2014-01-29

Exploring the Professional Role of Massage Therapists in Patient Care in Canadian Urban Hospitals – A Mixed Methods Study

Kania-Richmond, Anna

UNIVERSITY OF CALGARY

Exploring the Professional Role of Massage Therapists in Patient Care in Canadian Urban Hospitals – A Mixed Methods Study

by

Anna Kania-Richmond

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF COMMUNITY HEALTH SCIENCES

CALGARY, ALBERTA

JANUARY, 2014

Abstract

Background: Massage therapy (MT) is becoming established as a recognized health care profession. MT services are being incorporated into various types of health care settings, including hospitals. However, little is known about the delivery of MT services and the role of massage therapists in patient care in hospitals in the Canadian context.

Purpose: The purpose of this study was to conduct a comprehensive examination of massage therapy incorporation into Canadian urban hospitals.

Methods: A mixed methods study design was used. The quantitative phase (survey) and qualitative phase (semi-structured interviews) were conducted sequentially, with an emphasis on the qualitative phase. The survey was conducted in settings where MT services were organized by hospitals and provided by licensed massage therapists to patients. Semi-structured interviews were conducted with a purposively diverse sample of participants. The quantitative and qualitative approaches were mixed during data collection and analysis.

Results: Sixteen urban hospitals across Canada (5%) provided MT to patients by licensed therapists. The majority of hospitals were located in Ontario and ranged from specialized small community hospitals to large multi-site hospitals. Three MT delivery approaches emerged: stand-alone, closed-incorporated, and open-incorporated. In addition to clinical functions as health care providers and team members, components of the massage therapists' professional role included: program support, educator, promotor, and researcher. Role related experiences suggested the presence of ambiguity regarding the massage therapists' role, overlap with other health care professionals (HCPs), role overload related to limited availability of time and massage staff, and role conflict. Patterns suggesting variations in the role components and types of role experiences across study sites and in relation to team member status were apparent. However, the small sample size precluded further analysis of these potential differences.

Conclusions: While hospital-based MT in Canada is not a new phenomenon, MT is not yet an established health care profession in hospitals. However, there is significant potential for the inclusion of the MT role in Canadian hospitals that should be research-informed for effective implementation.

Acknowledgements

Undertaking and completing this study and PhD program was not a solo endeavour. It involved a number of key individuals, who provided the support, encouragement, and guidance I needed to arrive at this point. I am deeply grateful for their patience, intelligence, and belief in me.

Dr. Marja Verhoef – my supervisor. Thank you for your time, your words of wisdom, your ability to be simultaneously tough and gentle, and not showing me the way but guiding me towards discovery.

Dr. Esther Suter and Barb Reece – my committee. Your knowledge, insights, and guidance throughout the program were invaluable. Thank you for all that you taught me, in relation to this project and beyond.

Kit Richmond – my husband. First and foremost, for your unwavering support as I inched my way towards completing this PhD. Your help in maintaining healthy daily routines kept me on track and productive. Your patience, especially in the never-ending home stretch, and during the many challenging moments, gave me the space and presence I needed to keep going.

Jolanta Kania – my mother. For always being gentle in your encouragement and never wavering in your belief in me. And, for always enjoying so much the things I write! Your realistic and intelligent approach has been a source of inspiration.

Alex Kania – my father. For sharing his deep passion for knowledge and inquiry. For nurturing my creative side when I was young and encouraging my curious spirit as I got older.

Melanie Higuchi – my best friend. Your pragmatism and sensible ways inspire me. I am deeply grateful for your support and helping hand, especially in those moments when I felt overwhelmed and at a loss.

Dedication

I would like to dedicate this thesis to the massage therapists who accepted the invitation to participate in this research. Their experiences, insights, and commitment to their work were inspiring.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Acronym	Definition
ACNP	Acute Care Nurse Practitioner
CAM	Complementary and Alternative Medicine
CHREB	University of Calgary Conjoint Health Research Ethics Board
CIHI	Canadian Institute for Health Information
HBMTQ	Hospital Based Massage Therapy Questionnaire
HCP	Health Care Professional
MT	Massage Therapy
NCCAM	National Centre for Complementary and Alternative Medicine
NREM	Nursing Role Effectiveness Model

Chapter One: Introduction

1.1 Introduction – The Conception of the Study

Prior to undertaking the PhD program, I worked as a registered massage therapist at a hospital in Toronto, Ontario. In addition to providing direct patient care, I was involved in building the massage therapy practice with a massage therapy colleague. We were relatively successful in establishing our presence, building our clinical expertise, contributing to the care of a range of patient populations, and developing the processes needed to run the practice. Over time, however, we recognized that we needed to solidify our position within patient care, and also, in relation to the multi-disciplinary clinical team we were a part of. We had some level of understanding of what was expected of us as health care professionals (HCPs). However, it was evident that the other health care professionals we worked with had a relatively vague understanding of what we did or how we contributed to patient care. We realized that we were faced with a problem: we lacked a clear understanding of our professional role. I was confronted with the same issue whilst working in a Cambodian hospital, where I was tasked to incorporate scar massage as part of post-operative rehabilitation for acid burn survivors. Cambodia posed an additional challenge in that there was very strong association of massage with the sex trade. In order to be accepted as a credible practitioner and for my work to be recognized as therapeutic, I needed to clearly articulate my role as a HCP. In addition, I needed to develop the processes for the incorporation of a massage component into the rehabilitation program. However, when I turned to the literature, there was no information or research to provide the guidance needed in order to address these issues. The idea for this study emerged in response to this problem, which arose out of the clinical experience of a small group of massage therapists practicing in a hospital setting.

1.2 The Research Problem

Massage therapy (MT) in Canada is in the process of being established as a health care profession supporting the health of Canadians. Massage therapy services are increasingly used by patients for addressing a wide spectrum of issues, ranging from general wellness to treatment of specific conditions. They are either accessing these services directly or are referred to them by other HCPs. As a result, massage therapy is being introduced into a variety of health care

settings, such as hospitals. The provision of massage therapy in hospital settings is increasingly common and the work of massage therapists is becoming a part of the health care system.

Research in the area of hospital based massage therapy has been primarily focused on the efficacy, effectiveness, and increasingly, safety of massage therapy (Posadzki & Ernst, 2013; Corbin, 2005). This research evidence is crucial in supporting the incorporation of massage therapy into conventional health care settings (Adams et al., 2013; Shroff & Sahota, 2013; Parkman, 2005). However, the effective incorporation of massage therapy into these health care settings is also dependent on other factors. These include an understanding of the ways in which massage services can be delivered and how massage therapists' functions are delineated (e.g. description of the tasks and responsibilities). To date, there is a lack of knowledge about massage therapy practice in hospital settings, and more specifically, how massage therapy services are incorporated and the roles massage therapists play in patient care.

The focus of this thesis is placed on the professional role of massage therapists in a hospital context. A role-focused inquiry provides important information regarding the way massage therapists function within this health care setting, the tasks and activities they are expected to carry out, the responsibilities they assume, and how their work is defined in relation to other HCPs. Recognizing role to be a social concept, they are not developed nor enacted in isolation. A context-based examination takes into consideration that the location where the role is enacted may influence roles and related experiences. Such knowledge is essential for the effective utilization of massage therapists' skills in patient care.

1.3 Study Purpose and Objectives

In general, the purpose of this study was to conduct a comprehensive examination of massage therapy incorporation into Canadian urban hospital settings. The focus was placed on an in-depth exploration and description of massage therapists' professional role in patient care.

The specific objectives of the study were:

Objective 1 – Contextual description (hospital level):

a) Identify and describe Canadian urban hospitals that deliver massage therapy services to patients by licensed massage therapists.
b) Describe the ways in which massage therapy services are incorporated into hospital structures and patient care processes.

Objective 2 – Perceptions of massage therapists' roles (individual and team level):

Explore and describe the role of massage therapists in patient care in hospital settings as perceived by massage therapists who provide patient care in hospitals and members of patient care teams that included at least one massage therapist.

