporosis literature on fractures using examples from the database Scopus. Five prominent qualitative techniques (narratives, phenomenology, grounded theory, ethnography, and case study) can be used to generate meanings of the social and clinical world.

3.2 Introduction

Osteoporosis has been recognized as a rising health problem. It is a disease that alters the constituency of bones making them weak and causing fracture in the frail elderly. The emphasis on preventing these types of fractures has been the mainstay of current practice. In recent years, guidelines and recommendations on osteoporosis management have been implemented globally in order to curb the risk of fracture (Rabar et al., 2012; Marsh et al., 2011; Papaioannou et al., 2010; Schurman et al., 2013). Our knowledge of osteoporosis and fracture stems primarily from clinical and experimental studies. Advocacy groups, such as the vertebral fracture working group of the International Osteoporosis Foundation, set standards for osteoporosis using the quantification of bone density (Boonen et al., 2011). Researchers and scientists directed their efforts on quantifying parameters for classifying persons at risk (Audran et al., 2013; Leslie et al., 2013). Orthopaedic surgeons looked at the role of imaging techniques for testing bone strength peri-operatively (von der Linden et al., 2006). Using the qualitative paradigm can help broaden our understanding of concepts and research contexts that are poorly understood.
Table 2. A list of key terms in alphabetical order and their definitions used in this thesis

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action research</td>
<td>A method that involves the researcher working in collaboration with participants through cycles of evaluation and development to produce change in their practice of relationship</td>
</tr>
<tr>
<td>Case study research</td>
<td>An in-depth study of a 'system' based on a diverse array of data collection materials, and the researcher situates this system or case within its larger context or setting</td>
</tr>
<tr>
<td>Constant comparison</td>
<td>The researcher in grounded theory research identifies events while comparing them to an emerging category to develop and saturate the category</td>
</tr>
<tr>
<td>Constructivism</td>
<td>A belief about knowledge (epistemology) which asserts that the reality we perceive is constructed by our social, historical, and individual contexts, and so there can be no absolute shared truth</td>
</tr>
<tr>
<td>Culture</td>
<td>An ethnographer typically observes and participates in an environment to study indirectly the culture</td>
</tr>
<tr>
<td>Ethnography</td>
<td>A methodology that aims to understand the meanings and behaviours associated with the membership of groups, teams, etc., through the collection of observational and interview data</td>
</tr>
<tr>
<td>Grounded theory</td>
<td>A methodology that uses iterative data collection (such as interviews, observations) and analysis to build theories about social phenomena</td>
</tr>
<tr>
<td>Interpretivism</td>
<td>A theoretical framework that includes symbolic interaction, phenomenology, hermeneutics</td>
</tr>
<tr>
<td>Objectivism</td>
<td>A belief about knowledge (epistemology) which asserts that there is an absolute truth or reality that can be discovered and that knowledge is therefore objective and neutral</td>
</tr>
<tr>
<td>Open coding</td>
<td>The researcher uses open coding as the first step in the data analysis. Data, could be from</td>
</tr>
<tr>
<td>Phenomenology</td>
<td>A theoretical framework that focuses on exploring how individuals make sense of the world and that aims to provide insightful accounts into the subjective experience of these individuals</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Positivism</td>
<td>A theoretical framework that is guided by the search for the objective truth that will contribute to the progress of humankind</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>This is a process in which the researcher is conscious of biases, values and experiences he brings to the qualitative study</td>
</tr>
<tr>
<td>Saturation</td>
<td>In the development of categories and data analysis phase of grounded theory research, the researcher seeks to combine events to support the categories. Once no new information can be added to the understanding of the category, it is saturated</td>
</tr>
<tr>
<td>Structural description</td>
<td>The researcher writes a description of 'how' the phenomenon or central concept, was experienced by participants</td>
</tr>
</tbody>
</table>

Qualitative approaches can be used to complement quantitative research when focusing on efforts to deepen our understanding of osteoporosis and fractures (Wylie, 2010). In Table 2, we provide an outline of the definitions of terms used in this article (Table 2). Insights gained from qualitative research have lagged behind that of their quantitative peers (Sale, 2011). Qualitative methods look into people’s motivations, perceptions, behaviours, or lifestyle (Gooberman-Hill, 2011; Kuper, 2008; Morse, 2003; More, 1995). Qualitative study designs can contribute to our understanding of osteoporosis and fracture by positioning the researcher within a theoretical framework (Gooberman-Hill, 2011; Patton, 2002). Depending on the approach, different epistemologies apply. Patton uses six core questions to distinguish between these theoretical frameworks (More, 1995; Table 3). The researcher should ask what he believes about the
nature of reality or how should he study the world — such that different meanings ensue depending on which beliefs the researcher holds. A constructivist approach builds on one’s experiences and interaction with persons, groups, or cultures (Rabar, 2012; Berger, 1966). Qualitative researchers use different tools to analyze data in order to generate in-depth accounts of individuals’ and groups’ experiences. These tools may include any one of these methods: participant observation, fieldwork, in-depth interviews, visual representations, and historical archives to name a few of the common techniques.

Table 3. Six core questions used to distinguish between the theoretical frameworks

<table>
<thead>
<tr>
<th>What do we believe about the nature of reality?</th>
<th>Ontological debates concerning the possibility of a singular, verifiable reality and truth vs. the inevitability of socially constructed multiple realities</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do we know what we know?</td>
<td>Epistemological debates about the possibility and desirability of objectivity, subjectivity, causality, validity, generalizability</td>
</tr>
<tr>
<td>How should we study the world?</td>
<td>Methodological debates about what kinds of data and design to emphasize for what purposes and with what consequences</td>
</tr>
<tr>
<td>What is worth knowing?</td>
<td>Philosophical debates about what matters and why</td>
</tr>
<tr>
<td>What questions should we ask?</td>
<td>Disciplinary and interdisciplinary debates about the importance of various burning questions, inquiry traditions, and areas of inquiry</td>
</tr>
<tr>
<td>How do we personally engage in inquiry?</td>
<td>Praxis debates about interjecting personal experiences and values into the inquiry, including issues of voice and political action</td>
</tr>
</tbody>
</table>
3.3 Methods

We wanted to provide methodological insight into five key qualitative approaches. We performed a scan of the literature for qualitative studies in osteoporosis published up until February 2013 using the database Scopus. We used the search terms ‘osteoporosis’, ‘fracture’, and ‘qualitative study’. Narrower search terms included the five key qualitative approaches most frequently seen in social, behavioural, and health science literature: narrative, phenomenology, grounded theory, ethnography and case studies (Creswell, 2007). According to Creswell, these approaches represent approaches with systematic procedures for inquiry (Creswell, 2007). These qualitative approaches, as mentioned previously, represent different disciplines: 1) Narrative stems from the humanities and social sciences, 2) phenomenology from psychology and philosophy, 3) grounded theory from sociology, 4) ethnography from anthropology and sociology, and 5) case studies from the human and social sciences and applied areas such as evaluation research (Creswell, 2007). All articles were screened by title and abstract. The full text was retrieved, when methodology was not specified in either title or abstract. Inclusion criteria were papers focusing on osteoporosis, fracture, and explicit reference to one of the five aforementioned qualitative approaches, and published in the English language. Exclusion criteria included papers with unidentifiable qualitative methodology. The papers were screened by a trained qualitative researcher and when undecided, consensus was achieved by discussion with two other qualified qualitative researchers.
3.4 Results

Our search strategy yielded 530 hits (Appendix A). Forty-seven articles were included in the final count following careful review of their full texts to determine whether inclusion criteria were met. In Table 4, we provide a list of articles that were identified by the authors categorizing them by qualitative approach (Table 4).

Table 4. Key features from the qualitative articles that were included in our study on osteoporosis and fracture listed in chronological order by first author's last name

<table>
<thead>
<tr>
<th>First Author</th>
<th>Purpose</th>
<th>Qualitative Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archibald (2003)</td>
<td>Explores the experiences of individuals who had suffered a hip fracture</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Ballard (2002)</td>
<td>Determine women's perceived risk of menopause-related disease and to understand how this shapes their decisions about taking hormone replacement therapy for disease prevention</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Berlin Hallrup (2009)</td>
<td>Explores the lived experience of fall risk from a life world perspective in elderly women with previous fragility fractures</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Borkan (1991)</td>
<td>Examines hip fracture rehabilitation, focusing on meanings and post-fracture prognostic indicators</td>
<td>Ethnography</td>
</tr>
<tr>
<td>Congdon (1994)</td>
<td>Describes the elderly person's hospital discharge experience</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>De Souza (2010)</td>
<td>To understand patients experience with osteoporosis treatment in 12 patients monitored in a specialized outpatient unit</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Dickinson (2011)</td>
<td>Explores older people's</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Study</td>
<td>Title</td>
<td>Methodology</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Doherty (2004)</td>
<td>Investigates staff, residents and relatives in seven homes on the use of hip protectors and compliance rates.</td>
<td>Case study</td>
</tr>
<tr>
<td>Erol (2011)</td>
<td>Analyzes the discourses around postmenopausal osteoporosis in Turkey, focusing on the different constructions of risk in the medical and popular literature.</td>
<td>Ethnography</td>
</tr>
<tr>
<td>Green (2002)</td>
<td>Explores the factors that impact upon health decision making in relation to a group of these technologies.</td>
<td>Narrative</td>
</tr>
<tr>
<td>Helm (1995)</td>
<td>To gain an understanding of the effect of disability, specifically a Colles' fracture, and the role of occupational therapy in the recovery of function.</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Hicks (2012)</td>
<td>Examines autonomy, choice, options, and power in healthcare decision making for older people.</td>
<td>Ethnography</td>
</tr>
<tr>
<td>Huang (2009)</td>
<td>Explores ways that elders maintain independence while coping with hip fractures.</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Jensen (2004)</td>
<td>To explore the female</td>
<td>Grounded theory</td>
</tr>
</tbody>
</table>
osteoporotic patient's understanding of her individual pain condition and investigating the potential of a structured nursing program to increase the patient's insight, skills and motivation to self help, and possibly reduce pain

<table>
<thead>
<tr>
<th>Study</th>
<th>Objective</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kastner (2010)</td>
<td>To understand physicians' perceptions of clinical decision support systems and to transform conceptual osteoporosis tool into use</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Koskenniemi (2010)</td>
<td>To analyze the experiences of older hip fracture patients and their next of kin on dignity in an acute hospital</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Li (2007)</td>
<td>To develop a conceptual framework explaining the coping processes of Taiwanese families after hospital discharge of an elderly family member with hip fracture and to use the Roy adaptation model to examine their interdependence relationships</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Löfgren (2012)</td>
<td>Describes and explains a clinician-led improvement of a hip fracture care process in a university hospital, and to assess the results and factors helping and hindering change implementation</td>
<td>Case study</td>
</tr>
<tr>
<td>Long (2003)</td>
<td>Explores perceptions of the nurse's role within the multi-professional rehabilitation team and challenges for effective team working</td>
<td>Ethnography</td>
</tr>
<tr>
<td>Luptak (2006)</td>
<td>Explores preferences for end-of-life care and the types of plans made</td>
<td>Narrative</td>
</tr>
<tr>
<td>Author (Year)</td>
<td>Title</td>
<td>Methodology</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Martin (1989)</td>
<td>Pilot study analysing the strategic roles played by nonverbal communication in nurse practitioner-patient interactions involving patient education</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Mauleon (2007)</td>
<td>Shows what the experience of local anaesthesia and a surgical situation meant to patients</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>McKenna (2008)</td>
<td>Compares experiences of osteoporotic Caucasian and South Asian women in a purposive sample of 21 volunteers from south east England</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>McQuaide (1998)</td>
<td>Investigates midlife experiences of a group of white women in the New York City area and identified factors associated with successful negotiation of midlife transformation</td>
<td>Narrative</td>
</tr>
<tr>
<td>Meadows (2007)</td>
<td>Reports on a Canadian longitudinal qualitative case study of midlife women with fragility fractures, their treating orthopaedic surgeons and family physicians</td>
<td>Case study</td>
</tr>
<tr>
<td>Nahm (2010)</td>
<td>Explore informal caregivers' experiences with providing care to older adults over the first 6-month trajectory of hip fracture recovery and their support needs</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Nielsen (2012)</td>
<td>Increase understanding of the importance of osteoporosis information knowledge for patients' ways of handling osteoporosis in their everyday lives</td>
<td>Narrative</td>
</tr>
<tr>
<td>Pownell (2004)</td>
<td>Critically appraises a patient narrative reflecting on aspects of care delivery and debating</td>
<td>Narrative</td>
</tr>
<tr>
<td>Study</td>
<td>Title</td>
<td>Methods</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Robinson (1999)</td>
<td>Identify factors which promote function and enable a successful transition following hip fracture</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Sale (2010a)</td>
<td>To examine fracture patients' interpretations of their most recent bone densitometry results and perceptions of their bone health after being investigated through an OP-screening program in an urban hospital</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Sale (2010b)</td>
<td>To examine fracture patients understanding of osteoporosis and osteoporosis care after being screened for, and educated about osteoporosis</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Sale (2012)</td>
<td>To examine the ways patients communicate about their fractures, including the language they use, in order to better understand the meaning of a fall and the perceived risk for future fracture</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Santy (2001)</td>
<td>To explore pain experienced after fractured shaft of the femur</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Schoenberg (2002)</td>
<td>Explores the feelings and beliefs of patients hospitalized in an orthopaedic rehabilitation ward for receiving psychological help in that setting</td>
<td>Phenomenology</td>
</tr>
<tr>
<td>Shawler (2007)</td>
<td>Develop a theoretical model illustrating aging mothers' and daughters' transitions through a health crisis</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Shawler (2006)</td>
<td>Describes the process of empowerment</td>
<td>Grounded theory</td>
</tr>
<tr>
<td>Taylor (2010)</td>
<td>Explores mobility levels</td>
<td>Phenomenology</td>
</tr>
</tbody>
</table>
around the home and in the community before and after hip fracture

**Toscan (2012)**

To determine the core factors related to poorly integrated care when hip fracture patients transition between care settings

Ethnography

**Vik (2007)**

Illuminate how the environment may influence participation among elderly people who have undergone community-based rehabilitation in Norway, after an acute illness or accident

Grounded theory

**Vik (2009)**

To focus on how older adults who received home-based rehabilitation perceived staff during a period of 6 months when they received rehabilitation

Grounded theory

**Volkman (2012)**

Examines the use of different narratives expressing positive or negative emotions, and varying the narrator's perspective on the arousal of discrete emotions, dominant cognitions, perceived evidence quality, and perceived message effectiveness related to osteoporosis behavioural intentions

Narrative

**Wilkins (2001)**

Describes how self-concept and the meanings of aging and chronic illness provide an understanding of the diversity of strategies older women with osteoporosis use to manage their aging and chronic illness on a day-to-day basis

Grounded theory

**Williams (2010)**

Describes patients' experiences in a below knee

Phenomenology
cast, establishing common themes, and determining how the themes identified could inform nursing practice

| Wilson (2000) | Analyses factors which influence nurses’ decision-making in the clinical setting and define behaviours in context |

3.4.1 **Narrative research: A patient’s experience can improve orthopaedic nursing care following hip fracture**

Narratives can help us explore personal experiences. Pownell presents a narrative in which a 60-year-old woman named Ann describes her account of having a fractured hip. The narrative is told in her own voice in contrast to interpretation from a medical perspective (Pownell, 2004). This example does not use metaphors, which are additional tools used by qualitative researchers to analyze participants’ stories (Polkinghorne, 1989). The researcher contextualizes the interview information within the ongoing life experiences of Ann: she lived alone in a ground floor flat, one of her two children lived close by, and prior to admission she was fully independent. The author also informs the reader of the reason why she had presented to the accident and emergency department. The researcher centers his study on a single individual constructing a social reality in which the researcher observes how the context, a routine nursing evaluation, can affect the patient. The researcher chose to personalize the human experience using an in-depth interview. The participant was asked a list of questions related to her experiences and perceptions of care and health problems. The questions were structured
but the patient was allowed to freely guide the content and direction of the interview. The questions began with ‘what’, which does not lead the patient into areas assumed by the researcher to be relevant: ‘What did you feel about requiring hospitalization?’, ‘What were the good aspects of your hospitalization?’ ‘What were the bad aspects of your hospitalization?’ and ‘What do you feel could be improved?’. At least three messages about improving orthopaedic nursing care can be understood from this article: 1) Communication serves a therapeutic purpose, which was noted since the nurse was anxious and flustered offering poor communication, 2) The patient yearns for a drink which is not given to her, allowing the researcher to understand how nutritional support is necessary for this older age group, and 3) Another observation was that Ann did not have a background infusion on her patient controlled analgesia. The researcher believes that pain medication should have been administered and its effects monitored to ensure that the patient does not endure ‘breakthrough’ pain, when pain becomes unacceptable despite being on regular analgesia (Pownell, 2004). Studies have shown that patient satisfaction diminishes when there is no background infusion in the patient controlled analgesia.

Getting to know Ann’s personal story helps us to clarify issues related to improving orthopaedic nursing care during management of a hip fracture, thus benefitting quality care assurance and performance in hospitals and clinical practice.
3.4.2 Phenomenology: Insight gained from a patient’s understanding of their bone density test results

There are various phenomenological approaches, but what they all have in common is a focus on exploring how human beings make sense of experience and transform that experience into consciousness (Spiegelberg, 1970). Phenomenology has been primarily adopted as one of three methods: the phenomenological description, the eidetic approach, and the hermeneutic approach. A researcher undergoing phenomenological description seeks to understand the participant’s perspective of an experience, role, or process (Spiegelberg, 1970). This type of study assumes that there are commonalities or structures involved in people’s interpretation of events. For example, a description of pain aims to capture the different affective states of pain in various situations. Eidetic phenomenology seeks to explain essences and their relationships (Goldbeck, 1997). Hermeneutics is based on the idea that phenomena and human experiences are not immediately accessible and therefore call for an interpretive reading (Spiegelberg, 1970).

Sale et al. used an eidetic phenomenological approach to examine patients’ perceptions of their bone health after being investigated through an osteoporosis screening program in an urban hospital in Ontario (Sale et al., 2010a). This type of study was useful to generate information on how patients’ perceptions changed when receiving evidence on their bone health. Anticipating how patients might receive and interpret news on their bone health might improve the way in which providers explain bone density test results. The authors worked through the data, clustering similar perceptions under themes, and producing a description of the patients’
experiences regarding their interpretations of bone densitometry results. "Two common interpretations of bone mineral density (BMD) test results and subsequent perception of bone health emerged: no news about the test result was considered to be good news and evidence of compromised bone health was not considered to be serious or accurate." (Sale et al., 2010a, p. 373). The participants’ description of their BMD test results led the authors to further understand these interpretations. For example under the perception that ‘no news was considered to be good news’, participant (ID9) recalled having one BMD test before the most recent one. She described the first results as not ‘showing any craziness back then. I was at the top of the bottom and the bottom of the top. I was sort of in the middle...right in the average.” This participant’s most recent BMD test result showed osteopenia, but she assumed that the result was ‘perfectly normal again’. The authors relate these perceptions to a broader facet of human nature: the tendency for patients to deal with bad news by either denial or by bargaining (Sale et al., 2010a). The author also states that “the interviewer remained neutral and did not reinforce or discourage any topics discussed that were related to bone densitometry” (Sale et al., 2010a). This idea is known as ‘bracketing’, in eidetic phenomenology, which consists of setting aside preconceived ideas about the phenomena.

3.4.3 Grounded Theory: The development of a “healthy risk awareness” theory

Phenomenology focuses on a particular aspect of human experience, whereas grounded theory focuses on the process of generating theory (Creswell, 2007). Grounded theory can be seen as flexible in structure and while the idea is not to begin with theory and then set out to test it, but to begin with an area of inquiry and allow whatever is theoretically relevant to emerge

Hjalmarson et al. describes processes that contribute to fracture prevention (Hjalmarson et al., 2007). In this paper, grounded theory was evident in its data analysis. Three main analytical tools were used during the whole process of coding: constant comparison, repetitive questioning, and memo writing (Denzin & Lincoln, 2003). This is aimed at the construction of conceptual analyses, sampling to refine the researcher’s emerging theoretical ideas, and integration of the theoretical framework. The authors describe open coding, which was achieved using a line-by-line analysis of the whole text from every interview so that items that was significant to the phenomenon was explored. Concept cards helped them to build relationships by defining congruencies and differences. Although the authors do not adopt the coding paradigm proposed by Strauss and Corbin, they describe the importance of axial coding, which involved clarifying the relationships between subcategories and the preliminary categories. This was described in detail and was important in testing subcategories against the phenomena explored. The analytical process ended once the authors considered the substantive theory as theoretically saturated. Analysis of the data revealed a core category of ‘developing a healthy risk awareness’. One participant stated, “I bought myself anti-slip show grips for my shoes at the pharmacy. You’re done for if you fall! I think more about those things now. When I horseback ride I ride more calmly, look at the path, trot carefully on the track. Nothing could tempt me to gallop on this wet ground.”
Grounded theory includes specific components: a central phenomenon, causal conditions, strategies, conditions and context, and consequences (Strauss & Corbin, 1990, 2008). In this example, confidence interacts with learning and experiencing a sense of social context. The patients could manage fear and learn how to prevent fractures, which increased confidence. The other five categories are elements in the process of achieving healthy risk awareness, namely accepting having fragile bones, living with fear, needing to learn, having confidence, and experiencing a sense of social context.

The theories generated are typically complex and are open to criticisms or corrections by those who are being studied or those who are closely tied to them (Turner, 1981). Turner felt that those who advocated grounded theory often present their approach as novel and radical rather than affirming its roots in some of the more traditional principles of social inquiry (Turner, 1981). Turner thought that grounded theorists should acknowledge existing theory (Turner, 1981).

3.4.4 Ethnography: Exploration of cultural boundaries affecting hip fracture management

Ethnography is the study of the social interactions, behaviours, and perceptions that occur within groups, teams, organizations, and communities (Turner, 1981; Reeves et al., 2008). Ethnographers will produce an account of specific events within a meaningful context in which all relations involve moral choices. Essentially it is the juxtaposition of research design and fieldwork with various methods of inquiry to produce historically, politically, and personally situated accounts, descriptions, interpretations, and representations of human lives (Turner, 1981). Reputed ethnographers include Benedict and Mead, Boas and Geertz, and Whitings
which focus on different styles (classic holistic, semiotic and behaviourist style respectively) (Sanday, 1983).

Toscan et al. used an ethnographic study to examine integrated transitional care for older persons with hip fracture (Toscan et al., 2012). Elements of ethnographic studies include the use of personalistic observations which, in this example, the researcher conducted these as many times in 30-minute intervals throughout each patient’s transition process as possible, including: following admission, before and after participant interviews, during discharge, and during time spent in their respective care setting in general. Observations focused on documenting interactions between health care providers, patients, and families. The researcher noted verbal behaviours of the individuals observed as well as environmental details. In Table 5, we illustrate the variety of elements ethnographers record in order to understand the complexity of social life (Table 5) (Toscan et al., 2012). During an observation period at a convalescent care home, Toscan et al. noted the visible anxiety level of an on-duty nurse, who later explained that her behaviour was a result of the failure of the hospital to forward a list of patient medications in time for their preparation to be complete upon the patient’s arrival (Toscan et al., 2012). Consequently, the nurse was unable to complete a proper admission protocol having little ability to discuss medication management with the patient. In this case, the authors explored cultural boundaries surrounding a patient with hip fracture in order to improve future patient management. Here, they concluded that there was confusion with communication about care, roles and responsibilities were unclear, and overall continuity of care was strained by the system.
3.4.5 Case Study: Junctures where communication amongst interprofessionals break down

Stake defines a case study as an inquiry into a constituent member of a target population which does not center on a person itself but rather a programme, institution, a responsibility, a collection or a population (Gomm et al., 2000; Stake, 1995).