Objective 3 – Contextualizing role perceptions:

a) Explore if and how massage therapists' perceptions of their role vary across study sites.
b) Explore if and how massage therapists' perceptions of their role vary in relation to team member status.

1.4 Background

1.4.1 The Massage Therapy Profession

Massage therapy as a healing art is not new. Written records on the therapeutic use of massage are present across a number of cultures and go back 5000 years (Moyer, et al., 2004; Calvert, 2002). Its presence and acceptance as a therapeutic intervention within the contemporary biomedical health care system, however, is variable and its uptake has been primarily driven by patient demand. Massage therapy is generally defined as "a collection of bodywork modalities designed to improve health through manual manipulation of soft tissues including stroking, kneading, pressing, tapping, and shaking" (Stedman, 2005). In Canada, massage therapy is moving along a professionalization trajectory to establish its position as a recognized health care profession (Baskwill & Gowan-Moody, 2009). It has a recognized safety profile and there is a growing evidence base regarding its effectiveness for the treatment of a number of conditions

and symptoms (Airosa et al., 2013; Dion et al., 2011). It is worth noting that the research capacity of the massage therapy profession is also increasing, with massage therapists pursuing graduate level degrees and undertaking massage therapy focused research. Massage therapy is a regulated health care profession in three Canadian provinces (Ontario, British Columbia and Newfoundland) and lobbying efforts for regulation are underway in Alberta and Saskatchewan (Ryan, 2013). Within the regulatory framework, the scope of practice of massage therapists is: "the assessment of the soft tissues and joints of the body and the treatment and prevention of physical dysfunction and pain of soft tissue and joints by manipulation to develop, maintain, rehabilitate or augment physical function or to relieve pain" (Epstein et al., 1999; Service Ontario, 1991; College of Massage Therapists of Ontario (CMTO)). Massage therapy training programs across Canada are increasingly aligning with the 2200-hour standard set by the regulated provinces. Discussions regarding the development of a bachelor program for massage therapy are occurring across the country (Shroff & Sahota, 2013).

1.4.2 Massage Therapy as Complementary and Alternative Medicine

Within the current practice and research discourse, massage therapy is categorized as a complementary and alternative medicine (CAM) therapy. CAM as an area of research gained major visibility with the publication of the seminal paper by Eisenberg et al. (1993). The paper brought attention to the extensive use of therapies and modalities considered to be outside of the mainstream biomedical health care system. Similar studies were conducted in most westernized countries, indicating comparable trends (Al-Windi, 2012; McFarland et al., 2002; Ernst, 2000). Biomedicine, also referred to as conventional health care, is defined as a medical paradigm where disease and illness is predominantly explained and understood through the biological sciences (Coulter et al., 2008; Mead & Bower, 2000). CAM is often distinguished from biomedicine, based on underlying philosophical characteristics, which include a focus on holism, acceptance of vitality and/or presence of a 'life force', recognition of spirituality and energy as domains of health, and an emphasis on wellness and well-being (Wiese et al., 2010; Caspi et al., 2003; Micozzi, 2001). In addition, CAM interventions or practices are often practiced under different requirements and constraints than biomedical interventions (Berger et al., 2013).

Work has been conducted by various groups to develop theoretical and operational definitions of CAM (Wieland et al., 2011; Institute of Medicine (US), 2005; Caspi et al., 2003). The most commonly cited definition of CAM was provided by the National Centre for Complementary and Alternative Medicine (NCCAM), based in the United States. NCCAM (2008) defined CAM as "a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine". However, given the heterogeneity of CAM practices and increasing acceptance of select therapies and modalities over time, it remains an elusive concept difficult to define. Yet, as pointed out by Wieland et al. (2011), there is a shared sense among various stakeholders that there remains a group of practices that are "in some sense outside the mainstream medical model, and that these practices are appropriate to group together under the CAM label". Hence, the CAM label prevails. The most useful application of the CAM label may be to indicate the orientation of the conventional health care system towards the modalities, practices and therapies, and systems positioned as CAM. From this perspective, *complementary* medicine refers to practices which are used *alongside* conventional health care. *Alternative* medicine refers to practices used *instead of* conventional health care (Borkan, 2012; Gaboury et al., 2012; Barrett, 2003).

In the context of this study, massage therapy is conceptualized as a CAM therapy for three reasons. First, although it is increasingly used in private health care settings (e.g. health care clinics, rehabilitation clinics), it is not a common or standard practice in hospital settings. Second, proposed classification systems for CAM systems, practices, and modalities include massage therapy. For example, it is included in the NCCAM classification system of CAM practices (see Table 1). Here massage therapy is categorized as a manipulative and body based practice, which is distinguished from others as a practice that focuses primarily on the physical structures and systems of the body, including joints, muscles, and the circulatory and lymphatic systems. Lastly, in research, it is frequently framed within a CAM context (Shorofi, 2011; Cherkin et al., 2003; Eisenberg et al., 1993).

Table 1: NCCAM Classification of CAM Systems, Practices, Therapies, and Modalities

Domain of CAM Practice	**Description**
Manipulative and body based practices	Involve manipulation or movement of one or more body parts, focusing primarily on "the structures and systems of the body, including the bones, joints, the soft tissues, and the circulatory and lymphatic systems" to achieve health and healing. Examples include: chiropractic, reflexology, rolfing and ***massage therapy.***
Mind-body approaches	Emphasis is placed on the interactions between the mind, body, and behavior and how this influences health outcomes. Many of these interventions and techniques are associated with relaxation and thus may be useful in treating various patient populations where psychological stress is a factor. Examples include: meditations, yoga and biofeedback.
Natural Product Based Therapies	Involve the use of substances or ingredients found in nature for the purposes of promoting or supporting health. Examples include dietary supplements (e.g. selenium or glucosamine sulfate) and herbal remedies (ginseng, echinacea), which can be taken as teas, oils, syrups, powders, tablets or capsules.
Energy medicine	Involves the use of energy, either the unconventional use of electromagetic fields, or the manipulation of energy fields that purportedly surround and penetrate the human body. Examples include: qi gong, therapeutic touch, reiki, polarity therapy, and magnet therapy.
Whole medical systems	Complete systems of theory and practice outside the conventional allopathic model. Examples include: Ayurvedic Medicine, Traditional Chinese Medicine

*Adapted from NCCAM (2008).

1.4.3 CAM in Hospital Settings

Traditionally, the practice of CAM-classified systems, practices, therapies and modalities, including massage therapy, has been limited in hospital settings (Eisenberg et al., 1993). Several reasons may explain this occurrence. Some CAM modalities (e.g. acupuncture) are being subsumed within the scope of practice of hospital HCPs (e.g. physiotherapists) but are not recognized as medical interventions. In Canada, most are not funded through public health insurance plans (Esmail, 2007); the exception being chiropractic (F. LeBlanc, personal communication, December 5, 2013) and midwifery (Canadian Association of Midwives, 2010). The evidence to support their effectiveness and safety has generally been deemed limited or inconclusive. Therefore uptake and provision of CAM as part of hospital based health care provision in Canada has been limited (Hollenberg et al., 2011; Gavin & Boon, 2005). However, hospital administrators are beginning to respond to patient demand for such services and are permitting select CAM practices, such as massage therapy, to operate on their premises (Berger et al., 2013; Fournier & Reeves, 2012; Kania, 2005).

Although CAM in Canadian hospitals is now evident, few studies have examined its incorporation within these health care institutions. Soklaridis et al., 2009, for example, published findings of a qualitative inquiry on the financing and related sustainability issues of an outpatient clinic for artists which integrated CAM services in a metropolitan hospital. A multi-site case study was conducted by Hollenberg et al. (2011) on CAM integration in four hospital settings. The findings identified various factors impacting the variable integration of CAM (or TCAM) practitioners within these settings. Through interviews with leaders of integrative medicine programs at academic medical centers, Vohra et al. (2005) identified factors, such as funding and a “motivated champion”, needed for successful implementation of CAM services within academic medical centers in North America. Similarly, Boon and Kachan (2008) aimed to identify key factors needed to incorporate an integrative medicine clinic within two Canadian hospitals. Based on interview data, the authors concluded that the most important factors were a champion of the program who had credibility, identification of the “right” staff, and finding a suitable physical space for the program. Berger et al. (2013) published an evaluation of an integrative care model in a palliative care setting of one Canadian hospital. The findings indicate an overall significant beneficial effect on patient outcomes. Feedback from staff regarding the

program was also positive and supportive. The report also provided a very brief description of the service delivery model, which involved the provision of select CAM therapies by practitioners on a volunteer basis. The practitioners were organized by a coordinator and considered an adjunct to the multi-disciplinary team.

Research conducted on the provision of CAM services in the hospital setting indicates that massage therapy is one of the most commonly used CAM therapies in hospital settings. In fact, a survey of over 6000 hospitals conducted by the American Hospital Association identified massage therapy as the most common CAM therapy used in American hospitals (Ananth, 2011). In an unpublished study of 60 hospital sites in the Michange Health System, Myklebust and Iler (2007) identified that 16% of hospitals offered some form of massage "and an additional 44% wanted to be able to offer massage to their patients". In Australia, Shorofi (2011) found that massage therapy was one of the most commonly used CAM therapies by hospitalized patients and it was one of the most preferred CAMs for use in hosptial settings. In Canada, Oneschuk et al. (2007) identifed massage therapy to be one of the most commonly used complementary therapies, provided in 57% of the palliative care settings surveyed.

Research on hospital-based massage therapy published to date has predominantly focused on the effectiveness and outcomes of massage therapy for various hospitalized patients, including it use as a supportive therapy for those treated for or recovering from cancer (Sturgeon et al., 2009; Currin & Meister, 2008; Hughes et al., 2008; Wilkson et al 2008; Billhult et al., 2007; Smith et al., 2004), as a pain management strategy in post operative care (Dion et al. 2011; Anderson & Cutshall, 2007), for relief of anxiety and stress in acute care settings (Airosa, F., et al. 2013; Adams et al., 2010; Mitchinson et al. 2007), in burn care (Li et al., . 2010; Parlak Gürol et al., 2010), in labour and delivery (Janssen et al., 2012; Chang et al., 2006), and in rehabilitation (Chase et al., 2013). Overall these studies demonstrate a positive impact of massage therapy on patient outcomes. This suggests that massage therapists may play an important role in patient care in hospital settings. However, an understanding of patient outcomes requires an understanding of the structure and process aspects that lead to those outcomes (Gaboury et al., 2011, Sidani & Irvine, 1999). The massage therapists' professional

role, understood within the context in which it is enacted, is one such aspect and is the focus of this study.

1.5 Significance of the Study

While research supports the therapeutic benefits of massage therapy for hospitalized patients, there is a paucity of research to inform how massage therapy services are organized and how massage therapists function in hospital settings. Only one study was identified that explored issues related to professional status of massage therapists in the context of interprofessional collaboration (Fournier & Reeves, 2012). As a profession moving into a new health care setting and one where massage therapists will be required to negotiate their professional boundaries, a clear delineation of their professional roles becomes particularly relevant.

Research on hospital-based massage therapy practice is yet to be undertaken. As such, this research stands to make a novel and important contribution to the massage therapy literature and practice of massage therapy in several ways. It is the first study which aimed to explore how the massage therapists' professional role in patient care in Canadian hospitals is perceived. A clear delineation of the professional role may lead to novel and improved ways for massage therapists to be involved in patient care. It may also enhance the ways in which massage therapists work with other HCPs. The second contribution is by providing a description of the context (hospitals and service delivery approaches) within which massage therapists' roles are enacted. This is the first study where data on the delivery of massage therapy services in Canadian hospital settings was systematically collected and analyzed. The third contribution is by including an explicit consideration of context and how it may influence the massage therapists' role and role related experiences. In addition to providing a description of the context, through a mixed analysis, role and role related experiences were examined across study sites and in relation to team member status, a specific context factor. This allows for a more comprehensive understanding of roles and may enhance transferability of findings to other hospital settings. The knowledge gained from this study offers useful information for massage therapists and hospital administrators interested in implementing or establishing provision of massage therapy services within a hospital setting. The fact that the study was conducted on a national level and that the findings are situated across various contexts facilitates the applicability of these findings to a variety of

hospital settings. Findings may also be useful for massage therapy educators, to better prepare students for the various types of responsibilities and duties they may be required to undertake as HCPs.

1.6 Thesis Outline

This thesis is organized as follows: Chapter 1 introduced the research topic, presented the purpose and study objectives, and the background for the study, and identified how the findings make a significant contribution to the literature on massage therapy. Chapter 2 provides the literature review. Focused on professional roles, it provides the literature which was used as background information to inform the development of the study and to situate the research findings. The study design is presented in Chapter 3. It includes an overview of the mixed methods approach, a detailed presentation of the data collection and analysis methods for the quantitative and qualitative phases, followed by procedures used to combine the data from both phases to address specific study objectives (1b and 3). The chapter concludes with a discussion of methodological rigour and ethical considerations. The results are presented in Chapters 4, 5, and 6, for the quantitative phase, qualitative phases, and mixed analysis, respectively. Chapter 7 presents the discussion and conclusions. It includes a summary of findings, comparison of findings to the literature, and interpretation of the contextually situated qualitative findings. This is followed by a discussion of the strengths and limitations of the study. Implications for practice and education are then presented. The chapter concludes with future research recommendations.

1.7 Reflexivity Statement

Reflexivity is a process of critical self-reflection about one's own position and relationships with the research participants (Polit & Beck, 2010). Such reflection is most commonly associated with qualitative research where the researcher is considered to be an active participant in the research process rather than an objective observer. It is a strategy used to enhance the credibility of qualitative findings by making the researcher's position transparent (Walker et al., 2013). Therefore a reflexive stance is appropriate for the qualitative phase of this study. However, Tashakkori and Teddlie (2010) argue that engaging in active reflexivity throughout the research process should also be considered in mixed methods studies. Given my

relationship to the subject matter, I selected to take a reflexive stance throughout the course of the entire research project.

Approaching a topic of study with an "insider" perspective can have advantages and disadvantages. My clinical background informed the conception of this study, and formulation of the study objectives, the questionnaire, and the interview guide. It also enabled me to target issues through the questionnaire and during the interviews which are important and directly applicable to the front lines of practice. Being a massage therapist was also conducive to establishing a positive rapport and trust with a number of the massage therapist participants. Some were more willing to open up as they felt they were speaking with someone who understood their position. This enabled a more in-depth dialogue with participants during the interviews, moving into the essence of issues which may have otherwise been missed or discussed at a superficial level. However, being an insider also has disadvantages. At times, participants appeared to intentionally omit details or did not elaborate because they assumed that as a massage therapist I knew what they meant. This required attention on my part and active probing to ensure that the issue or topic at hand was captured in their words.

It is acknowledged that an "insider perspective" will cast, at least to some degree, a perceptual filter through which the analysis and interpretation are conducted. As such, prior to initiation of data collection, I took the time to reflect and write my responses to the interview questions in order to have a clear understanding of my position on the subject matter. During the interviews, I remained mindful of how questions and probes were asked to ensure that they aimed to further clarify or elaborate the participants' views rather than confirm my personal ideas or views. During interview analysis, frequent memoing (notes or write ups where the researcher was able to note initial thoughts and identify what is being learned) was used to filter out my reactions to participants' comments and opinions, allowing for the analysis to capture and reflect the participants' experiences.