Table 5. Nine observational dimensions and their descriptions used by ethnographers

<table>
<thead>
<tr>
<th>Space</th>
<th>Physical layout of the place(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actor</td>
<td>Range of people involved</td>
</tr>
<tr>
<td>Activity</td>
<td>A set of related activities that occur</td>
</tr>
<tr>
<td>Object</td>
<td>The physical things that are present</td>
</tr>
<tr>
<td>Act</td>
<td>Single actions people undertake</td>
</tr>
<tr>
<td>Event</td>
<td>Activities that people carry out</td>
</tr>
<tr>
<td>Time</td>
<td>The sequencing of events that occur</td>
</tr>
<tr>
<td>Goal</td>
<td>Things that people are trying to accomplish</td>
</tr>
<tr>
<td>Feeling</td>
<td>Emotions felt and expressed</td>
</tr>
</tbody>
</table>

Meadows et al. use a case study to discuss the various junctures where communication amongst interprofessionals break down (Meadows et al., 2007). Data may be gathered by personalistic observation. In addition, the writing style was informal, narrative, with verbatim quotation, whilst including illustration and even allusion, as well as metaphor (Gomm et al., 2000). This methodology can leave you with a proliferation of ideas rather than a narrowing of
ideas (Gomm et al., 2000). Although in the past many psychoanalysts and anthropologists have used case study as a method of exploration, a step prior to generating theories, it may not be however its best use (Gomm et al., 2000). Case studies can be useful to test hypotheses. The advantage in selecting this strategy is its rich description built from a myriad of highly unlikely isolated variables (Gomm et al., 2000). For instance, Meadows et al. reports that orthopaedic surgeons and family physicians identified difficulties in communication among health care institutions which affected follow-up care (Meadows et al., 2007). Here, the researchers state that a discharge summary is generated only for patients who have been admitted and information about out- or in-patient treatment is not relayed consistently as to whether it requires a hospital stay or a one-time encounter in the institutional environment. It was suggested that orthopaedic surgeons routinely order copies of in-hospital care to be delivered to the family physician; however, this was not done enough.

Where there is a problem to be investigated, then the discussion will be geared to diagnosing the problem, identifying its sources, and what can be done about it (Gomm et al., 2000). Here, the analysis will go beyond description and explanation to include evaluation and prescription (Gomm et al., 2000). In reading Meadows et al., we discover that family physicians are a source of information for the patients; however, few patients in the study reported being referred to their family physician while in the cast clinic or seeking information regarding fracture follow-up from their physician (Meadows et al., 2007).

The case study and use of a comparative method requires data from more than one case (Gomm et al., 2000). One can either create cases that are required for testing a claim, or search
for naturally occurring cases that will provide the necessary comparative leverage (Gomm et al., 2000).

3.5 Strengths and Weaknesses of this Study

The purpose of this chapter was to provide an introduction to qualitative methods to aid clinicians, funding agencies, and scientists to learn alternative ways of conducting research. Action research, which was not reported in this review because it was not one of the most common uses of qualitative research, can be used in a wide variety of professional occupations to emancipate the powers of a group of individuals, researchers and subjects alike, who seek to improve their social situation or condition (Charmaz, 2006; Meadows et al., 2007; Whyte (ed.), 1989; Mills, 2000; Kemmis et al., 1982; Elsevier Scopus, http://www.info.sciverse.com/scopus/scopus-in-detail/facts/).

One of the limitations of this paper is that we do not report qualitative research studies where the methodology is not clearly identified. For a more comprehensive search review, Medline and EMBASE databases should also be searched. Search terms were broad including the term ‘fractures’; however, specific fractures such as hip or wrist were not searched. One of the strengths of this overview is that we provide examples of the literature dealing with osteoporosis and fracture that adopt one of the five qualitative approaches. We scanned, in the interest of breadth, the database Scopus: a bibliographic index of 20,500 titles drawn from 5,000 publishers active in myriad fields, including technical journals and many branches of science not represented in Medline or EMBASE (Elsevier Scopus, http://www.info.sciverse.com/scopus/scopus-in-detail/facts/).
3.6 Conclusions

Qualitative research is holistic and can provide context to better inform decision-making and provide a rich knowledge base that integrates multiple stakeholder perspectives and encourages a shared understanding. Each qualitative approach offers a different lens for constructing reality. We have highlighted how the strategies are anchored to specific methodological practices. We learned that quality assurance programs focus on improving adequacy and effectiveness of care benefitting from the use of narratives. Narratives focus on individual patients, like Ann’s story. Osteoporosis evaluation has taken a patient-centred approach, which benefit from the use of phenomenological studies. Phenomenology assumes that themes or domains are relevant to one phenomena. The example of how bone density tests were perceived by the patient may help us define parameters for at-risk patients for future fracture and how physicians can communicate these results effectively. Practitioners designing models of care pathways for patients can benefit from an understanding of connections between programs, activities, processes, and long term impacts. In the grounded theory example, Hjamlarsen et al. through a process of data analysis revealed a core category they named ‘healthy risk awareness.’ Taking a critical approach, practices can test educational intervention directed towards changing behavior around this theory. Insights gained from the ethnographic study allowed us to understand the social reality surrounding the patient. In Toscan et al.’s study, the researcher noted the fluster and visible anxiety in a nurse and highlighted how this affected the nurse’s communication with the patient. In case study research, one solution to communication barriers that exist at the institutional level is standardized discharge orders that prompt family physicians to initiate follow-up. Although the
present paper focuses on the five most common qualitative methods, we believe that other qualitative methods, such as action research, need to be explored in order to gain a deeper understanding of issues dealing with osteoporosis. Each qualitative method provides its own unique perspective on the issue. We have highlighted how these strategies are implemented in qualitative research on osteoporosis and fractures and are anchored to specific methodological practices. We focus on studies that explore patient psychosocial experiences of diagnosis and treatment, cultural boundaries, and interprofessional communication.

3.7 Rationale for Choice of Approach

I considered the six core questions used to distinguish between different frameworks by Patton (2002, Table 3) and chose phenomenology for my approach to understanding prognosis following a hip fracture. I believed that socially constructed realities and multiple perspectives was fundamental in understanding the strata underlying the phenomenon. My personal orientation included already existing professional and academic ties to research on osteoporosis and outcome assessment as stated in Chapter 1. I chose not to bracket these beliefs or so called sensitizing concepts. I believed that the researcher should be a part of the research process. When I considered the participants in my study, I realized that the high levels of co-morbidities, the numerous professions involved in the patient's care pathway (i.e. nutritionist, physiotherapists, and endocrinologist), as well as the time-frame for recruitment (i.e. immediately following a hip fracture or at a three-month follow-up) and where the patients were recruited (i.e. nursing home, resident, or hospital) would shape my analysis. I considered these reasons early on in the study design and were deciding factors for me to adhere to
phenomenology because it was imperative to capture an in-depth experience of the individuals that enrolled in my study. Furthermore, one single in-depth interview per participant would not have been sufficient for me to understand the complexity of dealing with prognoses especially if only one time point was selected. Unique themes would arise by probing interactions and daily routines. It was important to hear the voices of the participants so conducting face-to-face in-depth interviews, when possible would allow me to gain deeper meanings of prognosis.

3.8 Summary

The purpose of my thesis was to explore patients' and HCPs' meaning of health following hip fracture. Toward that end, I sought to use a methodology that would best elucidate these experiences. Given the broad scope of experiences with hip fracture and my desire to move away from the limiting nature of traditional measures of health in conceptualizing outcome, I decided to use a qualitative approach, which permitted me to hear the voices of the participants. I sought an approach that would allow me to focus on meaning, impact, and the influence of both individual experience and culture in shaping these experiences. After considering several options, I chose to use a hermeneutic phenomenological approach.
CHAPTER 4
THE USE OF PHENOMENOLOGY IN UNDERSTANDING PROGNOSIS

4.1 Chapter Overview
In this chapter, I will discuss the use of phenomenology as a theoretical framework and how it affected various phases of my study including philosophical underpinnings tied to Heidegger and Gadamer, the data analysis, and iteration. The researcher makes sense of the world in an exploratory manner and aims to provide insightful accounts into the subjective experience of these individuals. Several strategies were adopted to allow for openness: the use of interviews to generate open-ended questioning, reflection, and use of peer group discussions. I will also shed light on a prominent scholarly thinker in interpretive phenomenology like Heidegger only to illustrate how this academic sheds light on meaning drawing on philosophy and applies it in practicum. Similarly, I will draw upon several key Heideggerian concepts such as bodily authenticity, death, and temporality which powered the first part of my findings comparing patients' and HCPs' perceptions of prognosis. The phenomenological question explores what is given in moments of prereflective, prepredicative experience—experiences as we live through them (Blume, 2003). And while phenomenology is deeply rooted in philosophy, 'doing phenomenology' is, as Van Manen (2014) puts it, a production of reflection, writing, and re-writing. The research setting, process, and ethical as well as political considerations will be described as it was influenced by a phenomenological framework. The sample descriptions of the participants in the study are further detailed in the two manuscripts found in Chapter 5 and 6. An underlying principle in qualitative research is to acknowledge and explore the theoretical position of the researcher as it may influence the interpretation of the data (Patton, 2002). As
such, in the following sections I will provide a personal biography of my experiences and previously held beliefs that shaped and informed my analysis.

4.2 Introduction

Phenomenology is considered "a process of inquiry rather than answering" (Van Manen, 2014, p. 28). Insights are brought not only by reflection and letting oneself go in 'a state of wonder' but he or she can achieve in-depth clarifications searching for linguistic origins of words and even sources of meanings (Van Manen, 2014). "Etymologically, the term phenomenon means that which appears; logos means word or study" (Van Manen, 2014, p. 27). At first, the word phenomenology takes on similarities to psychology, or biology or sociology-- the study, that dwells within the psyche, bios, or social (Van Manen, 2014). However, "phenomenology does not have a subject matter or domain since a phenomenon is not a subject" (Van Manen, 2014, p. 27). In the following section, I will draw briefly on some key concepts taken between scholars to describe the theoretical framework used for the current study on hip fracture management.

4.3 Hermeneutic Phenomenology

Hermeneutics forms a part of phenomenology even though not all phenomenology is hermeneutic or interpretive. In the present context, phenomenology will be defined using Van Manen's term to mean interpretive-descriptive phenomenology: "it is descriptive (phenomenological) methodology because it wants to be attentive to how things appear, it wants to let things speak for themselves; it is an interpretive (hermeneutic) methodology because it claims that there is no such thing as uninterpreted phenomena" (Van Manen, 2014, p.26). The true definition sought out in phenomenology (which is also referred to as
'authenticity') is obtained by understanding the meaning of experience, within the practicum of medicine, by not reducing observations to biological mechanisms but equating the many ‘endpoints’ to 'totalities of relevance', as Heidegger describes it (Dreyfus & Wrathall, 2009). Heidegger further defines a world as comprised of an 'interconnectedness of tools' that is acted upon bodies in action and distances himself from a world that is based on nature, which we often rely on (Heidegger, 1996, p. 72). Heidegger coins the term 'dasein' whose literal meaning is 'being there' (Carmen, 2006). Heidegger focuses on a self-awareness and world awareness rather than believing in an intuitive knowledge of being. Fittingly to Heidegger, a phenomenon is

something that first and foremost precisely does not show itself, something that, in contrast to what first and foremost shows itself, is hidden, but is at the same time something that essentially belongs to that which first and foremost shows itself, and belongs to it in such a way as to constitute its meaning and ground (Heidegger, 2010, p. 32)

Premises of Heideggerian phenomenology accept a researcher's preconceptions, which are integrated into the research findings (Beck, 1994). Some critics of Heidegger have argued that if our search for meaning is given a-priori, it may in fact not be sufficient enough to challenge the ‘cultural or political status quo’ (Guignon (Ed.), p.195). This may be viewed as an ‘emprisonment’ in the sense that the researcher may be reading into the text already that which is familiar to him (Guignon (Ed.), p. 199). Historically, the author occupies the superior position, since he knows the real meaning hidden from the reader; whereas, Gadamer instead
places both the interpreter and the reader on the same plane preferring to fuse notions of understanding into a common language (Gadamer, 2004, p. 159). Gadamer, in fact, argues that this circle of understanding is not entirely impermeable to novelty. Further to the metaphor of fusion, the reconstruction of a predetermined meaning is active rather than being passive (Gadamer, 2004, p. 199; Weinsheimer, 2004, p. 159, 164). Perhaps, we can understand Gadamer using his own words, “we understand differently, if we understand at all” (Gadamer, 2004, p. 165). “Differences and sameness are indistinct but both necessary to achieve a new creation” (Gadamer, 2004, p. 165). For Gadamer, it is important to reconcile the unity of meaning with the multiplicity of understandings; however, the metaphor of fusion often times is proof that Gadamer never came to grips with multiplicity. He did however manage to discuss the differentiation between the new and the old with an historical consciousness (Krajewski, 2004). In essence, as time changes one must acknowledge the past in order to gain a new understanding, to interpret the experience, and for the latter to be considered new. Gadamer sustains that one who is experienced also means that he or she is flexible and open to receiving insights that shape him or her (Palmer (Ed.), 2001, p. 53; Silverman, 1991, p. 89).

The lived experience can be felt in two ways: 1) a concept of self, derived through a path of reflection, which then corresponds to an already established concept of self-consciousness and 2) a pre-existing knowledge of the self (Dreyfus & Wrathall (Eds.), 2009). For example, ‘feeling shame’ can be associated with fracturing the hip and his or her sentiment can be shaped by the situation through reflection. Persons surrounding the individual, with the injured hip, may treat the joint separate from the experience. The rejection of the joint itself and the differential treatment sensed by the injured person might cause him or her a sense of shame. Whether or
not this sentiment is justified or not, the fact that he or she has experienced shame may in turn result in the perception of failing to live up to his or her self-image. One’s dignity, which is the already established knowledge of the self, in turn slowly deteriorates (Blume, 2003).

Heidegger refuses events, such as a hip fracture and/or any of the concomitant illnesses, to interrupt the continuum of life. The event is meaninglessness rather than perceived as absurd. The basic structure of temporality can be best understood as the combination of the past, present, and future. Our understanding of time rarely follows chronological sequencing or chronos (Bernegger et al., 2012, p. s17). According to Bernegger and colleagues (2012, s17), the idea of framing time takes on a qualitative sense and is better recognized either as ‘narrative time’ or kairos for persons recovering an event. It can be assumed that for those individuals affected by hip fracture, time takes on a similar qualitative interpretation. A hip fracture almost never is a single stand-alone incident but rather is compounded with other co-morbidities. This results in numerous visits to the hospital.

Mortality is often a concern for patients and their caregivers and sustaining a hip fracture brings this reality closer. Death is a constant and the only pure possibility of ‘being’ (Guignon (Ed.), p.229). The threat of death can exist at any point in time-- a term, embraced by Heidegger’s notion of ‘indefiniteness’. The indefiniteness of death’s 'when' can create two projections of how an individual can choose to live his life: 1) finding that the significance of ‘being’ in the current world fails to exist and he or she accepts death, or 2) falling into his existence, as he/she knows it, repudiating ‘death’ (Guignon (Ed.), p.229). In a qualitative study by Ziden et al. (2008), hip fracture was seen as a sign of forthcoming death, which had suddenly drawn closer.
This could be accompanied by a sense of meaninglessness and lost hope (Ziden et al., 2008). It was in the early phases of recovery that participants felt overwhelmed with emotions and physical well-being (Ziden et al., 2008).

Whether it is the mere mention of expected deterioration in health following a hip fracture or its anticipation – it can be viewed, by some at least, to be equivalent to a death sentence. Opening the discourse on prognosis as a perspective can indeed offer new opportunities for patients, who still continue to pursue their life undetached from the condition. For instance, Richards et al. (2013) noted that for the patient, living with various co-morbidities, the term ‘recovery’ is put in relation to his or her willingness to read hopeful signs where doctors’ indications are to the contrary.

4.4 The Use of Interviews in Hermeneutic Phenomenological Research

Hermeneutic phenomenological research requires a rich data source, one that comes as close as possible to accessing the lived experience of the participants and allows for an exploration of phenomena. The production of meaning is generated through the use of interviews, as each word produced by an individual is impregnated with 'local and personal manifestations of socially embedded discourse' (Tanggaard, 2009, p. 1509). Words are not neutral but rather the relationship constructed between interviewer and interviewee crosses over with meaning generated by other participants that have a temporal as well as geographical and historical dimension (Tanggaard, 2009). A legitimate claim to qualitative interviews is that the aim in itself is not so much to produce subjective meaning but rather to build context for what exists outside of the interview (Hammersley, 2008). Not only is the researcher’s judgment important in this research but the researcher must acquire skills such as the use of reflection, gentle
probing, and the conveyance of interest through listening techniques (Polit & Hungler, 1991; Jasper 1994). I conducted pilot interviews in order to inform the development of the interview guide but also to learn how to navigate through some sensitizing concepts. In a few interviews, I felt the individuals were politically motivated so I took note of the context and adhered to the criteria outlined by Kvale (1996) for undertaking a good interview. Kvale (1996) proposes criteria for studying rigour in interviews, which range from spontaneity of the researcher to achieving balance between interviewer and interviewee, as well as clarifying the story provided. The nature of the interview and questions are fluid and can change based on the nature of the relationship or interaction that occurs (Wimpenny & Gass, 2000).

4.5 Research Setting
This study was conducted over a 36-month period at a large teaching hospital in downtown Toronto. It was one of the two Level 1 adult trauma centres in Toronto and provides tertiary and quaternary services in neurosurgery, inner city health, cardiovascular surgery, and therapeutic endoscopy. The hospital serves a diverse population that includes the affluent condominiums in Harbourfront, the underprivileged of the inner city of Regent Park, and the gay and lesbian community in Church and Wellesley [en.wikipedia.org/wiki/St._Michael's_Hospital_(Toronto)]. The hospital has 475 beds and extensive outpatient clinics.
4.6 Process

Phenomenological research is carried forth in attempt to seek truth with an understanding of multiple perspectives (de Witt & Ploeg, 2006). Rather than noting patterns of commonalities of experiences, it was important to access the participants in a way to uncover their perceptions with in-depth insight (van Manen, 1997; Thorne, 2000; Streubert & Carpenter, 2002). The fundamental difference with sampling in phenomenology is that participants are interviewed as long as they are able and willing to articulate their experience concerning the phenomenon (Van Manen, 1997; Corben, 1999; Streubert & Carpenter, 2002). I recruited healthcare providers, patients and caregivers at a tertiary hospital in Toronto, Canada. Because data collection and analysis occur concurrently in qualitative research, initial sample size estimates were revised (Patton, 2002). Sampling was discontinued when there were sufficient similarities in the data set at the level of the larger concept to propose a shared meaning of prognosis following hip fracture.

The location of participant recruitment provides contextuality so that it can be assimilated together with its historical and cultural context. Contextuality, a term coined by Madison (1988), can help the readers find relevance to their own settings whether it be from a nursing, rehabilitation, or orthopaedic ward. The patients were recruited both from the fracture clinic in the hospital as well as in-patients admitted to the orthopaedic ward. The patients were diagnosed with a hip fracture by one of the attending physicians. The caregivers were recruited when he or she visited the patient in the hospital and agreed to sign the consent form. HCPs
were recruited as colleagues of the co-investigators. More details on the participants are included in the methodology section of the qualitative studies found in Chapter 5 and 6.

The purpose and scope of the study were reviewed and informed consent discussed in detail at the time of recruitment and again immediately before the interview with an emphasis on confidentiality and the potential emotional consequences of his or her participation. Each participant was given as much time as he/she needed to review the information in the consent form before providing written informed consent. The participants chose to provide written informed consent in person (on-site) or by mail (on-site mailing address) or through a dedicated fax line.

In the event that a face-to-face interview was not possible (persons living outside the Greater Toronto Area and those who were interviewed a second time), I conducted telephone interviews. Multiple interviews with the participant was possible, as per phenomenological studies, in order to produce an in-depth understanding of each participant included in the study. If more questions arose from the initial interview, within three months of the initial interview the participants were recruited for a follow-up interview and asked to sign and date a consent form for participating in the study. I anticipated conducting 4 follow-up interviews per group. The interviews lasted approximately 1-2 hours and were audio-taped. Interviews were transcribed by an independent transcriptionist who had previous experience preparing transcripts following qualitative interviews.

Each participant took part in an in-depth open-ended interview in order for the researcher (AHK) to have a nuanced understanding of the phenomenon. All interviews were conducted by
the same individual (AHK) who was not involved in the participants’ care. I gathered preliminary data to orient me in the field of hip fracture treatment and to help with the design of the semi-structured interview guide (Appendix D, E, and F; Hoang-Kim, 2010). Initially, each participant was asked about his or her experience of a hip fracture condition, how she or he evaluated the outcome of the surgical intervention and how she or he would describe what it meant to see change in his/her health as a result of the treatment. The interview questions changed during the course of the study to reflect a process of ongoing deduction and induction. For example, pilot interviews with the caregiver began with an open-ended question "What does it mean to have a hip fracture?" and subsequently the interview guide followed a semi-structured format as seen in Appendix F. These changes reflected Leventhal's model or Common Sense Model (CSM) of self-regulation (Leventhal et al., 1997).

4.6.2 Data Analysis Procedures

The iterative approach to data analysis was based on the transcripts and data collection in order to generate theoretically informed insight about what happens in given situations following hip fracture. The analytic process began inductively without a priori hypotheses.

4.6.3 Coding

The method of data analysis was in the form of a thematic inductive approach. Data analysis consisted of two interdependent stages: a descriptive analysis consisting of narratives for each of the participants and an interpretive analysis consisting of text that integrated the collective experience with reference to common and unique themes (Tesch, 2013). The descriptive phase included a description of the participant’s lived experience and the meaning he or she
attributed to it. The interpretive text consisted of my own integration into the overall findings. Thematic analysis was the final step. The process involved putting themes into 'bins' that were conceptually similar or looking for patterns that gave shape to the overall phenomenon of 'prognosis'. Codes were labels which described, in an abbreviated way, different topics and underlying assumptions in the data. The language of the participants guided the development of code and category labels, which was identified by a descriptive label. These labels were entered and stored into a qualitative software package, NVivo (version 10). Hermeneutic analysis involved a dialectical going back and forth of questioning by constantly considering parts and whole as described by Van Manen (2014). The principal investigator (AHK) coded the first five transcripts from each group of sources (patients/caregivers, providers) to create the preliminary coding and definitions with feedback from the co-investigators (SR, DB, AVK, ES). A coding framework was developed for two separate groups: 1) the providers and 2) the patients and caregivers. Discussion regarding additional probes and developing themes was reviewed by the co-investigators and a multidisciplinary group as data collection and analysis progressed. Once the final coding template was finalized, transcripts were re-coded to ensure that the final codes (with definitions readily available) were applied to all transcripts. Direct quotations from the transcripts illustrated and/or clarified the findings. I highlighted any differences between the experiences of the patients versus the providers.