Chapter Two: Literature Review

2.1 Introduction

This literature review presents the available background information that provides the research and conceptual basis needed to develop a study on massage therapists' professional role in hospital settings. To date, there is no published research on the topic of massage therapists' professional role. An extensive search did not identify any literature which aimed to examine the professional boundaries (relating to activities, tasks, and functions) and expectations of massage therapists in patient care in any health care setting (private clinic, hospital etc). One study on a related issue, collaboration of massage therapists in hospital settings, was identified (Fournier & Reeves, 2012). Thus, literature on the professional roles of other health professions needed to be accessed. The literature on professional roles of other CAM professionals, most notably midwives and chiropractors, was limited and not substantial enough to inform this study. The chiropractic role research is predominantly based in the 1950's and 1960's and the area of research was highly influenced by the work of Wardwell (1952), who presented the concept of "marginal role" in relation to chiropractors (Coulter, 1991). Research on professional roles of conventional HCPs (such as social workers, pharmacists, nurses, and physiotherapists) is more extensive. However, a review of the literature spanning across the various conventional health care professions is beyond the scope of this thesis. Instead, this review was focused on three health care professions: nursing, physiotherapy, and occupational therapy. Nursing is included as it is comparable to massage therapy in its movement towards establishing its position as a distinct health care profession. Physiotherapy and occupational therapy is included as, similar to massage therapy, both are therapy based professions with a scope of practice focused on achieving and enhancing physical function.

The literature reviewed spanned from 2000 to 2013 to limit the search to recent work. Multiple health databases were searched including Medline, PubMed, AMED, PsychInfo, EMBASE, CINHAL, and google scholar. The search terms used included: role, conflict, overlap, overload, ambiguity. Role and these four specific role related issues set the parameters of the literature search and this review as they were identified through this study to be relevant to the massage therapists' professional role. The role concepts were combined in various ways with massage therap*, midwi*, chiro*, physiotherapy* and physical therap*, occupational therap*,

and nurs*. References sections of selected articles were also reviewed to identify any other relevant literature. The existing literature is predominantly descriptive and qualitative in nature.

The literature identified as pertinent to providing the background for this study is organized here as follows: the literature on role components is summarized in Section 2.2. Literature on role related issues of ambiguity, overlap, overload, and conflict is recapitulated in Section 2.3. Conceptual foundations for the study of professional role are presented in Section 2.4. A summary which highlights findings of the literature reviewed and situates the study of massage therapy professional roles in this body of knowledge concludes the chapter.

2.2 Role Components

A role is a cluster of recognizable behaviours that are displayed by the role occupant in carrying out various tasks, functions, and responsibilities (Brookes et al., 2007; Biddle, 1986). They are often multi-faceted. As such, they are organized and presented as role components that characterize the professional practice. A number of role components have been identified in the health care professions literature. The most frequently cited are health care provider (or clinician), researcher (or scientist), and educator (Hollenberg et al., 2013; O'Rourke & White, 2011; Homer et al., 2009; Robarts et al., 2008; Bryant-Lukosius et al., 2004; Chaboyer et al., 2004; Watson et al., 2002; Sidani & Irvine, 1999). Several additional components were also evident in the literature. Hamilton and McDowell (2004) identified liaison, patient care coordinator, and team member as important and distinct components of the nursing role. O'Rourke and White (2011) proposed leader as a key domain of the nurses' professional role. Kinn and Aas (2009) identified a number of components specific to the role of occupational therapists, such as: life coordinator, health agent, case manager, independent living specialist, and work trainer. Administrator was identified an important component of the physiotherapists' role (Lopopolo, 2002 & 2004) and of the nursing role (Sidani & Irvine, 1999). In a study on the perceptions of midwives on their roles, in addition to care provider, educator and evaluator of practice, Homer et al. (2009) identified support provider and mentor as important components of the midwives' role.

2.3 Role Related Issues

A number of potential issues may arise in relation to a professional role. These include but are not limited to: role insufficiency, role conflict, role conformity, role burden, role ambiguity, role stress, role overload, and role overlap (Brookes et al., 2007; Hardy & Conway, 1988). Based on the emergent findings of this study, the four role related issues relevant to massage therapists' professional role were: ambiguity, overload, overlap, and conflict. Although presented separately in this review, these issues are often inter-linked and not always studied independently. For example, role ambiguity or role overlap can lead to role conflict. Role overload may be considered a type of role conflict; the expectations of carrying out too many tasks may be indicative of incompatible expectations. However, for purposes of clarity, the next section of the literature reviewed is organized in accordance with these four topics: ambiguity, overlap, overload, and conflict.

2.3.1 Role Ambiguity

Role ambiguity refers to a lack of clarity, uncertainty, or insufficient information regarding expectations, sets of required behaviors, or tasks and activities which are to be carried out by the role occupant (Hardy & Hardy, 1988; Biddle, 1986). Poor training, limited support, and lack of performance criteria may contribute to role ambiguity (Phillips et al., 2013). A number of studies have been conducted to explore the perspective of HCPs on how they understand their own roles. A study by Nancarrow and Mackey (2005) aimed to explore the perceptions of occupational therapists on their roles. The researchers' findings pointed to the fact that the participants had difficulty in describing their tasks or "therapeutic tools". Similarly, Pierre (2001) revealed that occupational therapists were uncertain about their assessment protocols. Recognizing that the roles of registered nurses (RNs) in acute hospital care have changed, Furaker's (2008) study aimed to analyze how RNs' characterized their role amidst these changes. Their findings were that although RN's were able to describe their main work tasks, they had difficulties articulating the essence of their work and felt that their professional role was vaguely defined. Jones (2005) and Donald et al. (2010) identified role ambiguity as one of the key barriers to the implementation, development, and evaluation of advanced practice nursing roles. Similarly, Watson et al. (2002) found that when new standing orders supporting the extended

role of midwives in Australian hospitals were implemented some participants were confused or uncertain about how the changes impacted their day to day duties. Contrary to these findings, in a study on perceptions of midwives' roles, Homer et al. (2009) found that midwives were able to articulate the role of the midwife in the Australian context.

The related concept of role clarity refers to understanding and confidence about a role. It is of particular interest in health care research as it is recognized to be a core component of effective health care provision in inter-professional settings where HCPs work in a collaborative manner (Donnelly et al., 2013; Muller-Juge et al., 2013; Vanderzalm et al., 2013; Byrne & Pettigrew, 2010; MacDonald et al., 2010; Booth & Hewison, 2002). Interprofessional collaborative practice is defined by the Canadian Interprofessional Health Collaborative (2010) as "a partnership between team and health professionals and a client in a participatory collaborative and coordinated approach to shared decision making around health and social issues". Collaborative practice is a dynamic process in which professionals interact and work interdependently, "enabling a synergistic influence of grouped knowledge and skills" (Kasperski, 2000). It involves a negotiated agreement between HCPs where the expertise and contributions that each team member brings to patient care is valued and there is mutual trust and respect. It is important to note that although collaborative practice aims to bring professionals closer together, it has made professional role clarity all the more salient (Furaker 2008; Brown et al., 2000). Within the interprofessional collaboration context, indicators of role clarity include: a demonstrated respect for the roles, expertise, and contributions of other team members; the ability to clearly identify where one's own professional boundary ends and another's begins; the ability to describe what others do, their knowledge base, and perspective in patient care; seeking out input or feedback from other team members; and, directly clarifying role misconceptions (MacDonald et al., 2010).

In addressing issues pertaining to role clarity, a number of studies have aimed to address interprofessional perceptions of roles. Johnston et al. (2012) conducted a study on perceptions of physiotherapists' roles in return-to-work programming. They found that even though the physiotherapists' roles were perceived as important overall, there was a lack of clarity regarding their roles across different stakeholder groups (e.g. nurses, managers). Similarly, a study by Smith and Mackenzie (2011) explored nurses' experiences of occupational therapists' roles in an

inpatient mental health settings. The main finding was a high degree of ambiguity regarding occupational therapists' roles. Although occupational therapists were accepted and their contributions to patient care were recognized, their role was not fully understood by the nurses. Findings of an exploratory study by Atwal (2002) found a high level of role ambiguity amongst nurses, care managers, and occupational therapists regarding each other's professional roles. Watson et al. (2002) qualitative study on midwives' role also identified that doctors often knew little about midwifery and the midwives needed to teach them what their role was. In contrast, Dalley and Sim's (2001) findings regarding nurse's perceptions about the role of their physiotherapy colleagues on rehabilitation teams indicated that nurses felt that they had a clear understanding of physiotherapy roles; however, they felt that physiotherapists did not fully recognize the nursing role. These findings are similar to those of a study by Pellat (2005), which highlighted a "knowing paradox" related to role clarity perceptions: while nurses, occupational therapists, and doctors felt confident about their understanding the others' roles, they felt that their colleagues did not have a good understanding their role.