4.7 Expressions of Rigour

A number of strategies were employed to ensure that the final interpretation of the data was justifiable. I conducted this study, situated within an interpretative framework, relying as much
as possible on the participants’ views of the situation, which allowed me to explore the complexity of views rather than focusing on the level of reliability or repeatability of each individual code.

Reflections on the concepts from a facilitated discussion group prompted changes in formulating questions in the interview guide. For example, in order to shift away from institutional talk for instance, I used introductory questions such as: “Can you describe an experience when you treated a patient with a hip fracture?” (Hoang-Kim, 2010a). The detailing of participants’ experiences was sought in individual interviews.

Openness was achieved through ongoing consultations with a multidisciplinary group throughout the data gathering, analysis, and writing of the research (De Witt & Ploeg, 2006; Foss & Ellefsen, 2002; Lambert & Loiselle, 2008; Le Compte & Goetz, 1982). Selective inattention was overcome, through the use of peer examination, enhancing receptiveness to the setting.

4.8 Iteration

The iterative process meant refining those themes while collecting more data even after developing my final themes. For instance, I coded the first transcripts as seen in the coding framework for HCPs (Appendix G). Following the preliminary coding framework, I began to research illness representations and the sick role as part of my comprehensive literature review search and learned of the CSM. Leventhal et al. (1997) described beliefs that individuals hold to help them cope with his or her illness. According to Leventhal et al. (1997), there are five components: Identity (or the label used by people to describe their illness), Cause (or seeking
information to understand the illness either from personal experience or from the opinions gathered from significant others, HCPs, and media), Timeline (or whether the illness is acute or chronic), Consequence (how the illness will impact his or her physical and social activities), and Curability/Controllability (or the extent to which the individual can control the situation). The interview guide changed to reflect questioning around these themes. However, I started to form themes around the idea that prognosis was culturally-sensitive if not socially construed. The academic and professional relations formed by the HCPs with peers further reflected changes in the sub-themes. Furthermore, I did not feel that the CSM addressed all the themes I had gathered from the transcripts. I did not feel that all coping strategies were impermeable to the psychosocial aspects seen in the patients and caregiver data.

4.9 Personal Biography and Assumptions

My orientation for the study was influenced by various dimensions that have historical and cultural implications. For instance, I have a knowledge-base in osteoporosis and outcomes research in the hip fracture field. I have participated in European Union policy summits on the future care of patients with chronic diseases and various think tanks organized by international societies of fracture repair and osteoporosis. This experience shaped some *a-priori* assumptions that I held: my belief that not all patients were able to provide a reliable self-assessment, proxy responders could provide some insight on health experiences in the aged, and that there was a need to develop an approach to assessing health in older adults following treatment of a hip fracture. In addition, the ICF is an abstract schema with which I had a prior commitment to.
I surmounted some obstacles in my research because of my initial positivist approach. I took an introductory course offered by the Wilson Centre for faculty members which allowed me to take a more constructivist view. In the intermediate qualitative research methods course, offered through the University of Toronto’s Dalla Lana’s School of Public Health, I practiced coding using a line-by-line approach. I encountered challenges in trying to have the participants avoid the power of institutional talk. As such, I re-worded questions in the interview guide. For example, the use of “we” and the use of literature references and statistics constitute institutional talk. I would then shift my questions to, “Describe to me an experience you had recently with a hip fracture patient that was placed in your care” or “Walk me through your typical day”. Another situation that would lead participants to using references and statistics was asking questions such as, "Can you give me an example/definition?”. Instead, I would say, “Can you tell me what you mean by that?”. Peer review discussion groups aided the inductive approach by ensuring that I did not miss any themes or probing questions because of sensitizing concepts.

4.10 Ethics and Political Considerations

The openness of the qualitative inquiry is challenging for ethical boards and researchers alike. Often questions and observations can be seen as intrusive and not all lines of inquiry can be submitted for ethical considerations; however, the participant may find themselves wanting to retract information or even denying the interview itself following the signed consent form. In opposition to this, Rubin and Rubin (1995) argued that the researcher is attempting to uncover truth and must keep in mind these ethical obligations during the entire process using judgment
and proper behaviour. True enough, evidence exists that people change their behaviour when aware of being observed (Patton, 2002). In our study, I did not include participant observation; however, this was a sensitizing concept, which may have influenced the analysis of the data. Sensitizing concepts (Patton, 2002, p. 279) are involved in the inquiry as the researcher investigates the phenomenon while maintaining openness in the inquiry and clarifying his ideas along the way. Major sensitizing concepts that helped organize and guide my work are documented in Chapter 2.

Participants from the three groups were given an ID number so that all qualitative data could be in electronic format without personal identification. The data was kept in a locked cupboard at the University of Toronto St. Michael’s Hospital at the musculoskeletal health and outcomes research centre until after publication of the results at which point they were shredded. Likewise the digital records from the interviews were kept on a computer that was password protected until the transcript was verified and then they were destroyed.

The risk of the participant identifiers and names getting into the possession of persons who were not part of the research team were mitigated: by using access authorization procedures and a password-protected database, having a designated systems administrator, using screen timeouts, using a firewall and virus protection, maintaining hard copies of the consent forms in locked storage, and shredding those upon completion of the study.

Collaborations with co-researchers can vary to different degrees. The researcher or a team of professionals can work alone and in either case, there is complete control over the data. The other side of the spectrum is where the co-researchers are involved in the study design,
collecting data and analyzing the data. In the middle, there will be periodic or partial collaboration (Patton, 2002, p. 169). In this study, I worked alone and the decision regarding the degree of collaboration was important to the study design. I considered these choices of evaluation essential to yielding the most meaningful and rich data given the characteristics of the participants, the socio-political context of the patient sustaining a hip fracture, as well as the information sought by different stakeholders in this orthopaedic field.

4.11 Summary

The goal of a phenomenological study is to capture an in-depth understanding of a phenomenon. Heideggerian premises formed the backbone of my theoretical framework. Balancing philosophical concepts with my findings in this iterative undertaking was fundamental. I have illustrated how receiving news of the hip fracture surgical treatment can be viewed by some as a death sentence. Others may view it as meaningless or as an interruption of life. These complexities need to be further explored as the strata are multilayered -- a reference Heidegger makes as he would rather replace beliefs about time being construed as 'a series of endpoints' with perception of time viewed more as 'a totality of relevance'. These findings may neither be predictive or replicable but these perspectives may lead to the discovery of new and different meanings.
CHAPTER 5

WHAT WILL HAPPEN NEXT? PERCEPTIONS OF PROGNOSIS FOLLOWING A HIP FRACTURE

Adapted from Hoang-Kim A et al., (Submitted for publication).

5.1 Chapter Overview

In this chapter, I will introduce the themes that were developed when analyzing the perceptions of prognosis between patients and caregivers combined with HCPs treating hip fractures in the metropolitan city of Toronto, Ontario. The overarching question of “What will happen next?” influenced both the HCPs’ actions and words and was further shaped by his or her cultural understandings and social connections. In the findings and discussion sections, I will focus on challenging our present conceptualization of “prognosis” in which I attempt to ferret out the implicit assumptions of evidence-based statistical foresight (i.e. survival curves, prevention risk). There are advantages and disadvantages of viewing prognosis as a perspective rather than as statistical foresight. This qualitative interpretation of time by the patient and caregiver will be discussed along with how forecasting insights, the ability to take control, and enlarging his or her opportunities ultimately clarifies meanings and conceptualization of prognosis following a hip fracture. In the subsequent chapter, I will present how relationships of trust and power affect the delivery of prognosis from the perspectives of local and international HCPs.
5.2 Introduction

There is an important distinction between prognosis as a measurement of what is visible and prognosis as “an attempt to draw out and highlight obscure but fundamental aspects of what shows itself” (Guignon (Ed.), 2006, p. 101). Prognosis, in practice, does not only deliver information about the present but will also affect one's future experience (Bernegger et al., 2012). Language reveals the origin and concept that can help us to understand hidden symbolic meanings that are associated with words. The Greek word for prognosis is πρόγνωση, which is a combined word for fore-knowing or foreseeing (Wikipedia en.wikipedia.org/wiki/Prognosis).

In most cases, patients and their family want to know, “what will happen to me?” or “what will happen next?”.

Prognosis acquires significance in the decision-making process since it takes place between diagnosis and treatment. The HCP can provide an idea of the patient's future drawing from presently available signs. Based on statistical information that is situated within a limit of uncertainty (Bernegger et al., 2012). Prognosis can mean both mapping one's future care pathway as well as assessing the individual's risk posed by a secondary fracture. Prognosis is based on the duration of a hip fracture before its treatment, complication changes, probable outcomes, prospects for recovery, survival rates, death rates, and other outcome possibilities. Often, the physician is faced with challenging circumstances of having to explain uncertainty satisfying the patient and families, which goes beyond explaining the present knowledge (Mishel, 1981, 1984; Kurita et al., 2012). I conducted the following qualitative study to help
clarify the assumptions built into our current conceptualization of prognosis while illuminating its advantages and limitations.

5.3 Overview of a qualitative study of patient and HCP perspectives on the meanings and conceptualization of prognosis following hip fracture interventions

The meaning of words is at least partly contingent on the context in which they are used (Gadamer, 2004; Sheehan, 2011). Context must take into account human beings that live in multiple existing worlds simultaneously. I adopted Heidegger’s phenomenological view that for something ‘to be’ is for something ‘to be present in the now’ and “Being” and “Time” are treated as one question (Heidegger, 1992; De Warren, 2012). An example of this is a patient who is at home following treatment of a hip fracture. She prepares a drink for her husband, who cannot move because of a recent stroke. Each of these perspectives – a patient, a caregiver, and her desire to be at home – has the function of providing a range of possible sense-making relations within its semantic field (Sheehan, 2005). Without a clear understanding of the important aspects of context, the specification of a theory (and subsequently a meaning) of prognosis following a hip fracture may be premature. We must ask “prognosis of what resources?” or “when?” and “in what situations?”. Questions such as these begin to indicate the range of different contexts which may be an important part of what prognosis means to a patient recovering from a hip fracture. According to Liebniz, we were born with concepts and through interaction, these concepts become refined. Liebniz referred to this experience as ‘incipient perception’ rather than ‘sense perception’ (Lash, 2010). Experience took a more leading role in Locke’s philosophy. Locke believed that our notion of knowledge was imprinted
onto the mind, which in itself was a ‘tabula rasa’ or clean slate. If context was relevant to meaning, a single definition of prognosis may be neither desirable nor possible.

This qualitative study was undertaken using an interpretive framework in order to find alternative meanings of prognosis and clarify the concepts associated with this phenomenon.

5.4 Methods

The study was conducted in a Canadian tertiary care, university-affiliated program. The interviewer was a researcher in this unit but not involved in direct patient care. Ethics approval was obtained from the hospital's ethics review board and University of Toronto ethics board (Appendix B and C). Informed consent was obtained from all participants. My study began inductively without any a-priori hypotheses. I gathered preliminary data to orient me in the field of hip fracture and to provide for the rationale behind the semi-structured interview guide (Appendix D, E, F, Hoang-Kim et al., 2010a).

5.5 Stakeholder Group Descriptions

I gathered demographic information for the twelve participants enrolled in the study: gender, country of origin, and age. For healthcare providers, I collected information about current position, area of expertise, and years of clinical experience in dealing with hip fracture patients. It was also important to know the percentage of the HCP’s time he or she dedicated to investigating hip fractures and low trauma fractures, complications, co-morbidities, management, and rehabilitation regimens. This section begins with a brief description of each
stakeholder group. Additional demographic and descriptive information is found in Tables 6 and 7.

5.5.1 Patients and Caregivers:

Participants, who consented to nine interviews, included six females and one male (age ranged from 70 to 88 years). Three follow-up interviews were conducted. Fifteen patients and caregivers met the eligibility criteria for the study, of which 4 declined. The caregivers were both female and were chosen to represent those patients who could not communicate or participate directly in the interview because of co-morbidities (Table 6). In this case, the two caregivers represented assumptions they made of their spouses, of age 80 and 88. Five of the patients did not have cognitive impairment and one of the patients had mild cognitive impairment. One of the caregivers had dementia and I interviewed her in the hospital as she was accompanying her husband for his three-month follow up visit. Her spouse had been through intense rehabilitation. The other caregiver was recruited from an osteoporosis patient society linked to the local hospital. Her husband was treated for hip fracture following which he suffered from a stroke. I was thus not able to contact her for a face-to-face interview until well a year following her spouse's injury. I conducted follow-up interviews with two of the patients. One of the patients was discharged from the hospital without operative treatment. I interviewed this patient immediately following her admission to the orthopaedic ward for a hairline stress fracture and I saw her again three months later. The other patient I interviewed three months after her fracture and again 1.5 years following the initial diagnosis because of a neck and back surgery. With the exclusion of one patient, the other patients received operative
treatment for their hip fracture and were interviewed three months following injury at their individual's home. Interventions included the sliding hip screw and bipolar and cemented hemi-arthroplasty. Osteoporosis and severe osteoporosis were present in three of the patients and in one of the caregiver's spouse. The patients had co-morbidities present which were confirmed through hospital records: arthritis, congestive heart failure, degenerative disc disease, depression, chronic pulmonary disease, as well as hearing and visual impairment.

Table 6. Additional Demographics and Descriptors for Patients and Caregivers From Medical Records

<table>
<thead>
<tr>
<th>Participant - hip fracture aetiology, classification &amp; treatment (n=7)</th>
<th>Sex-years of age (yrs)</th>
<th>Co-morbidities present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-fell down, non displaced medial femoral metadiaphysis, non operative treatment</td>
<td>F-81</td>
<td>Osteoporosis, hearing, depression, mild cognitive impairment moCA 21/30</td>
</tr>
<tr>
<td>Patient-fell down in apartment, left hip fracture treated with bipolar hemiarthroplasty</td>
<td>M-88</td>
<td>Congestive heart failure mini mental status examination 29/30; MoCA 23/30</td>
</tr>
<tr>
<td>Patient-fell missing a step into a room, post comminuted intertrochanteric fracture fixed with sliding hip screw</td>
<td>F-88</td>
<td>Arthritis, congestive heart failure, visual impairment, degenerative disc disease</td>
</tr>
<tr>
<td>Patient-slip and fall accident, impacted fracture of left femoral neck, treated with left hip bipolar hemiarthroplasty</td>
<td>F-70</td>
<td>Arthritis, severe osteoporosis, chronic obstructive pulmonary disease, degenerative disc disease, moCA 28/30</td>
</tr>
<tr>
<td>Patient- fell in a dark stairwell, displaced femoral neck fracture treated with cemented hemiarthroplasty of right hip</td>
<td>F-85</td>
<td>osteoporosis, visual and hearing impairment</td>
</tr>
<tr>
<td>Caregiver</td>
<td>F-92; patient M-88</td>
<td></td>
</tr>
<tr>
<td>Caregiver</td>
<td>F-76; patient M-80</td>
<td></td>
</tr>
</tbody>
</table>
5.5.2 *Healthcare Providers:*

Seventeen participants were recruited of which, 5 HCPs were enrolled in the study. The five healthcare providers who participated ranged from 35 to 67 years of age (Table 7). Three were male and two were female. Providers (two of which had academic affiliations) were geographically located in Southern Ontario in hospitals in a variety of employment situations: hospitalist, social worker, orthopaedic surgeon, and registered nurse. Two follow-up interviews were conducted.

Table 7. Additional demographics and descriptors for healthcare providers in Southern Ontario who participated in in-depth interviews

<table>
<thead>
<tr>
<th>Participant-Country of origin (n=5)</th>
<th>Sex-years of age (yrs)</th>
<th>Position-Area of expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCPLocal Canada</td>
<td>M-67 yrs</td>
<td>Surgeon- joint replacement</td>
</tr>
<tr>
<td>HCPLocal-Canada</td>
<td>F-57 yrs</td>
<td>Social worker-geriatrics</td>
</tr>
<tr>
<td>HCPLocal-Israel/Canada</td>
<td>M-36 yrs</td>
<td>Hospitalist-family medicine</td>
</tr>
<tr>
<td>HCPLocal-Canada</td>
<td>F-54 yrs</td>
<td>Registered nurse-nursing orthopaedics</td>
</tr>
<tr>
<td>HCPLocal-Canada</td>
<td>M-35 yrs</td>
<td>Orthopaedic surgeon-trauma and arthroplasty</td>
</tr>
</tbody>
</table>

5.6 *Confidence in the Data*

Several comments regarding confidence in the data are appropriate. The first relates to the comparability between the data derived from interviewing patients and caregivers. I was not interested in issues that concerned caregiver stress, so I coded for themes pertinent to the lived experience of the patient and for these reasons, I combined caregiver data with that of the patient. The primary caregiver was asked questions about the patient. The two caregivers that were interviewed added supplemental information to those stories provided by the patients.
themselves. In addition, the two patients that were cared for were both males which helped gather important perspectives about gender issues strengthening the themes that were developed.

A second comment relates to the homogeneity of views expressed in the various groups. The themes were developed as an overview of the codes derived from five of the transcripts in each of the stakeholder groups. Informants during the process and my participation in seminars also helped to shape the data. I attended a bioethics seminar on the cognitively impaired, a workshop on elder care, qualitative seminars on decision-making used for participation in research, patient's perception of well-being, well-being, and health, empowerment as a measure of self-efficacy and social support used, re-construction of self, grief theories, and spiritual support.

5.7 Overview

The interview questions took form under 6 headings: Identity, timeline, consequences, cause, control/cure, and illness coherence (Table 8, Appendix E).

Table 8. Questions in the in-depth interviews were under 6 main headings

<table>
<thead>
<tr>
<th>Heading</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity</td>
<td>Identification of patient with hip injury</td>
</tr>
<tr>
<td>Timeline</td>
<td>Acute, chronic, cyclical</td>
</tr>
<tr>
<td>Consequences</td>
<td>Minor or major threat</td>
</tr>
<tr>
<td>Cause</td>
<td>Hereditary, external, internal</td>
</tr>
<tr>
<td>Control/cure</td>
<td>Whether something can be done to control the threat</td>
</tr>
<tr>
<td>Illness coherence</td>
<td>Whether a person thinks about the threat in a coherent way</td>
</tr>
</tbody>
</table>
5.8 Data Collection

Each participant who was either a patient or a caregiver took part in an in-depth, open-ended interview focusing on the patient undergoing a hip intervention. Each participant who was a healthcare provider took part in an in-depth interview. I asked questions to obtain the participant's description of a typical day in detail, descriptions of interactions, workload, and relations to others in order to understand the experiences of the body and lived experience in the context of daily work practices and socialization. All interviews were conducted by the same individual (AHK) who was not involved in the participants' care.

5.9 Data Analysis

As in most qualitative research, data analyses occurred concurrently with data collection and data interpretation. The analytic process began inductively without a-priori hypotheses and was iterative. Although it is impractical to detail all the iterations involved in the analysis, I will highlight key insights or impressions which influenced the evolution and interpretation of the data. In this study, an important observation was noted as participants (HCPs as well as patients and caregivers) expressed interest in knowing 'what happens next'. HCPs expressed sentiments about the patient's future outlook acknowledging a shortcoming in their prognostic capacities. This observation led me to postulate that the way a person expresses uncertainty following hip fracture may be important, and this experience of the uncertainty may be linked
to expressions of re-possibilisation helping patients to make 'the best of it'. This also marked the point at which the analysis shifted from inductive to deductive.

5.10 Coding

Before developing the final categories, I coded the first five transcripts for patients and the two for the caregivers. In the five transcripts that were first coded for patients, there were six categories: cause of fracture, patient character affecting recovery, transition, communication, patient's meaning of recovery, and support. The codes developed for the caregivers included 12 categories: cause of fracture, caregiver reactions to the event, patient character affecting the reaction to the event, normal age-related problems, caregiver meaning of recovery, transitions, continuity, expectations regarding hip surgery, financial cost, support network, activities affected by the hip fracture, and activities while at home. In the next phase of coding, codes from caregivers and patients were combined into 219 items and re-grouped.

I coded the first five transcripts for HCPs resulting in 148 items which were re-grouped into nine categories: barriers to getting better, strategies to getting better, pre-existing co-morbidities alter patient management, family support, communication, financial investment, space, working in isolation, and future (Appendix G).
5.11 Expressions of Rigour

I kept reflective memos following each in-depth interview with either participants or informants. I conducted peer review with the research team (Appendix H). Audit trails were updated when coding changed or themes needed clarification throughout the iterative process. Transcripts were read and re-read for their sententious statements and meanings (Van Manen, 1997). Sub themes with similar focus were then grouped together under main themes. Finally, each main theme was named using terminology that accurately reflected personal statements made by the participants. Members of the research team (ES, SR, DB, AVK) met to discuss the proposed meaning units, sub-themes, themes, and domains to ensure an accurate reflection of the data.

5.12 Findings

Overall, there were seven key concepts developed to further our understanding of prognosis when presenting with a hip fracture (Figure 3).

There were a number of themes which arose repeatedly with the two stakeholder groups. For healthcare providers, the themes stemmed from the participant's current job description and area of expertise (hip work) and were affected by various relations formed in their social spheres. Themes such as interconnectedness and embodiment prevailed. Forecasting capacities connecting these concepts to the patient is represented by the areas to the left of 'forecast' in Figure 3. For patients and caregivers, the themes included non-knowledge or having a pre-existing knowledge of what it means having a hip fracture (either through news or friends). The relations formed in the patients' social spheres dictated and further refined the themes of
'enlargement' and 'sense of self-ownership' in turn influencing the participant's perception of the HCP's forecast as well as his or her perception of 'non-knowledge' (this is represented by the areas to the right of 'forecast' in Figure 3). In all themes, in addition to forecast, treatment decision-making and communication strategies can be found.

Figure 3. Thematic drawing depicting perceptions of healthcare providers, patient and caregivers.

5.13 Theme 1 for Patients/Caregivers and HCPs: Forecast

For the patient, sub-themes under the heading 'forecast' included his or her perception of the overall recovery: range of motion, pain, appearance of the hip, and receiving news about the treatment options. For the HCP, sub-themes under forecast included allocation and use of
resources, surgical expectations (timely execution of surgery, minimal blood loss), and radiological expectations.

5.13.1 Range of Motion

Forecast played an important role in the treatment decision-making and supplied patients/caregivers with preoperative information needs. Patients drew comparisons by observing others recovering from a hip fracture or they had had a previous operation. It was difficult for patients to assess changes in recovery and to detail the hip joint unless there were reference points. For instance, one participant was able to compare her outcome following treatment because she was placed in a hospital bed alongside two other patients also receiving hip fracture care. This one participant felt that should she have chosen complete replacement, it would have limited her range of motion. This reflection was made because she overheard instructions by staff to the other patients to limit activities. She described her ability to bend freely and having better range of motion. Viewing other people's experiences, in this case, allowed her to forecast a good outcome following the operation. This participant stated,

I was awfully glad I didn’t have a complete replacement, because I heard them giving instructions to some people that had had those, and certain things about don’t bend over beyond a certain amount. I mean I can bend over and touch my toes any time. That’s one thing that I can do. The doctors won’t believe me, until I prove it, but I have no trouble at all bending and picking things up off the floor and that kind of thing [IDI-12].

Range of motion was mentioned by several other participants: walking without external devices (i.e. a cane or rollator) or the inability of going up the stairs, and referencing their assumption that range of motion was a goal that was prioritized by physiotherapists.
5.13.2 Pain

Pain was a common theme and discussed with the greatest breadth; such that freedom from pain, was differentiated from controlled pain. This quote exemplified the latter concept of controlled pain.