2.3.2 Role Overlap

Role overlap, also referenced as role blurring**,** refers to situations of shared practice boundaries or when their roles of different professionals become indistinct (White et al., 2008). It is well documented that some forms of care can be delivered by more than one type of practitioner (Nancarrow & Mackey, 2005; Nancarrow, 2004). This may result from a shared knowledge base, competencies, and skills between different HCPs, and hence, overlapping scopes of practice (Baranek, 2005' Smith & Roberts, 2005). It is common in interprofessional work, which often involves a flexible, blurred- role approach (Oxtoby, 2009). It also results from role expansion, which may perpetuate the movement into professional territories of other HCPs (Nancarrow, 2004; Snelgrove & Hughes, 2000). However, several authors (Powell & Davies, 2012; Baranek, 2005) suggest that overlap may also lead to negative consequences, such as competition among HCPs, workplace tensions, diminished role security, and ineffective utilization of HCPs' skills.

Several studies on role overlap between physiotherapists and occupational therapists indicate that overlap did indeed occur and was perceived as an expected aspect of inter-

professional work (Smith & Roberts, 2005; Nancarrow, 2004, Booth & Hewison, 2002). Whereas some "found it liberating" (Brown et al., 2000), for many it was perceived as threatening. Booth and Hewison (2002) found that overlap was perceived to challenge role security. Smith and Roberts (2005) concluded that working across boundaries triggered a protective response, which heightened the sense of ownership of core skills. Similarly, findings reported by Brown et al. (2000) indicated that some participants found that role overlap enforced or strengthened role distinctions across professional groups. In addition, role overlap was raised as a concern in that it also blurred the lines of accountability and responsibility. Strategies used to minimize the negative impact of role overlap were contingent on clarity regarding professional expertise and confidence in one's own role (Smith & Roberts, 2005; Nancarrow, 2004; Booth & Hewison, 2002).

As the nursing profession continues to expand its professional boundaries, several authors have brought attention to the issue of overlap with other HCPs, specifically midwives and medical doctors (Powell & Davies, 2012; Djukic & Kovner, 2010; MacDonald et al., 2005; Snelgrove & Hughes, 2000) and across different nursing sub-specialities (Donald et al., 2010; White et al., 2008; Wall, 2006). This body of literature is quite extensive and beyond the scope of this review.

In relation to massage therapy, several studies indicate the use of massage by physiotherapists (Galloway & Watt 2004; Bekkering et al., 2003), nurses (Shorofi & Arbon, 2010; Seers et al., 2008; Chu & Wallis, 2007; Duimel-Peeters et al., 2006; Preece, 2002), and midwives (Stillerman, 2009; Adams, 2006; Stamp et al., 2001). However, this use of massage is not framed as overlap with massage therapists but rather a modality used by these HCPs in their practice.

2.3.3 Role Overload

Role overload refers to situations where the role occupant is faced with too many expectations or responsibilities; when the demands placed on the role occupant exceed their capacity to perform adequately (Brookes et al.; 2007; Hardy & Hardy, 1988). The issue may not always be the individual's comprehension of what they are to do, but rather their inability to complete tasks or functions due to limited time, skill level, or training. It was often related to a

lack of resources (e.g. human, financial, education) to meet expectations and demands placed on the role occupant. It was an outcome associated with organizational re-structuring (Lolopolo, 2002; McCarthy et al., 2000) and uptake of new or advanced level roles (McCallin & Frankson, 2010). Role overload was one of the key finding of an exploratory study by McCallin and Frankson (2010) of nurses assuming management roles, and was related to the numerous demands of the role exceeding the resource available. A survey conducted by Kath et al. (2013) on predictors of levels of nurse leaders' job stress found role overload to be one of the key stress predictors. In another survey on occupational stress of nurses, Alves (2005) found that role overload was experienced in relation to a broader scope of practice. In a mixed methods study aiming to examine how inpatient registered nurses coped with work related stressors, Santos et al. (2003) found that role overload was one of four significant stressors; the others were role insufficiency, role ambiguity, and role boundaries. The authors defined significant role overload as situations where "work load was increasing, unreasonable, and unsupported by needed resources" (Santos et al., 2013). Participants who experienced role overload felt they were not well trained for the job at hand, needed help, and/or were working under deadlines that were perceived as too tight.

2.3.4 Role Conflict

Role conflict refers to the situations where individual values, resource availability, requirements, or obligations make the expectations associated with a given role contradictory or incompatible (Smith & Larew, 2013; Brookes et al., 2007; Hardy & Hardy, 1988). Research on role conflict has been conducted in context of nursing (Bostrom et al., 2013; Smith, 2011; O'Brien-Pallas et al., 2010; Spooner-Lane & Patton, 2007;), physiotherapy (Gupta et al., 2013) and midwifery (Hall et al., 2012). Its occurrence appears to be related to work environments where the HCP experiences a high workload and a sense of being overwhelmed with the amount of work (Bostrom et al., 2013; Gupta et al., 2013), competing priorities or expectations which are difficult to balance or effectively address (Gupta et al., 2013; Hall et al 2012), and ethical dilemmas (Smith, 2011). It also resulted from what was perceived to be a "mismatch" between professional standards and employer demands (Gupta et al., 2013; Hall et al., 2012). In addition, role conflict was related to transition into new roles or expansion into advanced practice roles.

Moving into an unfamiliar area, role conflict arose as the HCP was faced with different functions and competing responsibilities or expectations (Smith, 2011). Lastly, it was also associated with burn out (Gupta et al., 2013) and high staff turnover (O'Brien-Pallas' et al., 2010; Spooner-Lane & Patton, 2007).

An important issue requiring consideration in the discussion of role conflict are power struggles associated with professional status. Salhani and Coulter (2009) state that, as part of the professionalization process, all HCPs claim some form of diagnostic and treatment role in the provision of patient care. Power struggles arise between professions as they attempt to establish or expand their professional roles in multi-professional settings. Power struggles may be particularly poignant in hospitals, which are considered to be "hierarchical status-conscious organizations" (Powell & Davies, 2012). This was addressed directly in three studies situated in the health care context. Salhani and Coulter (2009) provide an in-depth description of the power tactics used by nurses to expand their professional roles and establish powerful positions within a mental health hospital setting. Hollenberg (2006) used a case study methodology which identified power related issues in the interactions between conventional and CAM practitioners in two settings, one of which was a hospital. He identified four types of power tactics used by conventional and CAM practitioners. Conventional practitioners established their power by maintaining control over patient care process, limiting or excluding the involvement of CAM practitioners in patient care, appropriating CAM techniques, and expanding their roles in CAM areas. CAM practitioners attempted to establish or advance their position by appropriating the biomedical language and referring among themselves to increase patient access and flow. Fournier and Reeves (2012) conducted a case study which aimed to explore the nature of collaboration between massage therapists and other HCPs in one hospital site in Ontario Canada. Similar to Hollenberg (2006), their tentative findings suggest exclusion from processes such as interprofessional meetings and marginalization related to the perceived lower status of the massage therapists.