Yes, they gave me a pain killer that worked reasonably well, but I couldnt take it after the end of July because it conflicted with my Warfarin. So I had to stop. And since then I've just taken Tylenol,... but that's alright I'm not having as much pain [IDI-08-FU]

Many of the participants assumed that the surgeon’s role was to perform surgery and the patient's ability to forecast his or her ability to be free from pain would play a factor in deciding treatment options-- delaying operative treatment as much as possible. In the example below the participant received news that she was in need of a complete hip replacement.

He said I needed a complete hip replacement... I thought I would die on the spot. But I'm not going to have one..

..He wanted me to know that it (the hip) could be so painful that I would want to have another replacement. But I remember what a hip replacement was like and it isn’t that painful...No, actually it's getting much less painful. It still aches in the muscles but it's not a terrible pain like it was at first [IDI-08-FU]

Pain -- acquires importance at the very suggestion of its relevance by the HCP. However, for the patient, it does not seem to be a deciding factor on whether or not to have an operation for the patient.

Others mentioned pain affecting his or her walking ability but it was mentioned only because the patient assumed it to be considered important: "I mean pain is something that one often
talks about, and I guess walking is something that you said was directly affected by your leg" [IDI-12]

Pain was linked to the occurrence of a hip fracture. One participant expressed surprise at the absence of pain when tripping over a step on her way to a recital,

I couldn't believe I had a hip fracture actually, because I always had an idea that that would be a very painful thing, but it wasn't. The doctor told me later that when you have a hip fracture something twists and that takes away the pain, it doesn't hurt. I felt that when I fell, I could feel something twisting in there, felt it suddenly give way.

In contrast, another participant referred to general feelings of pain that were not directly linked to the hip fracture but rather attributed to old age. However, in another moment in our conversation, the same participant also felt that the muscle pain in her back was exacerbated indirectly by the hip fracture because she was using other muscles to compensate. This conflicted with the original assumption that pain was associated with old age.

...I'm not at all sure whether that has anything to do with the hip, because I was having problems that way before...Except that some of them developed because of it (the hip fracture), because once you start compensating for pain you use other muscles, and then they start to hurt...Well, obviously those muscles, they have to come back, they have to heal. And it takes a while, I think, after any kind of operation or illness. I can't think of anything particularly connected with the hip, as far as that goes. I was having some difficulties in walking beforehand. I've still got them. I'm not sure they're quite in the same place. As you get older you always seem to have pain somewhere [IDI-12]

References to pain by the caregivers were not linked specifically to the fractured hip joint. One of the caregivers referred to controlled pain by indicating changes in the administration of pain medications. However, sensations of pain could be localized when one of the caregivers was able to refer to patient positioning and the inability to move her spouse because of the pain.
5.13.3 Physical Appearance of Hip

The actual change in the physical appearance of the hip following surgical intervention was mentioned explicitly by two of the participants:

Oh yeah, it doesn’t match this one which I sort of found out gradually over time...because my hips have always done this cave-in thing here, that’s just the way they were built, it’s just me. But this new one is quickly uncaving and it’s just changing the shape...It doesn’t bother me, I just found it interesting... [IDI-18]

Another participant mentioned limb shortening. She did not have to take any pain medication but only the medication prescribed to treat her high blood pressure. She mentioned pain because she knew someone who went through a similar experience of having a hip fracture and was in pain the entire time. By comparing her situation to someone else’s made her realize that the limp did not seem to bother her at all. She said, "I guess I’m not 100% the same as I was before and I have a little bit of a limp sometimes, but I’m not complaining." [IDI-25]

Forecasting for the healthcare provider although it was the same theme from the patient and caregiver group, took on a different meaning for the HCPs. HCPs predicted outcomes following interventions based on statistical data: registries, governmental-managed approaches, allocation and use of resources. However, the HCPs felt that they could provide better forecast if baseline characteristics were established to categorize patient groups.
5.13.4 Allocation and Use of Resources

One of many participants assumed that how a patient was going to fare, following an intervention, would depend on how well the resources were used, tapped into, and put to good use.

The progression towards recovery will be slow but steady... what kind of help they think they're going to need, what kind of help we think they're going to need and whether they're agreeable to us helping them to get all of that organized [HCPlocal-IDI19]

5.13.5 HCPs' Expectations of Surgical and Radiological Outcomes

Another example of a statement made by one of the local HCPs was based on the allocation of resources, such as in this case, the passage from a surgical intervention to physiotherapy:

You just say to them, yeah, you should be better than this in three months, so let's have a look at you and see if there's something wrong. And if there's nothing wrong, then we'll have to change your physiotherapy or do something. [HCPlocal-IDI02]

This surgeon's assumption was that if the surgical intervention went well then this would be observed in the radiological follow-ups.

The surgeon felt that a lot could be predicted based on how the actual surgery went. A quick operation with minimal blood loss and no complications during the operation would help the patient shift priorities in the recovery phase, letting him or her focus on goals such as ambulating and weight-bearing.

Specifically, if you end up with a hemi-arthroplasty then a good result would be a relatively straightforward operation with a clear indication. So a displaced femoral neck fracture, short surgical time, no main significant blood loss, and no
peri-operative complications, so no blood clots in the patient, etcetera, and then to try to get the patient weight-bearing as tolerated the next day. And hopefully by two weeks comfortably ambulating independently with a walker or crutches and by six weeks they could already come into the clinic with a cane [HCPlocal-IDI-24]

These generalizations made from categorizing patients assisted the HCPs’ in making a prognosis. This may or may not include the patient’s actual state prior to surgery.

5.13.6 Communication Strategies Used by HCPs Delivering Treatment Options to Patients and Caregivers

Different strategies were employed by the HCPs to communicate their predictions to the patients. These conversations with patients and family were strongly influenced by the HCPs' assumption concerning the patient’s ability to survive the surgical treatment option. The ability to survive following an operation was most influenced by the intensity of the co-morbidities. The patient's state of mind, his or her autonomy, and the use of external walking aids were some examples that HCPs cited as impacting outcomes. "So if you don’t have dementia you are more likely to do well, if you are more independent." [HCPlocal-IDI24].

One HCP made vague references to "other things going on in people's lives" that made it difficult for the patients to cope with surgical interventions. In the following excerpt, the HCP provided statistical information based on the co-morbidities and the levels of ambulation.

I tell them it {surgical intervention} is very common... And often it goes very well but there is significant morbidity related to hip fractures and people say that a third of the patients do quite well, a third of the patients drop in their level of ambulation...meaning if they used nothing before now they might need a cane, if they used a cane now they might need a walker. And then a third, in theory,
actually die from this because it is an indication there are many other things going on and some people don't do well afterwards [HCPlocal-IDI24]

This HCP described a situation in which he assumed that the patient did not know what the operative procedure entailed-- a decision that the patient made, based on his or her desire to be free from pain.

Some people don't want to lose part of their bone, because you cut the hip completely, into the femur. So all that head, that's gone. It's cut down here. Sometimes I have the feeling some patients have no clue what they're getting into... They just want the pain to go away, and they don't care about the procedure. I have the feeling that people don't sometimes. Some people don't really know what they're getting into [IDIlocal-21]

5.14 Summary of Forecast

HCPs placed importance in allocating patients to groups based on whether they were undergoing a straightforward operation or whether peri-operative conditions dictated the patient's care pathway or his or her chances of surviving the intervention. A person's chance of survival following surgical interventions is at times masked. HCPs referred to 'other things going on' when forecasting. This uncertainty also increases the patient's anxiety. HCPs generally perceived surgical interventions to be common and emphasized this when conversing with the patient. There was tension in discussions about forecasts and patients may sometimes receive news about surgery as impending doom. When there were noted discrepancies between forecasts then patients challenged the HCPs. Patients, in my study, demonstrated that time was not imperative for healing. They assumed that recovering from a fracture took time. The
capacity to forecast for patients seemed to depend upon the experiences of others or having had previous exposure to the specified interventions that informs their judgment.

5.15 Themes for Healthcare Providers

Forecasting based on statistics was typical for HCPs. This experience or conversation felt dehumanizing to the patient. HCPs' social interactions formed intent behind discourse around prognosis affecting the patient.

5.16 Theme 2: Hip work

Hip work represented one of the dominant concepts. The concepts had great reach: job description, boundary roles, technology: use of implants, level of expertise, institutional obligations, and negotiations in healthcare teams. Relationships of power and medical authority will be discussed in Chapter 6 and 7 following a deeper analysis of the HCP data including data from international HCPs. Work that was associated with musculoskeletal conditions, like a hip injury, involved helping the patient or caregiver gain valuable clinical insight on his/her situation. The complexities, associated with the co-morbidities, often strained these communication strategies. When the HCP encountered uncertainty, he/she employed different strategies: emphasizing his or her role within larger networks of interprofessional specialties, citing government and institutional resources that patients/caregivers could access. There was a conflict around the meaning of time. Given the lack of time, some of the HCPs discussed the hardships associated with developing relationships of trust with the patients. For
instance, others who did not seem to quantify time, often presented cases where boundary roles were muddled. An HCP went beyond the demands of the typical day's work. What initially appeared as a 'simple fracture' to treat turned immediately to a more complicated case because of the multiple co-morbidities.

5.16.1 Job description

Common discourse included how HCPs perceived roles within the hip fracture care pathway. One participant stated, "When I do locums every weekend in the various hospitals I would say that on average I have a few hips every weekend so it is such a common procedure" [HCPlocal-IDI-24]. HCPs re-located to different geographical places for specialization or received patients either in clinical practice or institutions. Specialists were placed within certain networks depending on whether a hospital was specialized in polytrauma or a fracture clinic admitted patients with low trauma fractures and osteoporosis. Sometimes, busy trauma centres received patients from other geographical sites. These patients were transported to the hospital either by helicopter or by ambulance.

5.16.2 Boundary roles

Other examples of hip work included the HCPs’ references to boundary roles associated with subspecialties,

Obviously I'm a hip surgeon so I am more comfortable doing hip replacements and obviously it's easier than the guy who does mostly upper extremities and when they have to do a hip, although all orthopaedic surgeons are trained to do hemi-arthroplasty, those who do it day in and day out usually end up doing it with
more ease. So they have probably slightly better results but all orthopaedic surgeons know how to treat hip fractures relatively well [HCPlocal-IDI24]

Some HCPs mentioned feelings of isolation when discussing the role in treating these patients for a limited time.

5.16.3 Technology: Use of implants

It was typical to record discourse around the use of implants to treat various fracture types. Pain was discussed in relation to implants. Most surgeons who were also invested in innovative technology felt that pain for the most part could be eliminated and was not a major concern in hip fracture management.

An HCP assumed that the use of specific implants was associated with treatment outcome such as limb shortening or pain.

Pain actually usually is not the biggest deal if the operation is done well. So for bipolar, they usually do very well. Intertrochanteric fractures, again usually heal very well and the same with the nailing, pain is not an issue. Some of the older techniques like if you use a Dynamic hip screw for an unstable fracture then the fracture collapses and you get leg shortening and it might be associated with a bit of weakness in the limb. But even then, we are not talking about a 40 year old, we are talking about people usually in their 70s to 90s so the expectations are not too high. And it is important to set those expectations right away and I do that [HCPlocal-IDI24]

Here, patient bodies were differentiated by age which shaped the HCP's assumptions around surgical outcome.
5.16.4 Level of expertise

Forecasting would also take a different shape depending on the HCPs' level of expertise. To illustrate this, the HCP cited an episode where he refused to operate on a patient because of age combined with the patient's inability to ambulate and later attributed his treatment decision to his lack of experience:

So I met the patient an hour before the operating room, I had already booked the case thinking, that looks like a simple fracture. And then I saw the patient and I was like, she doesn't need it, she hasn't walked in 20 years so what is the point of me fixing the hip fracture. And the only argument was for pain, at least for that period for a few weeks before you have some early phases of union and also because the family said, what do you mean you are not going to treat the fracture? How would you treat it for any other patient so treat her like you would treat the other patients. And I said, yeah but she is not walking. And I went from booking the case to cancelling the case and saying, I don't think she needs an operation we will give her some good pain control for a few days until she eventually gets better [HCPlocal-IDI24]

The HCP’s inexperience, sustaining his fear of operating a patient, was coupled by the assumption that the patient might die at his hands and a law suit would have ensued. His sentiment was enforced by the fact that another surgeon operated on the same patient the following day.

Operative treatment seemed to be the preferred choice amongst HCPs. However, the sense of familiarity with the operative procedure could overshadow how overwhelmed patients and family feel when dealing with the injury and recovery process. Sometimes, expertise lead to overconfidence:

...and I heard one of the surgeons once say, what's the point, we are going to fix the patient and there is no discussion here...because almost everybody deserves the right to at least try to move from bed to chair comfortably or
from chair to getting up comfortably, there is almost hardly any condition that will prevent us from trying to fix them [HCPlocal-IDI-24]

5.16.5 Institutional Obligations

An example where hip work may oppose the patient's best interest was the admission of patients to the ward itself. One HCP stated, "I'm involved too because I want that patient out of my bed because I've got to admit other patients and it costs a lot of money and the hospital is yelling at me, what are you keeping this lady here for" [IDIlocal-02]

5.16.6 Negotiations in Healthcare Teams

...sometimes it really depends on the physician's personality...if you can be as concrete as possible, in terms of what the gains are that person will make, then that helps them to be able to make a compromise and say yeah, okay. Let's keep them for another week, for example. I don't want to sound like it's an 'us against them' story because often it isn't. But, at times, it can be. And the physician has the ultimate say [IDIlocal-19]

This passage illustrated the embedded hierarchies that were present in hip work and the strategies that HCPs adopted in order to circumvent challenging situations.

5.17 Theme 3: Embodiment

The concept of embodiment was related to the HCP’s cultural environment. Being ‘embodied’ was seen here in examples where HCPs felt comfortable and at ease in their surroundings and with tools on hand such that their actions were seamless with their work: actions used to help the patient/caregiver, familiarity with technology, and building trust with the patient.
5.17.1 Actions Used to Help the Patient/Caregiver

Although there was still much separation from embodiment and the achievement of trust, there were some examples where they were juxtaposed. In one example of embodiment, one participant described particular actions he took to help one of the patients to regain the senses and awareness while being in the hospital setting. These prognostic gestures or actions seemed to take the HCP outside of his boundary roles.

...I asked the nursing staff or somebody to take her out of the ward on a wheelchair and I suggested that we do something like that, to get her out of the environment with more sunlight, more natural light, just a change of scenery. Right now she's also in a room beside the nursing station, which is loud, there's a lot of commotion, and it's probably not helping ... when it comes to rehabilitation, the mind is as important as the body [HCPlocal-IDI-20]

Embodiment and the achievement of trust with the patients and caregivers could be built into conversations about treatment decision-making. HCPs believed that there was a level of skill required to treat complex hip fractures that many sub-specialists had. Enforcing the sub-specialist to take care of the patient with hip fracture could cause fragmenting of current networks in place where the patient entered the general orthopaedic surgeon's care.

5.17.2 Familiarity with technology

The HCP's feelings of familiarity with the surgical procedures were transmitted through the discussions. In this dissertation, these actions are in reference to the feeling of embodiment.

I think probably in the ideal world...although everyone is trained to fix hip fractures, it does require a certain level of skill which we all admit to having but I believe that it would be nice if it was mostly done by the sub-specialist as opposed to any ortho on call. So if you have a complex hip fracture it should be treated by a hip surgeon as opposed to somebody who does it [HCPlocal-IDI24]
5.18 Theme 4: Interconnectedness

Cultural diversity was drawn from the way one experienced the world socially.

5.18.1 Generational Diversity

In one statement, a HCP revealed the assumptions that different generations and ethnicities were affected differently by a hip fracture and had differing perceptions of health or prognosis.

The current generation of older people that we're working with lived through the Second World War and, still the Depression. Immigrants as well, even though they've been here for a million years, you don't shed those values that you were born with and because that next generation is aware. They want to throttle them because they don't know how to help them to realize that yes, they were sick but they can get better and they just have to try [HCPlocal-IDI-19]

The HCP felt that the patient's children had difficulty in understanding generational differences, thus hindering communication.

5.18.2 Cultural Diversity

Another participant explained his difficulty in perceiving cultural differences. Subsequently, this affected communication with the HCP.

the patient will say you decide for me doctor. They won't make a decision isn't that interesting? They won't make a decision. They will not make a decision. So the challenge of the doctor is to try to figure out how to turn that around, so that the patient will make a decision. No doctor can make a decision whether someone should have a DNR indicated in their chart of whether they should have hip surgery. And that's the thing about living in Toronto... is factoring all the different cultural understanding of what it means to be sick and what it means to accept help [HCPlocal-IDI-19]
5.19 **Summary of Themes for HCPs:**

Hip work involved the HCP explaining his or her role, the care team he/she was a part of, the networks and institutions that bound him/her, as well as the embedded hierarchies found within the subspecialty i.e. the HCP discussed hip interventions with more emphasis on the hip joint than on the patient as a 'whole'. Emphasis on implants, technology, assessment tools, and trials were all interlinked and part of organizations trying to categorize and label patients. The concept of embodiment included actions that were incorporated seamlessly into hip work. The concept of interconnectedness was seen as the manner in which the HCP assimilated cultural norms and differences. These contextual meanings influenced his/her rapport building with patients and family.

5.20 **Themes for Patients and Caregivers:**

Themes for patients and caregivers included a sense of ownership with sub-categories like taking precautions, feeling motivated, and being proactive. Under the theme enlargement, there were sub-categories such as preferences for fun-filled activities and self-regulating exercise or physiotherapy regimens. Under the theme of non-knowledge, there were sub-categories such as having others making decisions, and patients not wanting to think about the incident.

5.21 **Theme 5: Sense of Ownership**

The patient regained his/her agency instead of sinking into hopelessness. While the patient reconstructed perceptions of the self following injury, I noted that he/she felt the need to have
personal control over life circumstances. A sense of ownership was overcoming challenges and having a sense of mastery in carrying out the activities that he/she was able to do achieve prior to the injury (i.e. participating in a theatre group although resorting to taking the taxi instead of walking to the location). Sense of ownership included taking precautions, being goal-oriented, and being proactive.

5.21.1 Taking Precautions

Sense of self ownership included patients who exercised caution to prevent further injury. One participant said,

I try very hard to have one hand to hold onto the rail and only carry stuff in one hand, which prior to my fall I just zipped up and down with both hands full of everything. It hadn’t worried me...nothing changed after my hip, except I was just more careful [IDI 18]

5.21.2 Being goal-oriented

Developing a sense of self-ownership included the motivation to get better,

So, it hurts sometimes, it really hurts to do the exercises sometimes you’re really tired and you’re trying to walk to the wall. Get there. Don’t stop. They all say stop if you can’t go on but if that’s where they think you should go, for, I go yeah, I was going to get there, to want to get well and I imagine that depends a lot, on what’s going on in everybody’s life [IDI-18]

5.21.3 Being proactive

Complying with physiotherapy regimens helped the strategy mechanism for being proactive. Patients incorporated many of the suggested exercises into their daily routines, which became a way for them to re-engage with their social life. i.e. going for regular walks with family
members out in the park. One caregiver described the list of exercises as important because some never participated in any physical activity and did not know what it meant to 'exercise' following a routine. The caregiver believed her husband was performing activities that he believed would benefit and strengthen his leg i.e. gardening rather than adopting a exercise routine.

This participant echoed the dominant feeling that patients did accept that physiotherapy made the leg stronger,

_We were in a taxi coming home and the taxi smashed with another car. Fortunately, if there can be a fortunate, at that point, yes, I was a nervous wreck. It was way too much to handle at that point. But as silver linings, the insurance company provided a physiotherapist to visit at home every week and it was wonderful...she picked up the pieces too and started me with all kinds of leg strengthening hip exercises. So from that point of view, I really did get a great load of physiotherapy and great help with it, but it was through this unfortunate event [IDI-18] _

However this excerpt may also enforce statements made from those interviewed who felt that there were different meanings generated on how to improve one's recovery. This one participant [IDI-18] felt she would benefitted from more physiotherapy at the time of fracture.

5.22 Theme 6: Enlargement

Enlargement referred to the range of opportunities surrounding patients/caregivers. Social networks (friends, relations, and caregivers) helped enlarge the range of possibilities: incorporation of one's social life and activities during rehabilitation regimens, preference for fun-filled activities, the self-regulation of physiotherapy exercises and rehabilitation regimens.
5.22.1 Preference for fun-filled activities

One patient talked about not wanting to go to physiotherapy because he was busy when in fact going to physiotherapy would have helped his recovery:

...I’ve got all kinds of flyers from them about the services that I can get. I just have to decide what ones I would find useful and do something about it. But so far I haven’t. Actually, it kind of ties you up when you have people coming in like the nurses and the physio man...I find that I get up and I can’t do very much of anything, because they’re either coming any time from 10:00 on, and so I have to be ready for them to come [IDI-12]

This was an example of opportunity.

5.22.2 Patients self-regulating his or her exercise and rehabilitation regimens

Individuals did not always view the apparent benefits linked to completing physiotherapy regimens. Examples of reactions to these prescribed regimens may help us to propose some rationale for these behaviours. In the following excerpt, one of the caregivers spoke of persons she saw who did not finish the physiotherapy and assumed that everyone gave up on the individual.

...we heard some stories about people who go back to these long-term care centres and the physio either amounts to nothing or is done occasionally or the woman says I don’t feel like it today and they say fine and walk away. So they never recover. The stats with hip fractures are bad. Incidents of death within a year are pretty bad. Either that or you’ll land up in some kind of long-term care facility, it’s bad [IDI-11]

Caregiver IDI-11 contextualized the story building upon the seemingly non-committal rapport between the physiotherapist and 'client'. Forecasts of death and change in facility resources, for patients who did not follow through, were sustained by a knowledge of statistics for hip
patients. There was little here to hint at fatality but rather caregiver IDI-11 assumed that the patient was in charge to direct his or her future and well-being.

5.23 Theme 7: Non-knowledge

Non-knowledge was the opposite of factual knowledge. Patients/caregivers, sometimes were not part of the decision-making because family members or others took over this task. The reliance on surrogates to deal with important choices contributed to not knowing first-hand his or her fate. Although, these decisions were not made in total isolation and the participant, if he/she was able to communicate, took part in the informal negotiation even with dementia. There was still evidence that the patient relied on the outcomes of diagnostic tests and radiological outcomes to settle his or her concerns. In general, patients used surrogates to mediate the stress he or she felt following the hip injury. Non-knowledge included ways to minimize stress following an intervention.

5.23.1 Others making decisions

Non knowledge included themes such as the family making decisions for the patient. One participant expressed the view that her daughters decided she should change to a home without stairs. This patient resigned her fate by handing over the reins to her children.

I think the fact that my family said right no more three-story town house, we’re going to a condo and I wasn’t really quite ready. I didn’t particularly want to do that just yet but on the other hand, I must admit, it made me feeling apprehensive isn’t quite right, but a little leery of stairs...{name of person} was living at home but she’d wanted to move out, so it just seemed a good thing that she could get her condo, we’d get this one and nobody has to worry about steps so much [IDI-18].
5.23.2 Participants not wanting to think about the incident

Overall recovery constituted feelings that the patient was not fully operating for a length of time after the fracture. In this statement, the patient feels that she did not recover easily: “I don’t think I recovered easily I’m old enough that I don’t think about things like that.” [Participant-8FU].