2.4 Conceptual Foundations

The concept of role is frequently incorporated into frameworks specific to interprofessional work and competency development (e.g. The British Columbia Competency

Framework for Interprofessional Collaboration; Canadian Interprofessional Health Collaborative National Interprofessional Competency Framework; World Health Organization Framework for Action on Interprofessional Collaboration and Practice). Yet few frameworks or models have been proposed to specifically inform the study or understanding of professional health care roles. As O'Rourke and White (2011) point out, "the inclusion of a clearly defined model of professional roles that spells out the core components is under-represented in current models of professional health care practices". Although frameworks have been proposed to delineate nursing roles and related them to nursing outcomes (Kilpatrick et al., 2012; Bryant-Lukosius & DiCenso, 2004; Micevski et al., 2004; Sidani & Irvine, 1999), few were identified within other health professions (e.g. Advanced Practice Physiotherapy Framework in Robarts et al., 2008) or ones that have general applicability across the professions (e.g. Role Theory). Of those that were identified, two considered suitable for this study were: Role Theory (Hardy & Conway, 1988; Biddle, 1986) and the Nursing Role Effectiveness Model (NREM), adapted for Acute Care Nurse Practitioners (ACNPs) (Sidani & Irvine, 1999).

Role Theory and NREM were reviewed during the proposal development stage and selected to provide the conceptual foundations for this study. Role Theory grounds the role concept and provides the conceptual link to important role related issues (e.g. conflict and overlap). It has been applied in role focused inquires of other health professions (Brookes et al., 2007; Hughes, 2001; Hardy & Conway, 1988). Therefore, it was considered suitable for an inquiry focused on the massage therapists' professional role. The NREM delineates structures (variables present in the practice environment) and processes (functions and activities of the nurses' role) which may impact outcomes of nursing care provision. It is based on the now classic structure-process-outcome framework developed by Donabedian (1978), which has been extensively used in health services research. Therefore, although it has a nursing-orientation, it may have broader applicability to other health professions and is a good fit for a health services oriented study. An overview of each is now provided and its applicability to this study is highlighted.

2.4.1 Role Theory

Role theory is defined as "a collection of concepts and a variety of hypothetical formulations that predict how actors will perform in a given situation, or under what circumstances certain types of behaviours can be expected" (Conway, 1988, p. 63). Although its development is based on work conducted in the areas of sociology, psychology, and anthropology, it has been applied in health care research (Brookes et al., 2007; Hughes, 2001; Conway & Hardy, 1988). Biddle (1986) also pointed out that role theory provides a framework for discussing or studying roles in many social contexts. As such, it has applicability to a study of the massage therapists' professional role.

While different perspectives of role theory have been presented in the literature (functional, structural, symbolic interactionist, cognitive and organizational), Biddle (1986) maintains that all are based on three central assumptions. First, a role is a cluster of characteristic and patterned behaviors that can be learned and is distinct from the individual performing the role. Second, roles are positions assumed within social settings, such as hospitals. Role theory has been recognized as useful for relating characteristics of the setting or context and expected behaviours of the role occupant (Brookes et al., 2007). Lastly, roles are generated through expectations held by the role occupant and others the occupant interacts with when enacting their role. As such, role theory is useful for exploring massage therapists' roles in hospital settings. It proposes that the massage therapists' role is distinct and recognizable. It is also brings attention to the fact that the massage therapists' role is not developed or enacted in isolation. It is influenced and shaped by setting characteristics within which the role is enacted and other HCPs with who the massage therapists interact.

There are a number of role related issues derived from role theory that are relevant to the enactment of roles. As identified and described in Section 2.3, four issues which emerged in this study to be of particular relevance to massage therapists' role are ambiguity, overlap, overload, and conflict. The applicability and relevance to the massage therapy professional role is highlighted below.

Role ambiguity: As the massage therapists' role in the hospital setting may be new to the massage therapist and to others, lack of understanding as to the types of activities, tasks, and

functions they carry out and are permitted or not permitted to undertake may lead to a lack of role clarity.

Role overlap: Within a multi-professional setting such as a hospital, massage therapists may share certain tasks, skills, and knowledge with other HCP. Although not always considered to be a negative occurrence in multi-professional work environments, it does require clear understanding of how the massage therapist contributes to patient care.

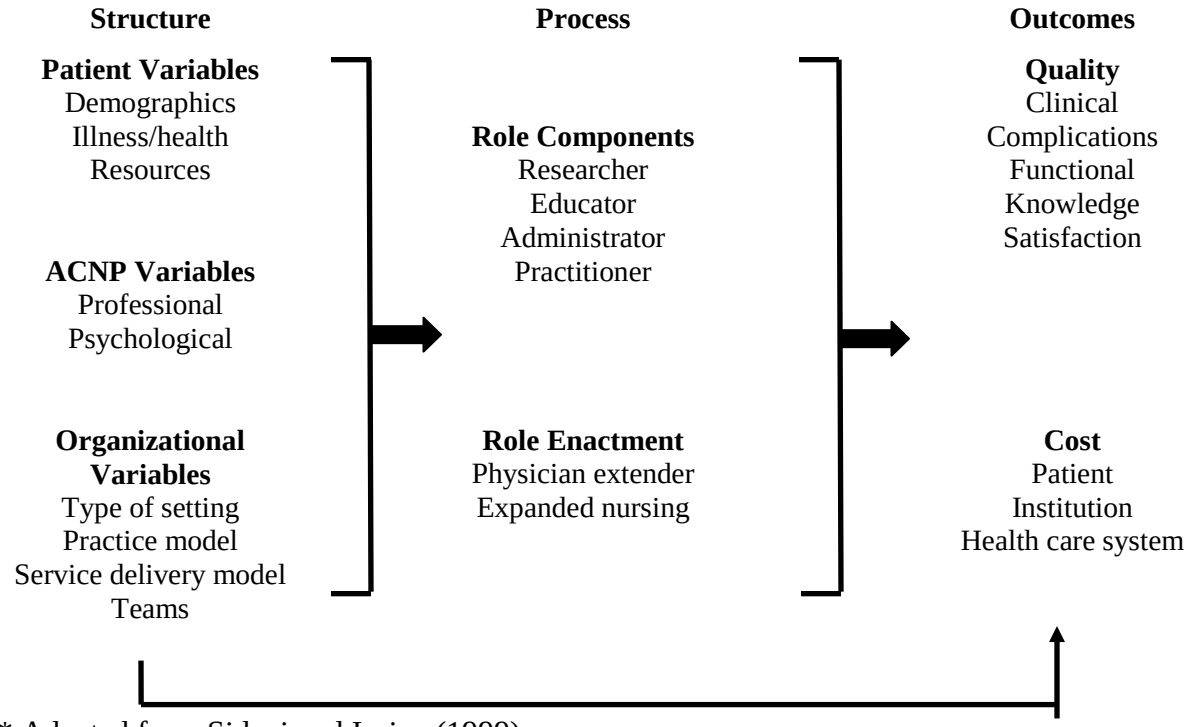
Role overload: Establishing a massage therapy practice within the specific structures and processes of a hospital setting may require new knowledge or skills the massage therapist does not possess. Additional non-clinical responsibilities, on top of patient care, may result in role overload.

Role conflict: The various individuals that massage therapists interact with in a hospital setting, such as other HCPs, managers or patients, may have different perceptions of massage therapists, based on their own understanding of or experiences with massage therapy. Therefore, the massage therapists' understanding of their role may be incongruent with what others expect of them. As such, there is potential for conflict to arise regarding the massage therapists role in patient care.

2.4.2 Nursing Role Effectiveness Model

The Nursing Role Effectiveness Model (NREM), put forward by Sidani and Irvine (1999), was developed to facilitate the evaluation of nursing role outcomes. It was modified specifically for the nurse practitioner role in acute care settings. The framework includes the various interrelated factors that are present in nurses' practice situations that may affect their roles and the outcomes of nursing care. The NREM framework includes three main domains: structure, process, and outcomes (see Figure 1).

Figure 1: Nursing Role Effectiveness Model



* Adapted from Sidani and Irvine (1999)

The structure domain consists of stable elements or variables related to the attributes of the practitioner, practice environment, populations served, and healthcare system that may influence processes and outcomes (Donabedian, 1978). Of particular interest to this study are the variables relevant to the practice environment (or organizational variables), which include: type of setting (acute or tertiary); clinical practice area (in-patient unit or out-patient clinic); extent of role formalization (e.g. role documentation or policy); hospital privileges; practice model; funding sources for services; and, case load (Sidani & Irvine, 1999).