5.23.3 Participants rely on radiological outcomes

Radiological outcomes seemed to appease the possible worries felt by the patients/caregivers themselves. In one excerpt, one of the patients said, "I think you go once every three months or so, I don’t know. I’m not 100% sure how that works. But they said it was fine, they took the X-ray and they said it looks fine." [IDI-25].

This participant [IDI-25] also mentioned another family member who wanted to be involved in the initial stages of the decision-making. However, this caused her more stress. She made it explicitly clear that she wanted to be in charge of her own life i.e. not wanting the HCPs to relay any news about the situation when her daughter was present or showing irritation that her daughter wanted to take charge and change the furniture in the home.

5.24 Summary of themes for patients/caregivers:

The ability to forecast helped patients make changes to his or her life following hip fracture. Non-knowledge or taking away decision-making opportunities made participants aware of their spatial and temporal surroundings. Contesting regimens also indicated a preference and value for filling his or her life with things or activities these patients enjoyed. They did not want to
feel trapped in an injured state. Undergoing surgery was considered an interruption to his or her daily routine and quality of life.

5.25 Discussion

Participants espoused the view that prognosis was a key element that complemented diagnosis and treatment. The medicalisation of prognosis was evident by the decisions made by the discharge team, which affected the patient in the immediate recovery phase and his or her access to resources. Government mandates formed boundaries that limited the patient's access to resources. The classification of patients by financial need, mobility levels, and age were some of the characteristics that would differentiate patients and affect his or her recovery.

It was typical to cement particular thoughts on the patient's prognosis by communicating and forming relationships i.e. with the patient and family members as well as with a discharge team. The discharge team comprised of social worker, occupational therapist, and physician. As Alexandre (2008) stated, "it is from the times of antiquity that the cultivation of prognosis helps the HCP". The manner in which prognosis was delivered, based on knowledge and the capacity to forecast, could enhance the HCP's reputation (Bernegger at el., 2012). Bernegger and colleagues (2012, s18), showed that one's prognostic capacity could be demonstrated in the power underlying discussions between patient/caregiver and the provider- - filling the much desired knowledge gap that existed behind two major lines of inquiry: 'what will happen next' and 'how much time is left?'.

Receiving news of having to undergo surgical treatment was a traumatic experience for the patient and family members. In my study, some of the patients had a range of reactions in
order to minimize the stress associated with the news: concern with physical care, a preference not to think about surgery, and strategies to control pain or mobility issues. Surgery and having a hip fracture constituted an interruption to his or her life continuum. The predominance of biomedical issues seen in the HCP forecasts overshadowed some of the psychosocial factors that were involved in the patient's life. If such was the case, there could be tension or a rift in providing treatment option to the patient and family. Where discrepancy was noted, patients and families advocated for what they believed was either in his or her best interest or in the best interest of the loved ones.

In my study, I found that fear of malpractice guided the conversation with the patient and family. Another body of work proved major differences in communication behaviours when associated with malpractice claim but no difference was found for surgeons (Levinson et al., 1997). Whereas in a companion report, the tone of voice recorded was found to be more 'dominating' for those surgeons who had a malpractice claim (Ambady et al., 2002).

Individual efforts put forth by each HCP to give his best prognosis were affected by the hierarchical spheres in which he/she functioned from day-to-day. My findings demonstrated that forecasting was affected by the social connections that the HCP embodied to achieve trust with the patient/caregiver. Literature has shown that working in a consumerist environment may make the HCPs nervous about making decisions rooted in judgment and experience. HCPs felt bound to check his or her diagnosis, for instance, with confirmatory tests (Nettleton et al., 2008b). In this case, references to radiological outcomes or the ordering of superfluous tests, as
voiced by the HCPs in my study, illustrated this. However, many HCPs claimed that a lack of baseline characteristics for patients presenting with hip fracture left them the unwanted freedom of delivering prognoses based on judgment and experience. Delivering treatment options to patients may contain traces of the increasing pressure HCPs felt to prescribe in ways that were influenced by administrative, commercial, professional, economic, and patient forces.

Although prognostic instruments may focus on quantifying survival, we need to focus on the concept of how the remaining recovery time could be qualitatively enhanced (Table 9). In clinical contexts, practitioners will often rely on assessment scores to predict and then offer à contre-coeur of what they prophesize (Christakis, 2000). Caregivers, families, and HCPs can provide support to broaden the patient's capacity to make the best of it given the situation.

Communication about prognosis should leave space for possibilities of 'survival'. Those who know numbers - i.e. mortality rates, chances of survival were seen to hold power (Bernegger et al., 2012, p. s20). In this present study, I demonstrated that the concept of enlargement was not limited to these statistics. In turn, those receiving a bad prognosis could turn their perceptions. The dialogue could be more focused on increasing the patient's agency and filling life with joyful activities.

The concept of non-knowledge affirmed the philosophical underpinnings involved in the construction of self following hip injury. The uncertainty of the future was not always a desired choice but was affected in part by communications with the HCP and having others make
decisions that affected the patient's future. This concept of non-knowledge may or may not increase stress, following a hip fracture, depending on how information was then relayed back to the patient after the decision was made. The decisions could be made entirely or partially by the family members. Patients were affected by language and actions; what happened was not in his or her hands. Others were responsible for making decisions for the patients themselves. However, having caregivers/friends and families did enlarge the possibilities of living the remaining life joyfully, even though not always autonomously. Others helped the patient
develop strategies that otherwise he or she would not be cognizant about. For example, the prevention of further injuring oneself was a strategy developed once the patient became more cognizant of his or her temporal and spatial surroundings. Some scholars supported the evidence from my work that some individuals had the ability to extend their present capabilities in order to exert control over his or her own life (Gecos, 2003). The concept of developing self-ownership was associated with mastery over circumstances that bears directly on the life of the individual (Pearlin, 2010). Mastery was seen as a protective resource to reduce the consequences of stress (Avison & Cainey, 2003). Some scholars indicated that self-ownership could develop but others who were situated in better social milieus could learn this strategy earlier (Pearlin et al., 2007; 2010).

5.26 Implications

When prognosis is understood as a perspective, individuals can legitimately participate in finding new opportunities to improve the quality of life following a hip fracture. The dramatic effects of having a hip fracture can have far-reaching implications for patients/caregivers and healthcare providers. For the patient, effective recovery involved a considerable array of strategies to minimize stress that facilitated and promoted engagement in the social world. For HCPs, understanding the social, political, and economical forces that underlie prognoses was fundamental in creating rapport not only with patients and families but also with peers and colleagues in professional networks.

To this end, I did not look at direct exchanges between practitioners and patients. However, a qualitative study design can provide a nuanced understanding of a phenomenon i.e.
discriminations between perceptions of health as a direct result of hip fracture needs. Further in-depth analysis helped discover deeper meanings and contexts for prognosis following hip fracture. Elements that helped patients develop insight was important in effecting clinical change.

5.27 Conclusions

Both stakeholders failed to recognize the commonality of oscillating between networks. These different connections were dynamic, which suits the ever-changing landscape of healthcare. These networks and connections shaped the participants' meaning of prognosis and subsequent decision-making concerning treatment. In the present study, the patients/caregivers viewed the event of a having a hip fracture, echoing Heideggerian premises, as an interruption of his or her life. Indeed, drawing from philosophical underpinnings it is possible to see how we can open up the discourse on receiving and delivering news about the future following a hip fracture. Heidegger saw illness as meaningless and did not consider it even as absurd. Viewing prognosis as a perspective could minimize the stress associated with post-intervention care management. HCP conversations with patients could set back their readiness for change, if it was filled with medical jargon (new techniques, technology, and resources).

The ideas of patient and family readiness for change was at a disjunction with discussions of change provided by the providers. Statistically-laden prognoses, associated with levels of ambulation or pain, do not always resonate with patients and families. If we shift from the idea
of performing surgery to talking surgery with patients and families, there is an opportunity for negotiation to take place.
CHAPTER 6

RELATIONSHIPS OF POWER AND TRUST: IMPLICATIONS FOR DELIVERING PROGNOSSES TO PATIENTS FOLLOWING HIP FRACTURE

Adapted from Hoang-Kim A et al. (submitted for publication)

6.1 Chapter Overview

This chapter presents a second qualitative study undertaken to how the delivery of prognosis changes across different healthcare systems. First, I provide the reader with the social roles that are contingent on the HCPs treating or managing hip fractures. Second, I focus on the thematic analysis of four areas, which I call "hip work", "embodiment", "forecast", and "interconnectedness". Third, I present a section on shifting stakeholder alignments highlighting possible subgroup differences.

6.2 Introduction: Developing the therapeutic relationship between patient and provider

The fundamental goal for healthcare professionals managing hip fractures is the promotion of clinical change. As we have seen in the previous chapter, developing strategies to help the patient gain insight on the present situation and symptoms can reflect positive clinical change. Often HCPs speak in terms of specific parameters that range from relieving symptoms to managing social conflicts within the familial setting. Historically, the development of insight (which is the acquisition of knowledge or some type of rationale that helps the patient explain his or her symptoms or problems) has been seen as the primary contributor of change (Glucksman, 1993). Quality and nature of the interaction between patient and HCP also
promotes positive clinical change and enhances outcomes of care across different healthcare systems (Glucksman, 1993; Levinson, 2013). A therapeutic relationship fostered by effective communication can harness improvements in patient satisfaction and prevent malpractice (Levinson, 2013). Increased information sharing and shared decision-making is associated with greater satisfaction (Roter et al., 1997), greater emotional well-being (Kinmonth et al., 1998), and greater self-reported medication adherence (Stewart, 1984). It is important to understand the underlying elements of power and trust embedded in discussions around delivering prognoses to patients and family members.

Building trust can in turn be the basis for developing a good therapeutic relationship. Providers may vary in the amount of information he or she provides to the patients about diagnosis and treatment and the degree to which he or she encourages shared-decision-making with the patients (Cvengros et al., 2007; Krupat et al., 2001). Further, authors of a systematic review have shown that a gap exists for informed decision-making and expressed empathy in the dialogue between surgeon and patient (Levinson et al., 2013). It is often unclear what the role of the patient is within medical decision-making. This ambiguity leads to increased levels of anxiety and lack of overall support.

HCPs often work alongside individuals in various disciplines where elements of power come into play. The clarification of roles or responsibility within the team and defining social relationships with peers becomes imperative. In a presidential update, Dianne Dyer addressed
some concerns about registered nurses and nurse practitioners struggling to fulfill their distinct and appropriate roles on healthcare teams. In response to role confusion, tension, and ambiguity, the Canadian Nursing Association’s position statement on nursing leadership was issued:

Leadership is about the competent and engaged practice of nurses, who provide exemplary care, think critically and independently, inform their practice with evidence, delegate and take charge appropriately, advocate for patients and communities, insist on practicing to their full and legal scope of practice and push the boundaries of practice to innovate at new levels (Dyer, 2013, p. 3.)

HCPs possess more than medical know-how that could benefit the patient and family; health promotion and wellness, community engagement, and social determinants of health (Dyer, 2013).

Knowledge about prognoses authorizes medical personnel and HCPs to engage assertively with patients, which brings to the forefront discussions about power. According to Levinson et al. (2013), four papers in qualitative research (Todd, 1984; Philips, 1996; Marchant-Haycox, 1997; Mirivel, 2008) and one companion report (Salmon, 2000) investigated issues of power between patients and surgeons. Todd (1984) found that surgeons tended to choose the conversation topics and exerted more power and control in the interaction compared to patients. Philips (1996) found that there was a lack of information sharing, insensitivity to patients' social conditions, evasion of direct questions, and use of medical jargon between patient and HCP. Other papers indicated that surgeons and patients each chose specific strategic positions to assert authority (Marchant-Haycox, 1997; Salmon, 2000). Further to the statement on team
leadership, Dyer encourages ‘talking aloud’ when assessing patients (Dyer, 2013). Yet, it is unclear whether 'talking aloud' when assessing patients creates asymmetrical relationships amongst team members, or with patients and their families alike.

Historically, healthcare systems in Canada have moved from one of health promotion (dominated by structure) and health belief (dominated by agency) to one where holistic care involves helping individuals minimize stress associated with post operative outcomes (Strohschein & Weitz, 2013). Public funding has allowed for a more complex view of the body to be researched (Strohschein & Weitz, 2013). I shall synthesize some elements, which have already been discussed in Chapter 2 of this thesis: "body work" (Wolkowitz, 2002), "disciplinary power" (Taylor, 2011; Hochschild, 1983; Leidner, 1993; Pierce, 1995), and "human embodiment" (Lupton, 2000; Nettleton & Watson, 1998). Despite the differences in focus, I did not isolate these hermeneutic concepts but would rather emphasize the integration of the body with the mind. My study builds on research that conceptualizes embodiment and its characteristics in relation to the distinct culture of working with patients presenting with hip fracture.

Research showed evidence that there was still much separation between action and verbal communication in the creation of trust with patients. Brown et al. (2011) demonstrated this disjunction in a phenomenological study with cervical cancer patients,
...it was apparent that, whilst verbal communication was useful in establishing the agenda of the professional in relation to that of the patient, it was body work which was crucial in corroborating and validating beliefs pertaining to the ability and willingness of the professional to deliver his agenda in the future (p. 280)

In the excerpt above, different bodies driving policy and practice guidelines can impact HCP discourse.

The concept of embodiment was fundamental in constructing ideas about perceived prognosis. We departed from the simple dualist's view of embodiment that negated that the activity of thought was united with the body (Smythies & Beloff, 1989). Merleau-Ponty's phenomenology of language claimed that thinking takes place in and through an embodied language or spoken word that cannot be understood as a 'technology' (Merleau-Ponty, 1962; Murray & Holmes, 2013). More specifically, I chose Gadow's work to guide my findings, in that "the self is inseparable from, but not identical to, the body, and the experience of body-self unity is the taken-for-granted, unself-consciousness connection between body and self" (Gadow, 1980; Hudak, 2007, p.32).

I conducted the following qualitative study to explore aspects of multiple relationships amongst HCPs and external bodies. I will also consider the delivery of prognoses across different healthcare systems.

6.3 Sample Procedure

I conducted semi-structured interviews with 18 HCPs. The sample consisted of 13 international and 5 local HCPs. Ethics approval was obtained from the hospital's ethics review board.
Informed consent was obtained from all participants. My study began inductively without any a-priori hypotheses. I gathered preliminary information from two focus groups comprising local HCPs with international HCPs. These sessions helped to guide the design of the interview guide.

I used a thematic inductive approach and an iterative process. A single coding framework was developed from data including both local and international HCPs’ perspectives. The stakeholder group interview procedures were reported in Chapter 4.

6.3.1 Healthcare providers:

Information about demographics about the five local HCPs were reported in Chapter 5 under Healthcare providers. Sixteen international HCPs met the eligibility criteria. The 13 international HCPs who participated ranged from 30 to 68 years of age (Table 10). One was female and 12 were male. Eight were from Europe, 3 were from Australasia, and 1 was from North America (not including the local HCPs who were all from Canada). Nine were surgeons, five of which were specialized in trauma. Other positions included a geriatrician, rheumatologist, head of bone and joint research, and a medical director. One follow-up interview was conducted.

6.4 Assumptions

I attended either orthopaedic or osteoporosis meetings where I recruited the majority of the international HCPs. These individuals had strong research skills, perhaps with interest in collaborative efforts towards innovation and becoming champion leaders in their respected field. These individuals may have been members in political or research-oriented societies. The challenges with interviewing at the international level was grasping the real meaning or intention behind the linguistic terms or cultural meanings embedded in the HCP narratives. I
encountered difficulty in navigating through the different care pathways, dedicated to patients with hip fracture, that were unique to the geographical location.

Table 10. Characteristics of healthcare providers enrolled in our study

<table>
<thead>
<tr>
<th>Participant – Country of Origin (n=18)</th>
<th>Sex – years of age (yrs)</th>
<th>Position - Area of expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCPlocal-Canada</td>
<td>M- 67 yrs</td>
<td>Surgeon- Joint Replacement</td>
</tr>
<tr>
<td>HCPlocal-Canada</td>
<td>F-57 yrs</td>
<td>Social Worker - Geriatrics</td>
</tr>
<tr>
<td>HCPlocal-Israel</td>
<td>M-36 yrs</td>
<td>Hospitalist -Family Medicine</td>
</tr>
<tr>
<td>HCPlocal-Canada</td>
<td>F-54 yrs</td>
<td>Registered Nurse- Nursing Orthopaedics</td>
</tr>
<tr>
<td>HCPlocal-Canada</td>
<td>M-35</td>
<td>Orthopaedic surgeon - trauma and arthroplasty</td>
</tr>
<tr>
<td>HCPint- United Kingdom</td>
<td>M-50</td>
<td>Orthopaedic surgeon- trauma and upper limb</td>
</tr>
<tr>
<td>HCPint – United Kingdom</td>
<td>M-68</td>
<td>Medical director – development and supply of medical devices to treat hip fracture patients</td>
</tr>
<tr>
<td>HCPint- Belgium</td>
<td>M-49</td>
<td>Rheumatologist – osteoporosis</td>
</tr>
<tr>
<td>HCPint- Finland</td>
<td>M-57</td>
<td>Orthopaedic Surgeon – fractures, bone tumours</td>
</tr>
<tr>
<td>HCPint-Spain</td>
<td>M-50</td>
<td>Orthopaedic Surgeon – orthopaedic surgery</td>
</tr>
<tr>
<td>HCPint-Australia</td>
<td>M-59</td>
<td>Head, Bone Joint Research – bone and joint disease</td>
</tr>
<tr>
<td>HCPint-Italy</td>
<td>M-31</td>
<td>Orthopaedic Surgeon- osteoporosis</td>
</tr>
<tr>
<td>HCPint-Netherlands</td>
<td>M-48</td>
<td>Orthopaedic Surgeon – general orthopaedics, traumatology</td>
</tr>
<tr>
<td>HCPint-USA</td>
<td>M-61</td>
<td>Surgeon – trauma</td>
</tr>
<tr>
<td>HCPint-Thailand</td>
<td>M-61</td>
<td>Surgeon – trauma</td>
</tr>
<tr>
<td>HCPint-Singapore</td>
<td>M-50</td>
<td>Surgeon – trauma</td>
</tr>
<tr>
<td>HCPint-Sweden</td>
<td>F-30</td>
<td>Resident surgeon – orthopaedics, hip</td>
</tr>
<tr>
<td>HCPint-USA</td>
<td>M-54</td>
<td>Geriatrician – geriatric fractures, palliative care</td>
</tr>
</tbody>
</table>
6.5 Stakeholder Differences in Dominant Themes

Interviews with the international HCPs revealed more breadth in the subcategories of hip work including more discourse on registries, classification of patients using databases, and HCP performance ratings. Different funding priorities, either dictated by the government or institution, also created discrepancies between HCPs and their view of hip work. However, in those healthcare systems where the government created national registries, HCPs also voiced their opinion in conflict, either mistrusting the incentive or the research methodology selected for acquiring patient information. These healthcare gap remedies created political incentives to discredit these very initiatives. These fluctuations in implementing structure and resources to aid the patient were changes that were difficult to accept and adapt to. There was most agreement in the concept of forecast when comparing participants internationally versus locally. I will highlight only some of the sub-themes that either demonstrated more depth or breadth for fear of otherwise being redundant.

6.6 Theme 1: Hip work

Hip work focused directly on the bodies of others—assessing, diagnosing, handling, treating, manipulating, and monitoring bodies. The diurnal experience in hip work involved many disciplines which drew on different knowledge-specific expertise. Practitioners operated within different spheres with embedded hierarchies. The concept of hip work included sub-themes which considered embedded hierarchies associated to the closeness of the body, geographical transfers of bodies/hip fractures to trauma centres and specialists, awareness of institutional boundaries, classification of patients, and expectations linked to the performances of the HCP.
6.6.1 *Distance to hip*

Those HCPs who were directly involved with treating the patient's hip joint also tended to talk more about the joint.

*See, that’s kind of funny because I love doing hip fracture, so it’s almost like it’s not, I don’t view it as it’s more of a challenge than it is.. I don’t think about it as a difficulty. I guess the worst thing is when I don’t have any bone to work with. So the severely osteoporotic, that’s the one I’m unhappiest with the most because I know my internal fixation is not stable enough, and so with those, primarily I always consider arthroplasty...* [Participant-int15]

It was less likely for particular HCP disciplines to refer to other disciplines when they identified strongly with their professional role. For instance, a surgeon was more aware of treatment choices made by other surgeons rather than with what a geriatrician or endocrinologist prescribed. This was the case even though these other specialists were involved in the patient's circle of care. This one participant described the benefit of having geriatricians as part of the protocol for managing hip fractures. In the following example, the HCP explained his assumption that with geriatricians included in the patients' assessment, patients were discharged earlier.

*...And the geriatricians they take care of rehabilitation and..of course the medical optimization on the ward after the operation... Well sick patients that need some special geriatric care with the drugs and different examinations and special treatment and physiotherapy and so on. I have to say it works much better at the geriatric ward..the geriatricians are much better organized in getting the patients home. The hospital stay decreased.* [Participant-int01]

Bodies with hip fracture were stigmatized. There were explicit statements made to frail and old patients and the key role asserted by the geriatrician to assess and treat dementia. However, it was unclear whether this treatment algorithm was suitable for all patients or not. Another
perspective was that by inserting these new HCPs in the hospital protocol caused fragmentation of the care received by the patient.

6.6.2 Moving 'Hips/Patient' Bodies

Many of the patients were transported to and from the trauma hospitals. This one excerpt was an example of how the HCP revealed delays in providing surgical treatment to the patient because of these transfers.

I should also say she comes from the {deleted geographical location} so she is a long way away, had to come down by air ambulance. So, by the time she came here, that was going to delay her surgery as well. She just had her surgery today so that's effectively 48 hours after she had injury [Participant-int23]

HCPs not working a shift caused transfers of the patient to another HCP. The transfer of the patient to a rehabilitation unit not inside the hospital could also reflect changes in HCP care. The patient's co-morbidities also altered his or her management and delayed treatment.

6.6.3 Awareness of Institutional Boundaries

Linguistic terms associated with surgical intervention was used by the HCPs to minimize its apparent disruption to the patient's life. According to participant-int16,

Of course, the patient wants to get rid of the pain, but the patient doesn't like surgery. Normally, I will say don't worry. We'll bring you to the OR and we will pull it. We will not say directly that we're going to operate. We're going to fix, or we're going to do something. Then the patient will say okay because as long as you can get rid of the pain they don't care what you're going to do (Participant-int16).
In this instance, the participant used 'we'll bring you to the OR and we will pull it' with deliberate linguistic manipulation to build trust with the patient and ease the tension. In this particular institution, it was noted that with its reputation there was an institutional preference for operative treatment.

6.6.4 Classification of Patients

Work was bounded by hierarchies which constituted expertise as well as economical, financial, ethical, and political agendas i.e. running clinical trials, government run registries, and job positions held either in a private clinic or in a hospital. The users and creators of registries arguably contributed to the perception that patients were perceived as consumers or clients. The hip fracture registry created in Australia was referred to by one participant as, “a database for the government to make decisions” (Participant-int7).

...the state is divided into three regions, each of those regions has the same template of management structures and guidelines and rules of how they go about things...it is now a very centralized managed healthcare service, and KPIs (key performance indicators) are an important way in which they manage things...So, how many patients did you get, how long were they there, how many complications did you have...There are also moves towards establishing an electronic patient database. So the patient's medical history will go with them as they move from doctor to doctor. That's not yet implemented, but there's a federal government initiative to move in that direction [Participant-int7]

The majority of participants voiced strong opinions regarding patient assessment. Data collection parameters, in some cases, were set according to professional discipline or geographical location. For instance, one participant described a "Traffic light system", "you have mental status, family..social status and other diseases. So the red light is like really sick and alone and demented and green is healthy with family and so on" [Participant-int01].
Many complained about the reach these instruments had, questioning the choice made by hospital administration in implementing them altogether. Some HCPs valued certain assessment tools because of their proven validity and use in current clinical trials.

6.6.5 Expectations linked to HCP performance

This excerpt made it clear that not all surgical operations could be solely attributed on experience and expertise. Chance was a limiting factor in the possibility of not obtaining good outcomes. It was evident however, that there was unease concerning HCP reputation and discussions ensued about prognoses that were not always transparent. For instance, pressure was posed by governments releasing HCP outcomes following interventions,

...we do actually have a regular update of our surgical procedures, and these are reported annually. And, so they're all documented, the patients who die under our care, they're all visible to healthcare professionals. And, in fact, they actually do even appear in national statistics, the start of this year, that surgeons' outcomes will be documented in national papers. Which is ridiculous in some ways, because you could have somebody who is involved in a lot of very, very difficult elective work, where people will, unfortunately die from the surgery, die from the procedure, or shortly afterwards. Where, you get somebody who's doing hand surgery and it's strictly for carpal tunnels under local anesthetic and they'll have nobody ever die. Because, the public doesn't necessarily understand what the figures mean, and they'll go, oh gosh, that person's good, or that person's a killer. Because there's no great way, no sensible way, of saying but wait a minute. ..it's like I remember one year, my figures for patients who died under my care was higher than others. Just by chance, I think I admitted three people, all within the space of one week, who were just in the most awful pre-morbid states who all just came in. They were, literally, just like looking at a ghost the second they came to the door. And, they were like a ghost before they broke their hip as well. But, those three came in. As it happened, two of them didn't have operations and one did. But of course, it went down that I was a killer for the year. But, as far as the next few years, my figures have been low, because not many have come in such a state. So, this is what I'm saying to you, a lot of things are completely out of our control. The body will survive or it will not survive, and I'm not sure if patients have to be in a state whereby they could actually respond to the care which is being offered to them in a good way, they can actually get
This participant conveyed degrees of competitiveness when comparing his figures with those of his peers. In the public eye, his performance as surgeon was scrutinized not only by patients themselves but also by commercial vendors, who sustained perhaps that their implant was best at the hands of experienced specialists. The rationale behind creating public awareness of a surgeon's outcome caused more of a rift between the patients and providers. In addition, this approach made by governments causes even more of a disconnect in the perceptions of body versus patient as a whole. In the aforementioned passage, the HCP referred to the patient as a body which would survive or not. Again this perception focuses on the consumerist approach.

6.7 Theme 2: Embodiment

Embodiment included the effect of institutions (political, social, structural bodies etc.) that mediated the HCPs' bodily experiences and behaviours. The concept of embodiment included sub-themes that showed the assumption that patients were being respectful to the HCPs, the HCP's familiarity with surgical procedures or logistical nature of his or her role within the care pathway, and negotiations with patients.

6.7.1 Assumptions that patients are respectful to the HCP

A Swedish participant described her assumption that patients were respectful to doctors:

They [patients] have expectations. They are very kind but they do respect the doctors still. Swedish are very kind people so they wouldn't say directly to the doctor that I don't believe or something like this. But then maybe later they doubt [Participant-Int01]
The HCP was aware of her power when entering discussions about treatment options with the patient and family members.

6.7.2 Familiarity with technology: Use of Implants

Another participant explained that familiarity with the tools on hand was important for him to carry out the work and creating a routine.

The deciding factors for doing it also is speed, of course, because familiarity means people will do the operation that bit fast, and with a slightly higher success rate...So we're going for something which is fairly fast, fairly reliable in our hands, and which hopefully will help avoid complications, and get that patient done in one go... and familiarity tends to bring out the best in all of us in terms of doing a good job, so you do something, you just do it again and again, you tend to be a little better at it than...changing the techniques you use [Participant-int23]

Time was a factor in guiding this surgeon to adopt tools that were familiar to him in order to execute and facilitate the operation. Familiarity with the surgical procedure also ensured a timely operation.

6.8 Theme 3: Interconnectedness

The theme of interconnectedness focused on the HCP's agency to act within and outside of his/her boundary roles as well as to have beliefs influenced by social and cultural context. Interconnectedness had subthemes: the HCPs' considerations for the patients' spiritual beliefs, influences from peers and colleagues in creating collaborations, collecting sponsorship in attending international meetings and events, as well as joining societies.
6.8.1 *Spiritual beliefs guide treatment decisions*

One surgeon expressed his observation that there was no use in going against spiritual beliefs when providing operative treatment.

Most of the people in Thailand are Buddhists. Of course, there are some Christians and... If you want to do the surgery and they say okay, this day is not good. This time is not good. They accept the surgery and they say okay, this day is not good. This time is not good. They accept the surgery, but they say I don't want to do it on this day or I don't want to do it in that period because some fortune teller they believe says not to do it on that day so I say fine...Although as a surgeon, we operate anytime. We don't care because we have confidence in ourselves, but if the patient tells you something like that, it's better not to refuse [Participant-int16]

6.9 Theme 4: Forecast

Scientific discourse was filled with facts about mortality rates affecting outcomes in patients presenting with hip fracture. Forecast was intertwined with bodies situated within a historical context.

6.9.1 *Assumption that treatment is a success*

Participants may have predicted a good outcome following surgical intervention; however, the lives of the patients may have, in fact, altered dramatically. One HCP, having direct experience with hip fracture treatment, recalled an incident with his relative:

I remember my mother in law very clearly. She had a trochanteric fracture. She was not needing a stick, so she was independent. And always after her fixation repair it was regarded as a success, but she best walked with a stick, couldn't walk as far, lost a lot of her independence and stopped driving. So it made a big change to her life although she was regarded as a success and I think a lot of patients are in that category [Participant-int3]
The following HCP viewed the surgical treatment, for one of his patients, as a success; however, the fact that friends and families do not visit the patient were external factors that did not concern him as the treating surgeon:

...the patients feel that they have to get full support from the society. This is something now in our system that... But are they complaining? Very few... they have some other concerns...you know they don’t have friends or relatives are not coming to see them... I think, in my mind it means that the surgical treatment has succeeded. So it’s more personal, about their life [Participant-int5]

6.9.2 Communication strategies used by International HCPs delivering treatment options to patients/caregivers

Many of the references made here that were attributed to culture had similar implications to citations made by the local HCPs. Both HCP groups believed that children of patients have deep invested interest in taking care of their parents, especially when injured. When the injury altered the parents' lifestyle, HCPs cited specific instances when caregivers were willing to give up their own life in order to take care of their loved one. In this excerpt, the HCP assumed that the relatives were concerned with the risk of surviving an operation:

I think it’s very much, not only to Thais, but I believe for most Asian people they respect their parents. They have a responsibility to take care until whatever so I think it is important in our culture, the Asian culture, to explain very clearly. Sometimes you have arguments from different relatives who agree or don’t agree because the patient may be 90 years old, and they’re not in a good situation so they worry whether the operation will make the patient even die earlier so you have to always balance [Participant-int16]

In this situation, the relatives negotiated with other family members in order to make the appropriate treatment decision. The HCP assumed that his role was to explain very clearly the
benefits of having an operation, perhaps more so, because his experience empowered the conversations he had with the relatives.

By the way, it depends if the fracture patient is able to understand what we are telling or not, this is the first for us. If the patient can understand what we want to do, we explain first to her and then when we do the round in the ward, we also, at the end of the round, we talk with the relatives. And we explain the same thing, maybe in a different manner, more focused with more scientific terms that the patient which is elderly, they can't understand everything, maybe we say the same things but with different words.[Participant-int13]

In the excerpt above, the HCP was affected by the age of the patient. He assumed that conversations that were filled with scientific explanations did not clarify the situation to the patient. Again he shifted the way he carried out dialogue with family members. He assumed that they were younger and more capable of understanding more of the technical terms.

In the following passage, the HCP assumed that there was not enough time with the patient to develop a meaningful relationship.

But you need to have let's say a good and not single contact with the patient to come on that kind of topic and the discussion with the patient. In the very short time we have the contact we are having most of the care to get them in and out of the bed because it's not so easy. They don't step out of the bed and spring on the table, so they are just recently operated and they cannot bear the weight on the leg. And then they are not familiar with the examination so they do not know really what's happening but we are explaining that and that is the main thing. They easily understand what is weak and strong bone. And everyone knows about medications so we do not explain at that moment already all details. You see the patient is following the idea that there can be done something. That is important.[Participant-int4]

This participant felt that his actions were more helpful to the patient than the use of words i.e. helping the patient move and get out of bed because the patient's biggest challenge was his or her inability to move autonomously. The HCP also assumed that the patient was somewhat
embarrassed or uncomfortable with the unfamiliar setting. The HCP felt responsible for creating a connection to the present situation. The provider also took on the role in lessening some of the presumed anxiety felt by the patient by conveying either through actions or simple words that something was going to be done to help the patient get better.

6.10 Summary of HCP themes (local HCPs and international HCPs)
Overall, both HCP groups held strong views in trying to minimize peri-operative complications with either the use of appropriate technology (i.e. improved implant design) or competency that enabled the HCP to perform surgery in a timely and efficient manner. Both groups voiced concerns about delays that were beyond their control. There were factors attributed to the co-morbidity being addressed as a priority or the transfers to trauma centres, which impacted the outcome considerably. There were inherent challenges blocking the HCP to fulfill his or her role dutifully and perhaps even responsibly. References were made concerning the pressure exerted by government, on a large scale, and institutional pressure, on a smaller scale, should the institution implement patient assessment and allocation protocols that did not adhere to the HCPs’ own beliefs. Cross-culturally, common communication strategies were employed showing the HCP's preference for surgical intervention when the patient was assumed fit or with low mortality risk.

6.11 Discussion: Shifting Stakeholder Alignments in Decision-Making Algorithms
In the core findings of the study there were several strategies employed in hip fracture management that minimized post-intervention stress. However, cultural norms did dictate
differences in delivering prognosis that seemed to contradict if not impede a holistic approach i.e. the HCP from Asian cultures assumed that a higher degree of pain was tolerable for the patient. Prognosis was often the departing point for decision-making and anticipated future action (Baudot, 1970). Spiritual beliefs also seemed to prevail in the decision-making even when surgery was inevitable and necessary that it was to be executed in a timely fashion. More themes of embodiment than interconnectedness were developed for local HCPs when compared to international HCP stakeholders. My findings indicated that both interconnectedness and embodiment should be further explored in terms of the impact it has on patient/caregiver decision-making algorithms, comfort levels when delivering culturally-oriented care, and its role within healthcare teams.

6.11.1 Establishing Patient/Caregiver Trust

Interconnectedness, the social interactions and beliefs, that formulate prognosis in keeping with an HCP's membership could be used to advance and facilitate care for the patient with hip fracture. Understanding one's needs can ease tension in the dialogue between HCP and patient. It was equally important for the physician to build a relationship out of trust with the patient. This was often based upon his or her professional capacity to convey medical knowledge and know-how.

Heidegger (1962) claimed that the self was defined by its context, insisting that human existence was relational and participatory. The discourse used by the HCPs (both local and international) revealed disjunction in how individuals were referred to as subjects rather than objects (Heidegger, 1962). I noted heavy emphasis in the discourse that was focused on body
parts and joints rather than viewing individuals as subjects rather than objects. These discourse practices would have implications in improving the rapport with the patient perhaps leading to greater adherence to rehabilitation regimens at home and compliance to pharmacotherapy.

The HCP needs to assess his or her comfort level with culture and when delivering culturally-oriented care. Below are two brief accounts drawn from empirical evidence of culturally-oriented care delivered by physicians based on the use of language as a medium of effective communication. One descriptive qualitative study showed that if the physicians did not have all the necessary information for making a decision there would be unnecessary tension (Parsons et al., 2014). The second ethnographic study explored how health and spiritual phenomena were viewed differently amongst older Thai persons in the United States (Pincharoeng & Congdon, 2003).

Parsons et al. (2014) showed that language barriers impaired patient comprehension. Some of the participants described some processes where they felt that they could 'get by' rather than 'get help'. One physician described a 'grey zone' in which a patient's "level of English proficiency is good enough so that maybe you can feel that you can get by but their comprehension may in fact be poor enough that they can get into trouble" (Parsons et al., 2014, p.3).

From the same study, a participant acknowledged that "'getting by' meant proceeding with 'imperfect information', treating 'more of what they could see rather than the symptoms'" (Parsons et al., 2014, p.3). In these emergency situations, physicians felt that even though they were 'getting by' it was a less-than-ideal situation. If the participants also felt that it was all that they could achieve, this part of the decision-making was seen as a source of anxiety.
Pincharoen and Congdon (2003) developed five themes from having interviewed 9 older Thai persons on their perspectives of health and spirituality: (a) connecting with spiritual resources provided comfort and peace, (b) finding harmony through a healthy mind and body, (c) living a valuable life, (d) valuing tranquil relationships with friends and family, and (e) experiencing meaning and confidence in death. Also in my study, the acquired meaning of death for patients could negate medical authority. Burkhardt and Nagai-Jacobson (2002) explored the notions behind spirituality and aging by noting that spirituality transcended religious boundaries. This view was also consistent with Gadow's (1983) dialectic in aging, which allowed for the self to revitalize. Self-revitalization could parallel the concept sense of self ownership, in that one could develop a strong spirit and relationship with the body as the body declines. These perspectives on aging combined with spirituality could sensitize the HCP to cultural issues when delivering forecasts.

6.12 Future Directions

The HCPs demonstrated that patients who presented with hip fracture and its associated pathologies were strongly influenced not only by language but also by actions, cultural norms, and spiritual beliefs (Delle Fave, 2006). It was important to investigate these aspects because those who were injured could be situated in compromised social, cultural, or attitudinal environments (Bickenbach et al., 1999). Further research needs to address discourse by analyzing direct exchanges between HCPs and patients.
6.13 Possible Sub-Group Differences

There were more combined themes of hip work and forecast for local HCPs than themes of embodiment and interconnectedness. Themes of interconnectedness interwoven with forecast and hip work were prevalent for the international HCP group than themes of embodiment.

6.13.1 Hip work associated with forecast

HCPs voiced concern in permitting the patient to be discharged early from the hospital causing their recovery to worsen. However, he/she is not in a position of power when discussing these options for the patient with his medical team.

It's a hard fight to have with the medical team, in terms of needing to have the patient stay a bit longer, until the team can get a better handle on or they think that they can do a little bit more to make them a bit safer, because hospital beds are at a premium [Participant-localID19]

In the passage following this, the HCP stated strategies associated with negotiating longer hospital stays for the patient. Success ensued and was dependent on personality types within the medical team and the ability to present a clear forecast or bad prognoses for the patient.

In the following excerpt, the HCP assumed that when the patient had low cognitive abilities there were more disadvantages associated with moving these patients from one location to another.

Cognitive and functional go hand in hand. I don't want to generalize but often it does go hand in hand. So, with people with cognitive problems, the repetition is essential, to see if the outcome of repetition can be embedded in the brain for the patient to remember what they need to do. Often the biggest problem is that they forget to put their brakes on when they're transferring. If you need a
minimal amount of standing tolerance to prepare a meal, sometimes, if the person doesn't have a lot of standing tolerance at discharge and they want to go home and they don't want to go to rehab, then the occupational therapist will talk to them about sitting in their walker while they're preparing their meals. Do as much sitting as they can. [Participant-localID19]

In these instances, the use of verbal repetition for those with dementia allowed the patient to prevent re-occurrences of fracture or incidents involving transfer.

6.13.2 *Hip work associated with interconnectedness*

International HCPs mentioned differences in their perspective around the use of pain control. The HCPs assumed some patients, based on cultural expectations, had different tolerances to the idea of pain.

*Surgery is a great thing, after surgery the pain drops considerably. We don't really have a problem with pain because in Asian culture no pain no gain... I hear when I go to meetings in North America that narcotics is what they use and in fact doctors really dope their patients out, we don't have that problem. Patients are expected to have a bit of discomfort and they're very much into natural sort of things they're into Ginseng and alternative therapies but not Morphine and stuff. So they're okay with pain* [Participant-int17]

The participant forecasted that surgery would help reduce pain that was associated with the hip injury.

Here is an example that illustrated the assumption that patients with hip fracture were destined to have a bad outcome. As described by one participant,

*I think surgeons expect a bad result, or they have an attitude that it doesn't matter if they get a bad result, that bothers me the most. I've seen that in a lot of places I visit around the world, that the attitude is well, it's an old patient, they've got a hip fracture, they're not going to live that long anyways, and so they're more accepting of a bad result than they should be* [Participant-int15].
Another participant assumed that surgery was not going to better the situation for his mother-in-law despite her less than perfect state. As an HCP, who had a repertoire of hip fracture cases, he projected a bad outcome for his relative and elected not to push for more surgery.

**Going back to my mother-in-law we didn’t say anything. We knew she had gone to see her doctor about it. Her hip was still hurting. There wasn’t any point in pursuing it further because it would have involved further surgery which she didn’t want** [Participant-int3]

6.13.3 *Hip work associated with embodiment*

This surgeon did not only operate his patients but incorporated his skill into designing better hip implants that would lessen pain.

**We basically go back to the implant, the surgical technique, and try to identify what are the factors that are causing the pain, and what we can do about that. So because of that, it’s like anything, when you study a problem, you have a tendency to do a better job at it, so I think that’s one of the reasons that maybe it’s improving some** [Participant-int15]

6.14 Discussion of Sub-Group Differences: Combined themes for local HCPs and international HCPs

I noted that there was an overall shift in power relations granting few individuals a monopoly over medical authority. This finding contrasted some of the past literature examining concepts of power (Conrad & Schneider, 1980; De Swaan, 1989). Other sociologists claimed a change in structure of the medical profession and more power asserted by the patient as reasons for this shift (Light & Levine, 1988; Lupton, 1997; Nettleton, 2004). In a few instances, I noted more authoritative tone in the narratives gathered from international HCP participants as compared
to the local HCPs. This may be linked to the idea that international HCPs had more themes of interconnectedness than local HCPs. Twigg (2011) discussed how HCPs employed strategies to further their professional agenda; placing the patient in a submissive position, anticipated feelings of respect rather than those of contest.

Linked lives was a concept explored in the life course framework (Elder et al., 1996). The links however in this framework did not consider how relations may vary in terms of value and duration. In my work, these two factors seemed to impact the delivery of prognoses to patients/caregivers.

6.15 Implications

The HCP provided care not only through words but also through actions or so called 'prognostic gestures'. Some limitations in this study included more diverse professions interviewed locally compared to those interviewed internationally. New patient perspectives gained from international interviews would greatly enhance the transferability of the study results. I sought the inclusion of HCPs from different geographical spheres in order to gain true in-depth insight into the phenomenon. Future directions need to include a deeper analysis of social behaviours like the embodiment of trust in relation to the patient's perception of prognosis especially as a function of agency.
6.16 Conclusions

In order to flesh out a global understanding of prognosis we need to incorporate a social dimension. A look at interprofessional relations proved that this social dimension was in constant flux with its historical and cultural context. Social dimensions were defined by concepts such as interconnectedness and embodiment of trust. These would impact the delivery of prognoses in healthcare teams and the decision-making for the patient/caregivers. Levels of cultural awareness (including familial/generational, spiritual beliefs, boundary roles) and spirituality would also need to be considered as a function of prognosis.
CHAPTER 7
DISCUSSION AND IMPLICATIONS

7.1 Chapter Overview

In this chapter, I will provide a synthesis of the key findings bringing together some cohesion between the perspectives of patients and providers. This will be followed by a section on providing a rationale for understanding perceptions of prognosis. I will also address the impact of these findings for healthcare professionals. In particular, how might these results further HCP goals in effecting clinical change; 1) by aiding the patient to develop clinical insight and 2) by developing the therapeutic relationship with the patient. My findings for patients/caregivers should be placed within a patient-centred care model. A range of pertinent theories presented in the comprehensive literature review (Chapter 2) will help illuminate the nature of my qualitative data. Further there is a section on thesis contributions to the field of hip fracture and conclusions including its strengths and limitations. I will also identify directions for future research.

7.2 Introduction

I discussed "what does it mean to have a hip fracture" specifically building upon research that conceptualized prognosis, the underlying phenomenon in my work, which acquired meaning shaped by a social, cultural, and historical context. As discussed in Section 2.1, various theories were drawn in order to make sense of my findings. There is a lack of theoretically informed results in the hip fracture literature. Overall, the Heideggerian concept of viewing prognosis as a perspective rather than a foreseeing informed the main concepts developed in this
dissertation. Concepts were developed to grasp the social dimension of prognosis and its application to clinical practice: For HCPs, “embodiment” (Merleau-Ponty, 1962; Gadow, 1980), “interconnectedness” (McDowell, 2009), “hip work” (Twigg, 2011), and “forecast” (Bernegger et al., 2012); for patients/caregivers, “enlargement” (Bernegger et al., 2012), “nonknowledge” (Bernegger et al., 2012), “sense of self-ownership” (Locke, 2008). Despite the differences in focus, both stakeholders oscillated between various networks; HCPs and patients, were embedded in a relational process with both parties confronting what prognosis means with different explanatory understandings, values, and beliefs.

7.3. Synthesis of Findings

From "What will happen next? Perceptions of prognosis" presented in Chapter 5, it was noted that HCPs, in practice, did not only deliver information about the present but prognosis also affected one's future experience (Bernegger et al., 2012). Indeed, this may present challenges for the patient who may want to focus on the immediate present and avoid thinking about the next steps or overall prognosis (Nissim et al., 2013). Twelve participants were interviewed including patients/caregivers and local HCPs. HCPs typically viewed prognosis as being rational and evidence-based. The HCP often felt uncertain when making decisions rooted in judgment and experience (Nettleton, 2008b). The tone of voice was dominating where surgeons feared a malpractice claim (Ambady, 2002). In my study, when there was a mismatch in surgical expectations, then patients and families would contest decisions made by the HCP. There was a predominance of biomedical issues, i.e. overreliance on diagnostic testing, survival curves, when communicating with the patient/caregiver. The use of medical jargon could overshadow the psychosocial aspects important to the patient/caregiver. In order to improve dialogue
between patients/caregivers and providers, there should be less tension between the body-self dialectic.

Patients/caregivers could choose either to view surgery as impending doom or see it as an interruption of a continuum. The injury could also be viewed as meaningless (Heidegger, 1962). Pearlin et al. (2007) demonstrated that mastery was seen as a protective resource used to reduce stress. Some individuals seemed to have the ability to extend their present capabilities in order to control their life.

In my study, those receiving bad prognoses could turn perceptions around if the dialogue was more focused on increasing their agency through self-ownership and enlargement. Prior experience, or learning from others, could help patients gain better forecasting capabilities. Family and caregivers could help patients gain temporal and spatial awareness.

Finally in the conclusion of my study, although forecasting was common concept, the meaning of forecast between the two groups differed. The chances of survival following surgical intervention was emphasized in dialogues between HCPs and patients/caregivers. There is a need to re-focus these dialogues on how the remaining recovery time can be qualitatively enhanced. Changing the way we look at prognosis in clinical settings can offer new opportunities for patients.