The process domain consists of dynamic elements, actions, and events taking place over time, which lead to outcomes (Donabedian, 1978). In the NREM, the process domain is limited to the behaviors and actions of the role occupant, identified through role components and role enactment. Role components are relevant to this study as massage therapists need to have an understanding of what comprises their professional role, which in turn guides their behavior. The role components in the NREM include: practitioner, educator, researcher, and administrator. A description of each is provided in Table 2.

Table 2: NREM Process Component – ACNP Role Components

Role Component	Description
Practitioner	The nurse is expected to provide direct patient care and includes activities such as doing examinations, obtaining health history, participating in rounds, consultations, educating patients, and performing procedures. The practitioner role may entail independent, interdependent and dependent role functions. Independent role functions are those for which the practitioner is fully accountable and responsible for. Interdependent role functions are those which dependent on the responsibilities of other HCPs to be achieved. Dependent role functions are those which are carried out in response to direct medical orders.
Educator	The nurse is expected to provide education to nursing and medical students and staff education programs.
Researcher	The nurse is expected to apply research findings into practice and initiate or participate in research related activities.
Administrator	The nurse is expected to participate on committees and be involved in hospital wide policy and procedure development.

*Adapted from Sidani and Irvine (1999).

Role enactment is the expression of the role through actions taken by the role occupant. In the NREM, it refers to the approach taken in carrying out the nursing role components. Here, role enactment is proposed to occur in one of two ways: Physician Extender, where the nurse is primarily responsible for the daily medical management of patients. In the Expanded Nursing Role, the nurse is responsible for coordinating patient care activities in addition to their medical management functions.

To reiterate, the NREM was selected to conceptually inform the design of this study as it clearly defined two factors relevant to the study objectives: organizational variables (identified within the structure domain) and role components (identified within the process domain). The organizational variables informed the development of the survey. The specific nursing role components may not all apply to a massage therapists' role. Nonetheless, they provided a useful starting point for approaching the exploration of massage therapists' roles and a point of comparison. The roles which emerged in this study may be compared to the core components in

this framework to determine compatibility and potential for further development of massage therapists' roles.

2.5 Summary

At present, there is no research which has addressed the topic of massage therapists' roles and specifically in Canadian hospital settings. Identification of role components and issues related to professional roles, including ambiguity, overlap, overload, and conflict, have been addressed in research focused on other CAM and conventional health care professions. With the exception of nursing, the research in this area is generally limited.

Based on the available literature, professional roles are comprised of number of different components, such as educator or administrator. Specific to role related issues, role ambiguity (or lack of role clarity) was variable in relation to one's own role and was often high in relation to the roles of others. Role overlap was recognized to be a common occurrence in multi-professional settings. However, it was perceived to challenge role security and was contingent on role clarity. Role overload was associated with changes at the organizational level or role transitions. Role conflict was most commonly examined in relation to job-related stress, burnout, and turnover.

There is some degree of similarity between massage therapy and the other HCPs considered in this literature review (midwives, nurses, physiotherapists, and occupational therapists), as noted in the introduction to this chapter. However, there are also differences that limit the applicability of findings within these professions to massage therapy. For example, unlike nursing, physiotherapy, and occupational therapy, massage therapy training programs are not offered at a bachelor or Master's degree university levels. Massage therapy is not a regulated health care profession across all Canadian provinces, and, massage therapy is classified as a CAM practice rather than an allied health care. Unlike nursing and midwifery, massage therapy is more independent and not connected to the role of a physician. Therefore, an exploration focused on massage therapists and their role in patient care in Canadian hospital settings contributes important information to the on-going development and establishment of the massage therapy profession.

Chapter Three: Study Design

3.1 Introduction

This chapter describes the design of the sequential mixed methods study used to explore perceptions of massage therapists' roles and to describe the hospital setting within which these roles are enacted. This chapter consists of the following sections. Section 3.2 provides an overview of the mixed methods approach. Section 3.3 presents a detailed description of the study design. Sections 3.4 outlines the process used to identify the sample of hospitals. This is followed by a detailed description of the methods and techniques used in the quantitative phase (Section 3.5) and qualitative phase (Section 3.6). The procedures used to mix the quantitative and qualitative datasets at the analytical stage are detailed in Section 3.7. Issues specific to methodological rigor are presented in section 3.8. The research team is described in section 3.9. The chapter concludes with the ethical considerations, in Section 3.10.

3.2 Overview of the Mixed Methods Research Approach

Mixed methods research[1] is becoming established as the third major research approach, alongside the well-established quantitative and qualitative approaches (Johnson, 2007). Emerging out of research and the work of researchers primarily in the social and behavioural sciences (Teddlie & Tashakkori, 2009), it is increasingly being applied in health research (Wisdom et al., 2012; Curry et al., 2009; Brazier et al., 2008).

3.2.1 Defining Mixed Methods Research

Broadly, a mixed methods study design mixes or combines quantitative and qualitative approaches, methods, and techniques during the research process to examine the same underlying topic or phenomenon (Teddlie & Tashakkori, 2009; Onwuegbuzie & Teddlie, 2003).

[1] Mixed methods research is also referenced with other labels such as combined methods, multi-methods, and integrated methods (Teddlie & Tashokkori, 2009; Stange, 2006; Coyle & Williams, 2000). For the purposes of this thesis, the *mixed methods research* label is used because 1) it is the most commonly cited in the health research literature, and 2) its acceptance is reflected by titles of key sources, such as The Journal of Mixed Methods Research (Creswell & Plano-Clark, 2011) and highly cited textbooks by Teddlie and Tashakkori – "Handbook of Mixed Methods" (2003) and "Foundations of Mixed Methods Research" (2009).

Based on a content analysis of 19 definitions cited in mixed methods studies and guides, Johnson et al. (2007) proposed the following general definition of mixed methods research:

> "…the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration."

It is a distinguished methodological approach as it enables research that includes multi-level perspectives and is context-sensitive (Creswell et al., 2010; Cornish & Gillespie, 2009). It intentionally mixes quantitative and qualitative methods in a rigors manner. By doing so, it aims to draw on the strengths of each method to provide a more comprehensive understanding of the research problem that either could not achieve alone (Creswell & Plano-Clark, 2011, p. 12; Creswell et al., 2010; Curry et al., 2009).

3.2.2 Foundations of Mixed Methods Research

Pragmatism is the most common worldview taken by mixed methods researchers (Creswell & Plano-Clark, 2011). At its essence, pragmatism reflects a realist orientation, with a focus on generating practical knowledge useful in addressing real world issues (Teddlie & Tashakkori, 2009; Sale et al., 2001). Cornish and Gillespie (2009) state that pragmatists contend that '"the criteria for judging good knowledge are related to whether it works to solve the problems of everyday actions". In other words, knowledge should be viewed in terms of its practical uses and impacts on everyday actions. Pragmatism rejects the "either-or" choice of a constructivist (reality is multiple, socially constructed and based on human experience) or positivist (reality is singular and explained by natural laws) perspective (Teddlie &Taschakkori, 2009). It values objective and subjective knowledge as equally important reflections of reality (Creswell & Plano-Clark, 2011; Morgan, 2007).

3.2.3 Mixed Methods Study Designs

Qualitative and quantitative methods can be brought together in a number of different ways. Although the independent use of two approaches within a study where there is no interaction between quantitative and qualitative methods is frequently done, Teddlie and

Tashakkori (2009) consider mixing or combining of the methods during at least one point of the research process to be a key defining criterion of a mixed methods study design.

The design of a mixed methods study is built on decisions made by the researcher around four core design components: 1) rationale for mixing or combining, 2) priority of the approaches, 3) implementation sequence, and 4) points of interface. The way each is addressed in this study is detailed in section 3.3.

Rationale refers to a clear understanding of the fit or appropriateness of the study design in addressing the study purpose and objectives (Creswell & Plano-Clark, 2011). Although not exhaustive, Greene et al. (1989) identified five broad reasons for mixing quantitative and qualitative methods: 1) Triangulation (to confirm or corroborate findings), 2) Complementarity (to enhance, clarify, or elaborate findings), 3) Development (to inform the subsequent method), 4) Initiation (to reframe or pose new questions which can be addressed in subsequent method), and 5) Expansion (to expand the breadth or depth of the inquiry).