I conducted a second study entitled, "Relationships of Power and Trust: implications for delivering prognoses to patients following hip fracture". HCPs' goals are to promote clinical change. This could be achieved either through the development of insight or through the development of a therapeutic relationship with the patient (Glucksman, 1993). Indeed,
prognosis needs to have a transformative effect on the present self, on its agency, and on the quality of life to come (Bernegger et al., 2012). I interviewed 18 participants, who either provided an international perspective or a local one. In this study, I found that for local HCPs there was tension if physicians did not have all the necessary information; language, was a factor in impairing patient comprehension (Parsons et al., 2014). Cultural norms and beliefs were important to patients (Delle Fave, 2006). Aging allowed for the self to re-vitalize so that he or she developed a stronger spirit and relationship with the body as the body declined (Gadow, 1983).

In my study on how prognoses were delivered by local HCPs, the levels of cultural awareness were limited. Local HCPs relied primarily on building trust with patients/families by embodying concepts of expertise and competencies. The historical context was formed by the choice of alterations to protocols or mandates made by healthcare systems. For international HCPs, social identity was attributed to the value a person placed on his or her membership and the emotional attachment to this group (Tajfel, 1981). The value of these international collaborations, coordination, teamwork, and networking was less about shared identity and integration (Reeves et al., 2010). The definition of team, which included the patient could produce undesired consequences (Lencioni, 2002).

In my study, members oscillated between unstable networks and implementation of care. Working together in the same institution or same healthcare system could prevent HCPs from remitting information to others unless it was in their responsibility to do so. This would have implications for situating the patient within a patient-centred care model. In the conclusion of
this study, I believed that relationships of power and trust altered hip fracture management within healthcare and decision-making teams. On the individual level, this study conferred HCPs the right to assign prognosis to patients. Change is the new norm causing shifts in power from medical authority to the patient and their families. The comfort level of the HCP needs to be considered when addressing culture and when delivering culturally-oriented care.

7.4. Impact of Findings for HCPs and Patients/Caregivers

In the following section, I will examine how my findings demonstrate that perceptions of prognosis depend on interconnectedness. These results will be placed in context with some theories drawn from Chapter 2. In Section 1.4, I discussed how theory ultimately could serve three different purposes: 1) to help design the study i.e. research question, 2) to provide causal explanations for the arising issues, and 3) to help the transferability of the results i.e. education and policy making (Reeves et al., 2008b).

I will critically examine a range of theories to illuminate how the concepts are associated with prognosis (e.g. expectations, values, entitlement, and perceived occurrences). Embodiment (Merleau-Ponty, 1962) was employed as a perspective to view how the HCP incorporated trust and emotion in patient care. The body-self dialectic (Gadow, 1980, 1983) was employed as a way to understand how the patient/caregiver viewed hip fracture in his or her life. The theory of body work and power (Twigg, 2011) formed the parameters for revealing how social relations could be affected by professional disciplines.

Other pertinent theories will be used to make sense of the findings to help guide the implementation of educational initiatives and the delivery of prognosis. For instance, using the
idea of transference (Glucksman, 1993) will help us frame how the patient could gain clinical insight. Re-focused dialogue on issues that qualitatively enhance his/her life could also build upon the patient's agency. Notions of power and trust are fundamental in understanding relationships within healthcare teams and decision-making structures. For the patient and caregivers, emphasis on how to incorporate concepts of prognosis in a patient-centred model of care will be important to minimize associated stress and anxiety post hip fracture interventions.

7.4.1 Exploring Ways to Develop Clinical Insight

In order to frame social prognoses, the hip joint/body part was imbued with meaning through life and history (via social, cultural, and personal connections). Further, our attention falls to several theorists who focused on embodied practices, habits, and lived experience (Merleau-Ponty, 1962; Gadow, 1980; Bourdieu, 1977, 1990).

From a traditional perspective, "the acquisition of insight through interpretation and the resolution of transference are mutually linked" (Glucksman, 1993, p. 165; Freud, 1912). Glucksman provided a psychological interpretation of the rapport between HCP and patient. 'Non-transference' was regarded as the real relationship between provider and patient while 'transference', although was also genuinely felt, was seen more as the distorted, unrealistic, and not genuine part of the relationship (Greenson, 1967; Rogawski, 1987). This interpretation received some criticism in that the HCP was required always to be aware of the patient's projections and of his own projections onto the patient (countertransference) and vice versa (Glucksman, 1993). Generally, in clinical practice there was an admixture of transference,
countertransference, and real elements in the relationship formed with the patient that facilitate change (Glucksman, 1993).

In my study, the perspective of embodiment could be applied to understand 'real elements' in the relationship between provider and patient. HCPs incorporated competencies and relations in their discussions with patients and families. It was through the many instances cited by the participants, in my study, where HCPs performed acts that were beyond the call of duty. These excerpts showed how trust and emotion was built into discourse and embodied. I felt that this element of caring towards the patient and family members was associated with the strength of that rapport. This was not learned behaviour and it was not an element that existed independently from its historical or social context. One participant expressed concerned over the limited time he had with the patient, which was not enough to produce any meaningful discussions that effected change.

If prognosis was a cognitive as well as a perceptual process this could, in turn, be used to help patients gain clinical insight. In my study, patients gained a better understanding of their spatial and temporal worlds affected by their hip injury through previous injury or through other experiences. As mentioned in chapter 1, vignettes could be used to depict scenarios that aid the patient to learn from others. Vignettes are visual aids that can toggle memory cues about symptoms and help the patient and HCP improve communication about the present situation. These vignettes could, in practice, contain information about personal experiences, which touches upon social connections and cultural/spiritual beliefs. A visual aid could also bridge
experiences felt by caregivers managing a loved one. In this manner, anticipating what the HCP will project can minimize the stress associated with the post-intervention outcomes.

Another example of how a vignette could be applied, would be to address the disconnect between outsiders or caregivers and the patient. Current trends and research in positive psychology shows superiority for the 'insider's perspective' as opposed to the outsider (or caregiver). The insider's perspective places importance on what the individual with the injury can accomplish rather than what he or she cannot do, and to learn from ones who are coping well (Quale & Schanke, 2010; Luther et al., 2000; Carver et al., 2009). I found that caregivers assumed that the patient could be in denial of the consequences associated with a hip fracture. According to Quale & Schanke (2010), these acts by the patient were in fact health protective and associated with good adaptation to adversity. An example of this, in my study, was the participants who chose not to engage in rehabilitation regimens, whilst remaining functional. Elements constituting a protective barrier to stress were built into the good life after disability framework by Dunn and Brody (2008). Caregivers could be better informed by vignettes, which included content highlighting the social complexities involved in hip fracture management.

The body-self dialectic played a role in assessing patients as a whole. From Chapter 2, we see that Gadow's notion of the body being inseparable from the self helped frame my results from the patient's perspective. The hip joint was considered a part of the body. In addition, temporal and spatial awareness was gained from learning through the experiences of others or through changes implemented by caregivers. The latter was important in placing the body and the self, not just the hip, in situations to prevent further injury or fracture. These types of negotiations,
with caregivers, or patient assessment could be placed in the patient-centred care model (further discussed in section 7.4.4). Gadow's theory (1980, 1983) adds complexity to the assumptions of the magic bullet approach or body as machine, discussed in chapter 2. For example, in my study, diagnostic testing was used to identify fracture types; an intervention, cured the problem.

7.4.2 Developing a Therapeutic Relationship with the Patient

Power, not always visible to the patient and caregivers, could be noted at various points in the patient's care through words and action. For instance in Chapter 2, I discussed how patient positioning (usually lying down with the exposed injury) while receiving the HCP's prognosis placed the injured person in a submissive compromised state compared to the HCP who is in a standing position (Twigg, 2011). In my study, I noted a decline in power i.e. strategies used by HCPs with patients to prevent malpractice lawsuits or with peers to negotiate longer hospital stays for the patient. I have not explored the reasons and factors behind these power shifts, which is beyond the scope of the present study, although two hypotheses may be put forward. First, based on my study and other recent work (Nettleton, 2004), “the practice of medicine, as well as its authority is socially-contingent, and is framed by broader socio-technological change” (Jutel, 2009, p.285). Second, two of the sub-themes developed for HCPs, embodiment and interconnectedness, are of particular interest to the patient and families and shape perceptions of prognosis. I noted for instance, that local HCPs embodied trust by building a rapport with the patient based on his or her competencies; whereas, international HCPs built trust with the patient based on interconnectedness that was shaped by his or her social networks. Both
themes highlighted the HCPs' position of power. Competencies were expertise-based and discourse could contain more medical jargon linking treatment to technological advancements depending on how close the HCP worked with the hip joint. For instance, in my study, a social worker who allocated resources for the patient may refer less to the hip joint than the rehabilitation therapist who changes the patient's bodily positions. The importance of interconnectedness may be, in part, attributed to how the HCP was politically situated and in part, how the HCPs was academically oriented i.e. whether his or her research and clinical practice was focused more on population and patients’ health (Satterfield et al., 2004).

7.4.3 Interprofessional-Patient Education Initiatives

Medical authority was bounded by definitions and meanings of prognosis. Evidence from my work showed that power exerted by institutions, organizations, and embedded hierarchies in the work force were responsible for defining the historical and social context that influenced perceptions of prognosis (Baudot, 1970; Twigg, 2011; Friedson, 1972; Balint, 1964; Conrad & Schneider, 1980). According to Friedson (1972), medical authority resided with HCPs, who defined health and treated illness. This indeed raises the HCP’s public esteem, which consequently increases power. My findings were consistent on the individual level, conferring the rights of the HCP to assign prognoses, “with regard to the phenomena that are already known, analyzed and generally quantified” (Baudot, 1970). However, these theories did not account for defining prognosis in relation to different disciplines.

An alternative view was provided in my study; whereby an intentional or unintentional mismatch between one's interconnectedness or embodiment, could influence forecasting.
International cooperation and mobility in academic education and research training led HCPs to have cross-cultural experiences. If it was a researcher joining a scientific community, he or she would not have great difficulties in finding the way into the research agenda. Research, which was based on quantitative measurement, variables, experimentation, and operationalization could be performed globally (Schratz, 1993). Many international HCPs attending conferences and reading the scientific literature communicated through research, discourse that was accessible across national boundaries; however, they remained 'professional strangers' a term coined by Agpar (1980). Indeed, the cultural gap was not static and did leave space for negotiation involving self-reflexivity (Agpar, 1980). There was asymmetry between those who were familiar with the disciplines and those who were in fact not aware of hidden agendas. Becher likened university settings to tribal systems (Becher, 1989). An HCP could be situated where it was important to be sensitive to cultural biases, which were not always immediately visible (Harris, 2011). A case study conducted by Rodrigues et al. (2013), using the social identity theory (Tajfel, 1981), informed me to the extent in which profession-specific identity acted as a barrier to shared identity. My results were in accordance with Tajfel (1981): social identity was in part attributed to the value he or she placed on his or her membership and the emotional attachment to a group. I also noted that interprofessional collaborations outside of one's professional work; however, can significantly alter one's structure, attitude, thus impacting management at the philosophical level.

The HCP's idea of his/her placement within an organization could alter the way prognosis was delivered. Reeves et al. (2010) highlighted differences between teamwork, collaboration, coordination, and networking where international collaboration weighed less on shared
identity and integration. This finding similarly conferred that working together in the same healthcare system or the same institution could prevent HCPs from remitting information to others unless it was in their responsibility to do so. Complications arose when situating the patient within a shared decision-making environment. This entailed a shift in acquired meanings around teamwork (Reeves et al. 2010). According to Lencioni (2002) the definition of team, which included the patient, did not meet regularly and thus produced undesired consequences: lack of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results. This was an opportunity for patient education to refine the dialogue.

Clinical training and specialization caused undesired effects and a further fragmenting of networks involving patient care. In my study, co-morbidities did not always delay hip surgery but it remained a concern. Halpin (2011) noted the intricacies of Huntington's disease; whereby, it first gets treated as a psychiatric disorder then a neurological disorder. I used the notions of body work to draw a cohesive meaning between different environments, whether geographical location, type of setting i.e. hospital or private clinic, or discipline. Often geographical locations determined the priority that 'hips' were given and by what type of surgeon-- either general surgeon or sub-specialist (the hip orthopaedic surgeon). For instance, in Holland it is the general orthopaedic surgeon that treated hip fractures not the hip specialist. Similarly, whether 'hips' were treated in a hospital that mostly admitted patients with sport injuries might infer more 'transfers' or delays in treatment for the patient. Further, notions of power were retained for those individuals who were perceived more knowledgeable or those who had more connections and collaborations. These instances of power were important for the individual to grasp as structures, rules, and trends seemed to fluctuate constantly. Change
in power was relevant for the patient who dealt with transferring from structure to structure or with newly implemented protocols. The patient who was more in control of his/her situation exerted power when accessing resources and was scheduled to have a follow-up with various specialists i.e. the nutritionist or a gerontologist. Thus, having more connections enlarged the present situation. Power increased as family members advocated for the patient or made decisions for them. The interplay of power within these bodies was dynamic, which does not allow a patient so much time to cope or adapt. The perception of prognosis, when bounded by notions of power, emphasized adopting change as the new equilibrium.

7.4.4 Patient-Centred Care

Patient-centred was discussed at length in the paper by Sidani and Fox (2014), also presented in Chapter 2. The three components cited by the authors was also reflected in my findings: holistic care, collaborative care, and responsive care. Holistic care was defined as assessing the patient entirely in order to better address his or her needs (Smith et al., 2010; Stewart et al., 2000). Clinical observations made by Sidani and Fox (2014) suggested that patients expected to receive care from different HCPs, who administered treatment, and therapy that was tailored to the patient’s specific needs. Collaborative care involved shared decision-making between HCP and patient (Adams & Drake, 2006; Smith et al., 2011; Wilson, 2011). Responsive care was defined as acknowledging patients' individual needs, expectations, and knowledge in relation to their illness (Lauver et al., 2002; Reid Ponte & Peterson, 2008). However, the importance of developing a therapeutic relationship was highlighted in my work; although it was considered a
"non-specific element of patient-centred care", according to Sidani and Fox (2014). It was noted that patients appreciated that their emotional concerns and life issues were a part of the conversation with the HCP, including referrals to personnel or support systems that addressed specific needs (Sumson & Lencucha, 2007; Cheroghi-Sobi et al., 2008).

In my study, the patient did not view the hip joint as a hindrance in fulfilling life’s joyous moments. The appearance of the hip, range of motion, and pain did not dominate discussions following intervention by the patient/caregiver. The latter symptoms or consequences may not have been pleasant or particularly 'eventful'. However, the patient chose to make the best of it by integrating his or her present capacity in order to complete the task on hand. Sometimes, the effect of negating the obvious made it seem that he or she could exceed even his present capabilities. These considerations encompassed all other symptomatic co-morbidities. Thus, assessing the patient as a whole fits the definition of holistic care (Sidani and Fox, 2014).

However, baseline characteristics that were needed to assess these patients were not formalized in most hospital settings. The attempt at establishing these individual parameters seemed to contradict the idea of opening up the dialogue between the HCP and patient on how to enhance life. Registries of these sorts, as mentioned in my study, again, lend to the consumerist interface.

The emphasis on diagnostic or medical testing and an overreliance of radiological findings took away some valuable time in forming more meaningful relationship with the patient/caregiver. Whereas actions, such as moving patients to preferred body positioning or locations i.e. with
more sunlight, were seen as prognostic gestures. These gestures could be a more plausible solution for the patient/caregiver.

7.5 The Rationale for These Perspectives

Prognosis, following a hip fracture, was best conceptualized within a social framework--whether the individual viewed himself as a failure; or whether 'health' was combined with 'well-being' (constituting one's agency and having a personal drive to exist); or whether prognosis was better defined by some other kind of concept. Understanding prognosis, following a hip fracture, involved both an 'incipient perception' and a mental experience (Lash, 2010; Antonietti, 2008). Patients and HCPs seemed to use 'incipient perception', refining the concept of prognosis through interactions with the people surrounding them. In my study, a set of sensations, feelings, thoughts, memories, and desires formed much of the mental experience surrounding the concept of prognosis. The link between the physical process and the mental experience was consistent with Chalmer's claim in needing new psycho-physical principles to explain this happening (Chalmer, 1995). The concept of embodiment was also an example of where both body and mind were integrated to create a meaningful experience in relation to the prognosis (Gadow, 1980; Baron, 1985). The HCPs' exhibition of embodiment of trust was consistent with Merleau-Ponty's argument that thinking took place in and through the spoken word (Merleau-Ponty, 1962; Murray & Holmes, 2013). Future studies by theorists and epidemiologists (especially those measuring treatment outcomes) should capture hip joints' dual nature in that the self is inseparable from, but not identical to, the body.
Patients were no longer treated as 'consumers' or 'cases' because they were affected by shifts in power; change was the new norm. Consistent with the rapidly changing face of contemporary healthcare, the complexities seen in patients with hip fracture who were laden with multiple co-morbidities necessitated coordination between different networks. There were interprofessional networks, housing, family, and support networks; structures that the patient was frequently moving between. It was unclear whether these patients were equipped with the necessary tools to manage these dynamic and ever-changing structures. Frequently, the implementation of new policies made elements of power waver. There were many forces that acted to lessen the power underlying medical authority --- such as interprofessional teams discussing treatment decisions, or government-erected registries and databases-- and the patient and family caregivers depended on their environment to become informed.

My results did confirm that government or institutional bodies as well as HCPs stigmatized, classified, and sorted patients and their bodies. In this study, the patient with a hip fracture was empowered by gaining access to resources. However, there was a need to address gaps in the healthcare system that still associated financial need with frailty or age or some other labeled co-morbidity that entitled certain patients to receive more aid than others. These debates perhaps politicized what it meant to have a hip fracture and gave rise to needing to define and clarify institutional and organizational boundaries. Consequently these social interconnections affected HCPs and the role they played in their embodied actions i.e. caring for these patients.
My findings demonstrated that the meaning of prognosis was defined and was dependent upon a social, cultural, and historical context. For persons undergoing hip fracture treatment, a definition of prognosis linked to the concept of 'perspective' rather than 'foreseeing' or 'foreknowing' would enable patients and their caregivers to make the best of it, given their situation. This proposal of prognosis consisted of conversations about 'what happens next', with less tension between the self and the hip joint. The dependency upon context signified that the state of prognosis was dynamic and fluctuating.

7.7 Thesis Contribution

Considered as a whole, this thesis suggests a new conceptualization of prognosis specific to the individual who has been diagnosed and considers his or her hip fracture treatment options. Prognosis was a mixed cognitive-perceptual concept, defined as a relative lack of tension between the self and the problematic body part. According to this definition, prognosis was a function of 1) forecasting (including the extent to which treatment successfully addressed the patient's most important reason for undergoing treatment, i.e. symptom relief), 2) his or her agency (i.e. self-ownership, enlargement), and 3) non-knowledge. The delivery of prognoses for HCPs can effect clinical change by building trust within the therapeutic relationship and aiding the patient to develop clinical insight, which was a function of: 1) interconnectedness with spirituality, community-held beliefs, and generational values, 2) embodiment of competencies and expertise, 3) relational processes within his or her work environment (i.e. teamwork, collaborations, academic networks), and 4) forecasting (inclusive of diagnostic parameters and
peri-operative complications). Testing of this concept in different patient populations, as well as further psychometric testing of the prognostic profile and the measure of prognosis, would be necessary before any claims to generalizability would be appropriate.

7.8 Strengths and Limitations

Strengths and limitations have been noted within each of the studies reported in Chapters 5 and 6. There was limited diversity in professional disciplines when sampling international HCPs compared to the local HCP sample. I did not include patient and HCP observations or direct exchanges. Analyses of the interviews were made by the researcher alone (AHK) enforcing the researcher’s perspective and influence upon the outcome of the analysis. The researcher ensured that the relevant studies were conducted with rigour --elements of which are included in the methodological descriptions provided in Chapter 4 entitled "The Use of Phenomenology to Understand Prognosis".

7.9 Future Research and Implications

Future research needs to examine why the interest in the aims and experiences of prognosis remains disparate in different countries. We also need to achieve a better understanding of the conditions under which prognosis may be most effectively used and policies determined. Future work might also usefully grapple with developing ways to account for the contextual issues of time and place when providing prognosis. Developing a language and a way of talking about prognosis as a perspective within traditional healthcare environments should also be addressed. Finally, finding ways to facilitate the experience of body-self unity is important,
particularly if this should be shown to be modifiable. Conventional medicine might benefit from seriously considering some of the discourse from popular literature and alternative health practices, which have started to create meaningful dialogues. Research into how best to do this, who best to do it, and how to evaluate the outcomes remains to be explored.

7.10 Conclusions

Hip fracture is experienced as an acute event that is often compounded by the individual's co-morbidities, thus affecting prognosis. As such, patients and caregivers want to minimize the levels of stress that is associated with post-intervention trauma and be a part of patient-centred care. Agency was relevant and was defined by the patient's wanting to take control of his or her life and to direct his/her future. This often led to an empowerment and allowed individuals to exceed even their present capabilities. Protective barriers were used by some of the patients i.e. allowing others to make decisions or showing reluctance to participate in activities that otherwise have shown to benefit the patient. There was evidence that demonstrated a shift in the power of medical authority. Enlargement of opportunities can help the patient to make the best of the situation (i.e. caregivers, resources, physiotherapy regimens). Non-knowledge, enlargement, sense of self-ownership impacted the patient's capacity to forecast. In this study, patients were able to make associations to their fracture and improve their forecasting insight by engaging in a co-narration. A co-narration meant focusing on the presence of others who were exposed to similar experiences. In addition, this study had implications for HCPs: 1) developing strategies to help the patient develop clinical insight on his/her symptoms or situation and 2) developing a therapeutic relationship with the patient and families.
Presently, tactics for delivering prognosis, are ineffective as there is considerable strain contributing to increasing levels of uncertainty and anxiety in patients/caregivers. Social forces (i.e. policy and government mandates) were noted in discussions around hip work and forecasting. Multiple relationships existed with peers, colleagues, members of societies and professional academic institutions. These relations aligned with professional agendas and also affected the forecast. HCPs' understanding of patient spiritual beliefs and other cultural and generational disparities need to be clarified. This present dissertation succeeds in unfolding those complexities involving relationships of power and trust that played a fundamental role in shaping the delivery of prognoses to patients and families.

7.11 Summary

I used various modes of knowledge (projection, scenarios, consultation of experts, etc) to understand the rationale behind perceptions of prognosis formed by social context. In this chapter, I explored the relations between work and the process of decision-making, in connection with the type and scope of prognosis, the kind of institutions involved, and the ways in which the results of prognosis were utilized. Prognosis was by requirement of its very nature an interprofessional activity. The evidence generated by this research provides new insights into gaps in the hip fracture literature concerning: 1) the kind of concept prognosis was; 2) the nature of the patient in contemporary healthcare; 3) what prognosis meant for patients and healthcare providers; 4) how prognosis related to other concepts; 5) how prognosis should be defined; and 6) which theories were most appropriate for studying prognosis in patients following a hip fracture.
REFERENCES


Audran M, Jakob FJ, Palacios S et al. (2013) A large prospective European cohort study of patients treated with strontium ranelate and followed up over 3 years. Rheumatol Int Mar 2.


Baron RJ (1985). An introduction to medical phenomenology: I can’t hear you while I’m listening. Annals of internal medicine; 103, 606-611.


Goldberg (2009) - vicarious experiences


Parsons JA, Baker NA, Smith-Corviet et al. (2014). To ‘Get by' or 'get help'? A qualitative study of physicians' challenges and dilemmas when patients have limited English proficiency. BMJ open: 4: e004613.


Sale J, Gignac A, Hawker G et al. (2011) Decision to take osteoporosis medication in patients who have had a fracture and are ‘high’ risk for future fracture. BMC Musculoskelet Disord, 12: 92.


Sale JEM, Beaton DE, Sujic R, Bogoch ER (2010b) 'If it was osteoporosis, i would have really hurt myself'. Ambiguity about osteoporosis and osteoporosis care despite a screening programme to educate fragility fracture patients. J Eval Clin Pract 16 (3): 590-596.


St. Michael's Hospital (Toronto). (n.d.). en.wikipedia.org/wiki/St._Michael's_Hospital_(Toronto) last accessed on February 18, 2014


Thorne (2000). Data analysis in qualitative research. Evidence-Based Nursing 3, 68-70,


Wilson J (2011). No decision-making about me without me! British J of Nursing, 20, 337.


### APPENDIX A: Search Strategy

<table>
<thead>
<tr>
<th>Search Term</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Qualitative” AND “Fracture”</td>
<td>53</td>
</tr>
<tr>
<td>“Narrative” AND “Fracture”</td>
<td>124</td>
</tr>
<tr>
<td>“Phenomenology” AND “Fracture”</td>
<td>157</td>
</tr>
<tr>
<td>“Grounded Theory” AND “Fracture”</td>
<td>17</td>
</tr>
<tr>
<td>“Ethnography” AND “Fracture”</td>
<td>11</td>
</tr>
<tr>
<td>“Case study” AND “Fracture” AND “Qualitative”</td>
<td>53</td>
</tr>
<tr>
<td>“Qualitative” AND “Osteoporosis”</td>
<td>41</td>
</tr>
<tr>
<td>“Narrative” AND “Osteoporosis”</td>
<td>46</td>
</tr>
<tr>
<td>“Phenomenology” AND “Osteoporosis”</td>
<td>9</td>
</tr>
<tr>
<td>“Grounded Theory” AND “Osteoporosis”</td>
<td>9</td>
</tr>
<tr>
<td>“Ethnography” AND “Osteoporosis”</td>
<td>1</td>
</tr>
<tr>
<td>“Case study” AND “Osteoporosis” AND “Qualitative”</td>
<td>9</td>
</tr>
</tbody>
</table>

530 Hits
Scopus database
Inclusion: 48 studies
November 23, 2009

Dr. Emil Schemitsch,
Department of Surgery,
Division of Orthopaedic Surgery,
St Michael’s Hospital

Dear Dr. Schemitsch,

Re: REB# 09-298 – What are patients’, proxy responders’ and experts’ opinions on Health-Related Quality of Life in hip fracture patients following surgical and rehabilitative treatments? A Qualitative Study

REB APPROVAL: Original Approval Date: November 23, 2009
Annual/Interval Review Date: November 23, 2010

Thank you for your application submitted on October 30, 2009. The above noted study has been reviewed through an expedited/delegated process (not by Full Board review). The views of the St. Michael’s Hospital (SMH) Research Ethics Board (REB) have been documented and resolved.

The REB approves the study as it is found to comply with relevant research ethics guidelines, as well as the Ontario Personal Health Information Protection Act (PHIPA), 2004. The REB hereby issues approval for the above named study for a period of 12 months from the date of this letter. Continuation beyond that date will require further review of REB approval. In addition, the following documents have been reviewed and are hereby approved:

1. Protocol, as received on 30 October 2009
2. Letter of Information and Consent to Participate in a Research Study – Caregivers, version date: 20 November 2009
3. Letter of Information and Consent to Participate in a Research Study – Experts, version date: 20 November 2009
4. Letter of Information and Consent to Participate in a Research Study – Patients, version date: 20 November 2009
5. Recruitment Letter - Experts (letter of introduction), as received on 23 November 2009

Furthermore, the following documents have been received and are acknowledged:

1. Data Collection Form – Caregivers, version date: 20 November 2009 (as received on 23 November 2009)
2. Data Collection Form – Experts, version date: 20 November 2009 (as received on 23 November 2009)
3. Data Collection Form – Patients, version date: 20 November 2009 (as received on 22 November 2009)
4. Interview Guide for Caregiver Focus Group, version date: 20 November 2009
5. Interview Guide for Expert Focus Group, version date: 20 November 2009
6. Interview Guide for Patient Focus Group, version date: 20 November 2009
During the course of this investigation, any significant deviations from the approved protocol and/or unanticipated developments or significant adverse events should immediately be brought to the attention of the REB.

This letter serves as approval by the SMH REB for conduct of this study; however, additional approvals are required as outlined on the Office of Research Administration Authorization Check List form. Enclosed is a copy of this check list and REB authorization is in the appropriate space. Also, the Clinical Trial Agreements have to be submitted to the Office of Research Administration for review and approval. The remainder of the approvals must be coordinated through the Office of Research Administration prior to initiation of this research. All drug dispensing must be coordinated through the Research Pharmacy at 416-864-5413.

The St. Michael's Hospital (SMH) Research Ethics Board (REB) operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans, the Ontario Personal Health Information Protection Act, 2004, and ICH Good Clinical Practice Consolidated Guideline E6, Health Canada Part C Division 5 of the Food and Drug Regulations, Part 4 of the Natural Health Product Regulations, and the Medical Devices regulations. Furthermore, all investigational drug trials at SMH are conducted by Qualified Investigators (as defined in the latter document).

With best wishes

Dr. Julie Spence
Chair, Research Ethics Board

Dr. Brenda McDowell
Vice Chair, Research Ethics Board
Appendix C: University of Toronto Ethics Approval
APPENDIX D: **Interview Guide: Healthcare Providers**

**Qualitative interview and documentation**

**Preamble**

Thank you for agreeing to participate in this interview today. I’m the interviewee for this study.

As you are aware, the purpose of this study is to gain a rich understanding of patients’, proxy responders’ (primary caregivers’), and health care providers’ (clinicians’) opinions on patient care following hip fracture.

Your feedback is very important to us. We believe that interviews are an excellent forum to create energy and allow open dialogue and sharing of information.

**Ground Rules of the interview**

- No specific names should be used, including your own name and the names of patients, co-workers, or organization administrative personnel.
- Confidentiality: You should understand that your comments will be kept confidential by the study team.
- Consent Form: You have signed a consent form agreeing to participate, including agreeing to be audio-taped in this interview.

In addition, we would like to stress that you are being asked to share your thoughts in the interview. There are no right or wrong answers. We want you to try and be as open as you can be. We will conduct this interview by listening respectfully to your comments.

Participation in this interview as part of this study is a purely voluntary activity. If at any point you feel uncomfortable with the process and wish to discontinue the interview, you are free to do so. We take the issue of confidentiality very seriously. No personal information about you will be shared with anyone else outside of this study, unless required by law.

Again, we ask that you do not give your name or the names of anyone else or any institutions during this audio-taping. Your real name or the names of anyone else or any institutions will not appear anywhere on the written transcripts of, or reports concerning, the interview. We are audio-taping the interview so that we do not lose any details of the discussion. Notes will also be taken during and after the interview, but no identifying personal information about you will be recorded on these notes. Your voice when audio-taped is considered to be identifying personal information. However only authorized study personnel will hear the audio-tape afterwards. Any identifying information that may be recorded from the interview will be removed or coded in the transcription and any reports or publications coming from this evaluation.

Please be assured that the information provided by you will be kept strictly confidential. We hope you will feel comfortable to speak freely. The discussion will likely last approximately 1-2 hours.
APPENDIX D: Interview Guide: Healthcare Providers

Do you have any questions or concerns about the process? If not, let’s begin….

Start Audio-Recording.
Recording Interview Code No. (audio-record Interview Code No.)

TOPICS TO BE COVERED

The following topic headings serve as guides for the qualitative interview. As is typical of phenomenology studies, the exact content of the interview is not set. The questions used in the interview vary over time in response to the developing theory. In general the interview will cover the following areas:

1. To begin, what happens in your typical day?
   - Can you describe an experience that you have had recently in which a patient with a hip fracture was placed in your care?
   - Describe a situation in which a person with hip fracture does not do well following treatment
   - What types of things are important to you when you assess these patients?

2. If we focus on those who have chronic illnesses first, what are the main issues you encounter in terms of evaluating them?
   - What are normal changes of functional decline associated with aging?
   - How do you judge when a patient has had a meaningful change?
   - What kind of support do you get from clinical colleagues?
   - Are there system-level changes needed to allow your patient to improve?
   - Are there practical/logistical issues around the clinic/rehab space?

3. What kinds of instances do you see patients with poor health better manage with a hip fracture?
   - What are the biggest challenges that patients encounter?
   - How much time do your patients need before you see change in their ability to do things?
   - How easy or difficult is it for these patients to take care of themselves?
   - What advice do you give them in terms of changing their living environment?
APPENDIX D: Interview Guide: Healthcare Providers

- Were you ever surprised by some of the personal lifestyle changes they made following treatment of a hip fracture?

4. In the environment where you work, what kind of relationship do you build with your patients?

- What kinds of support can health care professionals provide? Tell me a situation, in which different support networks help.
- What types of care do older persons need following treatment of a hip fracture?
- What kinds of stress are encountered from day-to-day? What are the biggest challenges in providing emotional support?
- What kinds of support do primary caregivers provide?
- What are some concerns caregivers express?
- Describe a situation in which you helped to clarify concerns expressed by a family member.

5. What kinds of expectations do people having following treatment of a hip fracture?

- What makes them satisfied?
- What makes them unhappy about what they are not able to achieve?
- What characteristics do you see in patients that help them achieve a better outcome?
- What types of social activities are important for them to continue following treatment of a hip fracture?
- In what ways does one not having a social network affect their engagement in their daily activities?

6. So, in your view, what would it take to make your work more effective?

- What would you like to see happening in the future?
- What kinds of support/input/resources would you need?

Thank you for your important contributions and for sharing your views with me today.

Stop Audio-Recording.
APPENDIX D: Interview Guide: Healthcare Providers

FACE SHEETS

Following each interview a face sheet will be completed where the following are recorded:

1) What were the main issues or themes that stand out from this interview?

2) Summarize the information that I got, or failed to get for each target question:
   - Treatment choices (successes, influencing forces)
   - Defining change (important change, description of construct, meaning of being better)

3) Did anything else strike me as interesting or important with this participant or interview?

4) What new (or remaining) questions do I have to think about for the next interview?
   (Including who should be interviewed next).
APPENDIX E: Interview Guide: Caregivers

I'm wondering if we could start today with you telling me a little bit about yourself and your experience with (subject's name or relationship to subject)'s hip fracture

Identity (can be considered the label of the illness and the symptoms the patients view as being part of illness)

Appearance
1. What was his/her hip like before surgery?
2. Did anything bother him/her about the hip before the surgery?
3. Describe how the hip looks like now.
4. Do you think other people notice or respond to his/her hip now?
5. How did he/she respond to these experiences?
6. How did you respond to the hip fracture?

Cause (what may have caused their problem, such as genetic factors, poor diet, trauma, etc.)
1. Can you describe to me the events leading up to the fracture of the hip?
2. Can you explain to me how he/she fractured the hip?
3. Following the hip fracture, what are some other chronic or acute illnesses that have affected his/her present condition?

Time-line (patients' view about how long their problem will last and whether it is seen as acute, chronic, or episodic)
1. When do you think his/her hip will be back to how it was before the fracture?
2. How much time has it taken before you have seen changes in his/her hip?

Consequences (the effects the patients are expecting from their illness and their views on the outcome)

Function: Physical
1. What sorts of things do they do everyday at home and at work that are affected by the hip?
APPENDIX E: Interview Guide: Caregivers

2. What are some things that she/he has been able to achieve without relying on the hip or you?

3. What are some things you do to assist (subject's name or relationship) around the house or outside the house?

Function: Emotional

1. Has engagement in any particular activities affected how she/he looks at or deals with the injury?

2. What is your perception of his/her need for emotional support following injury? Can you describe to me such a situation?

Cure/control (the patients' expectaions as they recover from or control the illness)

1. What are your expectations as they recover following surgery?

2. What kinds of things have you done to manage his/her hip problems?

3. Can you describe to me what could have been done to make their outcome better?

4. What has been a meaningful change to you?

5. If you were to give advice to a caregiver or a friend who had just fractured their hip, what would it be?

Wrap up

1. Is there anything we haven't covered today that you feel is important to your understanding and experience of having to care for someone with a hip fracture?

2. What has this interview been like for you?

3. Anything further that you would like to add or to comment on?
APPENDIX F: Interview Guide: Patients

Study Title: What are patients', proxy responders’ and experts’ opinions on Health-Related Quality of Life in hip fracture patients following surgical and rehabilitative treatments? A Qualitative Study

Please be assured that the information provided by you will be kept strictly confidential. We hope you will feel comfortable to speak freely. The group discussion will likely last approximately 1-2 hours.

Do you have any questions or concerns about the process? If not, let’s begin....

Start Audio-Recording.

Recording Focus Group Code No. (audio-record Focus Group Code No.)

TOPICS TO BE COVERED

The following topic headings serve as guides for the qualitative focus groups. As is typical of grounded theory methodology, the exact content of the interviews is not set. The questions used in a focus group vary over time in response to the developing theory. In general the focus group will cover the following areas:

A) Tell me about the issues and concerns with your hip
   - What is your well-being physically, socially and emotionally?
   - To what extent do other co-morbidities (medical conditions) affect your recovery of physical function?

B) What caused pain or discomfort in your hip?
   Tell me what worked/didn’t work to alleviate the discomfort and pain in your hip?

C) What would be an indication that you felt better or worse from how you were on the day after surgery?

Thank you for your important contributions and for sharing your views with the group today.

Stop Audio-Recording.
APPENDIX G: Coding Framework

THEMES GENERATED FROM 5 HCP TRANSCRIPTS:

1] Barriers to getting better
2] Strategies to getting better
3] Pre-existing co-morbidities alter patient management
4] Family Support
5] Communication
6] Financial Investment
7] Space
8] Working in isolation
9] Future
1) BARRIERS TO GETTING BETTER

- **Lack of financial resources** (financial burden to the hospital, patient access to medications, patient access to assisted living financial support),

HCPs view that keeping patients in hospitals is a financial burden: “A convalescent unit would be a unit designed for limited tenure. They would be there for one, two, three weeks but very much the discharge date would be in-mind. And it provides concentrated continuing nursing care if they need it but mainly physical therapy to get them moving... Nowadays it costs a lot of money to keep a patient in a unit of any sort so you try to avoid it. But if you see a patient on a rising curve of ability of recovery, but they’re not, sort of in five or six days they’re not fit to go back home then they can go for two or three weeks to a convalescent unit and then they can go home. And that’s a very good outcome. Now that used to be kind of routine. It’s not routine now. And actually a patient within a week can get home, is sent home because that’s important.” [IDI-03]

HCPs view that patients go to skilled nursing rehab to qualify for assisted living financial support: “... It would be Medicare would pay to have aides and people come... One hundred days they’re allowed. Now once you’re getting skilled nursing care then you’re able to justify it more but for a lot of people who run out pretty quickly and they have to pay out of pocket. For assisted living they still have to be able to get up, ambulate to their dining area independently. So that’s one of the things they have to do. So people may still have to go to skilled nursing rehab to get to the point where they can ambulate 100 feet or 150 feet to go back to assisted living.” [R01-MC03]

- **Lack of information** (surgeon follow-up information from patient or carer and no report from rehab, or patient education re. OP therapy),

No information at follow-up: “There’s no one with them except for the transport person from [deleted location] and they know nothing about the patient. The surgeon is standing there going how is their pain and how is their function and that person is going I don’t know, I don’t know. It’s not very helpful and there’s no report from the Rehab Centre stating how they’ve progressed.” [FG-03]
APPENDIX G: Coding Framework

1) REMOVING STANDARDS DISCRIMINATION

- Psychological factors: include measures, illness, physical health, social support, and beliefs about control.

2) REMOVING STANDARDS DISCRIMINATION

- Psychological factors: include measures, illness, physical health, social support, and beliefs about control.
2) STRATEGIES TO BECOMING BETTER

- **Supporting social purposes (development of new skills, social support, perceived risk of failure, feeling more secure, taking precautions, national campaigns).**
  
  "Even though they might not realize it, they're a psychotherapy mobility perspective. They're looking for new skills to add to their toolkit. In a sense, they've really focused on their activities and their analysis for the outside context so that's a very real consequence that we see." [S-G-9]

- **Recovery and transition.**
  
  "Being a good caretaker helps. "People that are usually very active people and then there's a goal to get out, they can work here with physical therapy and occupational therapy."

- **Supporting group memberships (meeting them in new spaces and activities programs).**
  
  "As we've come to realize, the family has to help them in some of their change in vision exercises and do some of the strengthening exercises." [S-G-8]

- **Finding someone advocate for the patient.**
  
  "As the end of the day, if in a busy clinician, there's something that gives a patient perspective that patients and their families could take on. In terms of taking care of their health, to make sure that there's someone who could give a history and advocate for the patient. That's something that's entirely within the patient's and their families' power." [S-G-8]

- **Increased health.**
  
  "Better than seeing surgery, can provide behavioral changes in patients, good healthier outcomes generally."  

- **Occupational therapy as providing behavioral changes in patients.**
  
  "If what patients need to be learned or acquired doesn't need surgery. I mean, occupational therapy is very, very good. ... to get them to use their muscles the right way, not to continue serving us with a tiny. People get in the habit of using and continue to treat. It's very important that you don't... And not you get the patient to expect to be learned, that's a much better [clarification]." [S-G-8]

- **Occupational therapy.**
  
  "Things in the area of physical health, looking at the future programs, a lot of these things are covered. Like home visits are covered, home visiting, occupational therapy and physical therapy. And it's not just physical therapy. So it's actually good news that you're doing a good job in this area, and you're doing it by the book. That's excellent." [S-G-8]
APPENDIX G: Coding Framework

36. PRE-EXISTING COMORBIDITIES ALTER PARENT MANAGEMENT: "When in treatment, concurrent medications, other factors that lead to premedication to fall, protocols for those at high risk for delays can fail."

Generalizability means delay in treatment. "Now if they're already in a physical decline and they're a bit of a comorbid them it's much harder to then get all those quickly and treat them because they may have heart disease that needs treating or hope that need treating so something." [44:44]

Other comorbidities may predispose patient to fall. "There are usually multiple comorbidities. These are the functional comorbidities. There could be mental issues but usually more you're thinking cognitive issues. Those are concurrent medication or concurrent medico-treatment. Concurrent medication in terms of other issues they're predisposed to fall. They may have osteoporosis. They might have degenerative disc disease or a prior bone or any one of those things." [49:06]

Protocols can help patients at high risk for delays to recover. "Finally, the doctors are becoming more they have great access to their hearing and their good together communication and clear guidance. When it's day and night. Good sleep protocols so that they are wide awake or right. It's quiet and they're not even woke up at 6:00 am for their dressing medication. Then the medication they're two one and don't that Faber's are taken out. It's really that their bone's adequately restored that's really a success. There's complications for that and then the appropriate for their sake's and their needs. It's really also a success approach of picking extra attention to these people that are deemed high risk for delays." [50:13]

40. FAMILY SUPPORT: "Help realize something is wrong, take care of medications. Active participation of family helps to implement care in social setting, financial support to stay in extended homes, provider's more involvement, advocate for patient, lack of family support, barriers to family, associated with outcome of care."

Family helps patient realize something is not normal. "But as I said the symptoms get worse slowly, with time, and usually also the patient is aware of something is wrong. So, you would come. But as I said, it's usually a relative, a daughter or son, also knows, realizing that mother or dad is not doing normally." [54:05]

Family concerns for lack of mobility and increased risk of falling. "So they're very concerned about their host of mobility. The falls still it's a worry. They're afraid it's going to fall. They wonder if there's anything that we can do to reduce the mobility, minimize the risks at home, that kind of thing." [54:05]

Family support helps patient feel better. "It do think that the encouragement of the family, sometimes the active participation from the family can be really important for some patients in terms of helping them recover." [55:20]

45. FINANCIAL INVESTMENT: "Funding goes to NGOs for research, insurance can alter patient management. Testing of donors and inclusive can half change in patient management, government funded national registries, after patient care management."

HPAs reliance on national hip fracture centers for patient follow-up. "As I said this is the nationwide hip fracture system that follows them up four months after the operation. And they come back to if they have a problem or if the problem is detected on the telephone call. [58:42]

HPAs claim that national registries cannot be relied upon creating surge in response. "... We're going to get all the data from those national registries, very easy, but as we have learned if you make really good examples, you can only rely on these national registries. As you know, these are sort of episodically such as..." [59:49]

HPAs treating patients may order additional tests. "I think it's important. I try to see all the patients before surgery, to get informed consent before surgery, not after." [60:45]

"Usually, you know, most of the patients don't come back after, if they are not involved as a team." [60:45]
APPENDIX G: Coding Framework

8) WORKING IN ISOLATION (surgeon, coordinator, OP specialists, endocrinologists, geriatricians, nurses, physiotherapist, occupational therapist, discharge team)

- **Surgeon’s role** (expectation that surgeons must perform surgical intervention, family view that secondary surgery is bad, patients don’t want to go back to hospital, surgeons expect to see patients with complications, getting to OR quickly is good, questions about pain and mobility to patient and family)

  Disconnect between patient and surgeon’s view of surgical success: “...the patients feel that they have to get full support from the society. This is something new in our system that... But are they complaining? Very few.. They have some other concerns.. You know they don’t have friends or relatives are not coming to see them... I think, in my mind it means that the surgical treatment has succeeded. So it’s more personal, about their life.” [IDI-05]

  “I remember my mother in law very clearly. She had a trochanteric fracture. She was not needing a stick, so she was independent. And always after her fixation repair it was regarded as a success, but she best walked with a stick, couldn’t walk as far, lost a lot of her independence and stopped driving. So it made a big change to her life although she was regarded as a success and I think a lot of patients are in that category.” [IDI-03]

  Family expectations that secondary surgery is bad: “Going back to my mother-in-law we didn’t say anything. We knew she had gone to see her doctor about it. Her hip was still hurting. There wasn’t any point in pursuing it further because it would have involved further surgery which she didn’t want.” [IDI-03]

- **Coordinator’s role** (help with proper nutrition and mobility): “...I just make sure that they’re getting their proper nutrition.” [FG-03]
- **Occupational therapist** (measuring what they can do i.e. Meal preparation, grooming)
- **Physiotherapist** (to mobilize)
- **Geriatrician**
- **Nurse**

9) FUTURE (HCPs view that implement new guidelines for patient management will help, getting supporting evidence for self-management for patients with hip fracture would help, knowing patient expectations at baseline would be good to know)
## APPENDIX H: Timeline

<table>
<thead>
<tr>
<th>Year 1: Month 1-12</th>
<th>Year 2: Month 13-18</th>
<th>Year 2: Month 19-24</th>
<th>Year 3: Month 25-30 Year 3: Month 31-36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background • Facilitated Discussion Group • Course work</td>
<td>Background information: Follow-up International IDI (1), Focus Group (1), International IDI (1) Course work</td>
<td>Providers (2) • International Experts (7) Background: • Patient (1) • Family Caregiver (1)</td>
<td>Patients (3) Family Caregivers (3) Providers (3) International experts follow-up (2) Patients (2) Family Caregivers (2)</td>
</tr>
</tbody>
</table>