Priority refers to the relative importance of the quantitative and qualitative methods based on the research question. The quantitative and qualitative methods can be prioritized in three possible ways in a mixed methods study. In explanatory designs, the emphasis is placed on the quantitative phase. In exploratory designs, the qualitative phase is dominant. In the third option, emphasis is equally placed on both approaches (Creswell & Plano-Clark, 2011; Curry et al., 2009; Teddlie & Tashakkori, 2009).

Implementation sequence refers to the order in which the two methods are implemented and conducted, which is informed by the research question. This can occur in one of two ways. In a concurrent or parallel design, both the qualitative and quantitative methods are implemented at the same time. In a sequential design, the two approaches are implemented at two distinct phases or time points (Creswell & Plano-Clark, 2011; Teddlie & Tashakkori, 2009).

Point of interface refers to the specific points during the research process where the quantitative and qualitative datasets are brought together and mixed or combined. Mixing is defined as “the explicit interrelating of the study’s quantitative and qualitative phases and has

been referred to as combining and integrating" (Creswell & Plano-Clark, 2011, p. 66)[2]. Four points of interface have been discussed in the literature: during data collection, data analysis, data interpretation, or at the design level (Creswell et al., 2010; Tashakkori & Teddlie, 2003)

Creswell (2010, 2011) has proposed three procedures for mixing data: connecting, merging, and embedding. Connecting refers to the use of information obtained in one dataset to inform the development or analysis of the subsequent approach. The datasets from both quantitative and qualitative approaches are kept separate and used alongside or in adjunct to each other (Creswell & Plano-Clark, 2011; Creswell et al., 2010). Merging refers to the simultaneous use or presentation of qualitative and quantitative data. The datasets generated from both approaches are integrated to generate new or additional findings that go beyond what each component alone could produce (Creswell et al., 2010; Moran-Ellis et al., 2006). Merging can be achieved by transforming data (e.g. counting the number of themes in the qualitative dataset) or displaying results from both approaches in a table or figure (Creswell et al., 2010). Embedding refers to mixing at the design stage and involves the insertion of one set of data into the other, usually primary or dominant, design. The embedded approach is specifically used to fit the secondary or supplemental phase into the design framework of the dominant approach (Creswell & Plano-Clark, 2011; Creswell et al., 2010).

An additional consideration in mixed methods study designs is that it can be fixed or emergent. In fixed designs, how the quantitative and qualitative approaches are mixed is determined before the study has been initiated. In an emergent design, decisions regarding mixing are made during the research process (Creswell & Plano-Clark, 2011; Teddlie & Tashakkori, 2009).

3.3 Study Design

3.3.1 Overview of Study Design

A sequential mixed methods study design was used to address the study objectives. An overview of the study design and how the study objectives were addressed is presented in Figure

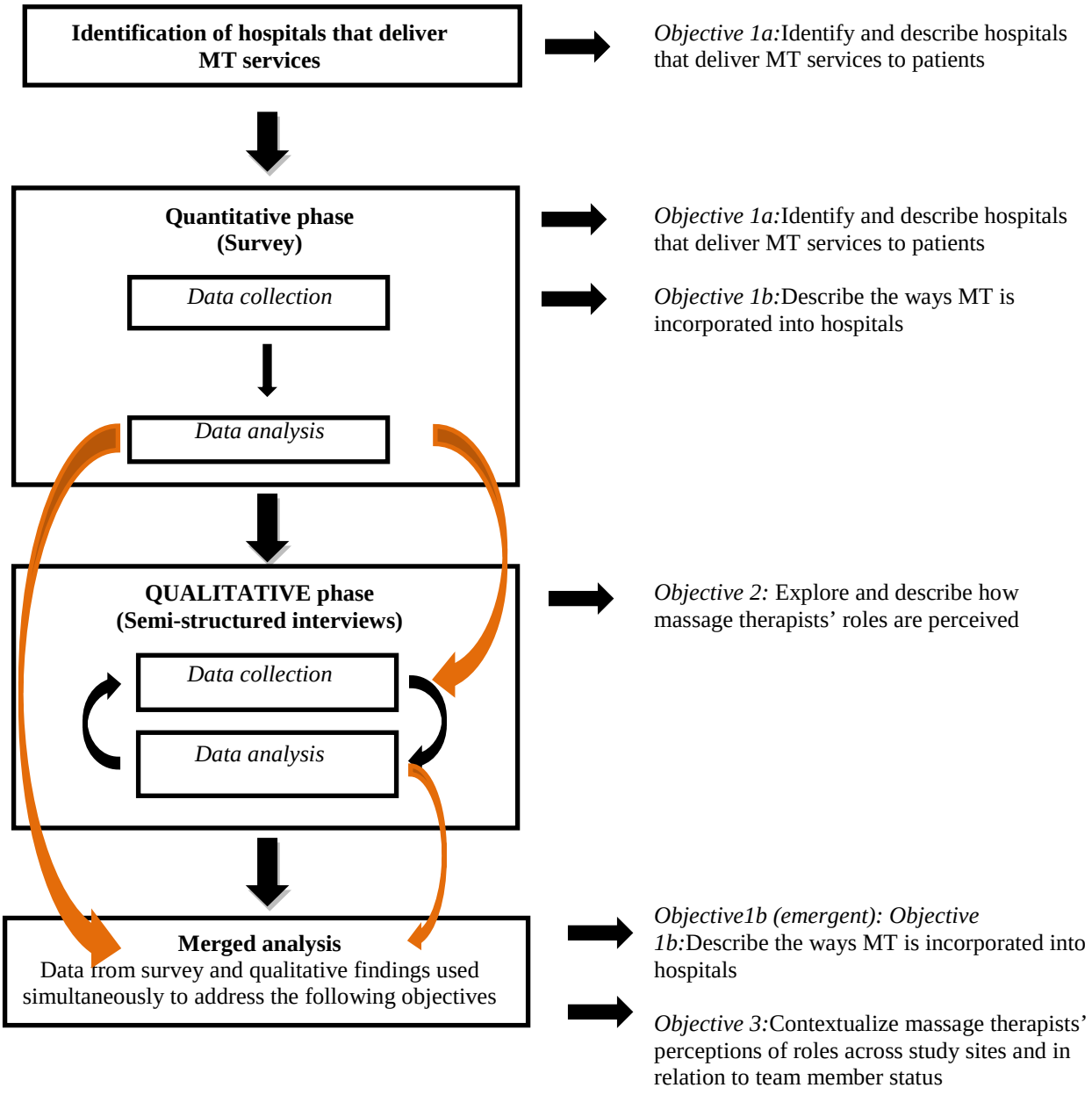
[2] As terms mixing, combining, and integrating appear to be used interchangeably in literature, for consistency, the term "mixing" will be used in the remainder of this study.

2. The quantitative and qualitative data were collected at separate time points with the quantitative phase preceding the qualitative phase. The qualitative phase was the main research focus. The quantitative phase consisted of a descriptive survey of urban hospitals that delivered massage therapy services to patients by licensed massage therapists. This provided the contextual description within which the qualitative findings were situated. This was preceded by a systematic search to identify the population of urban hospitals across the Canadian provinces within which the survey sample was identified. Once completed, the qualitative phase was initiated. It consisted of semi-structured, in-depth interviews with massage therapists and other HCPs who worked with massage therapists on patient care teams.

3.3.2 Rationale for Study Design

A mixed methods study design was determined to be most appropriate for addressing the study objectives for several reasons. First, the results of the quantitative phase were used to identify the sampling frame for the subsequent qualitative phase. Second, specific context factors identified in the quantitative phase were used to expand the breadth of the qualitative findings through a mixed analysis (Objective 3). Lastly, during the course of the study the decision was made to merge specific data from the quantitative and qualitative datasets in order to enhance the description of the ways in which massage therapy services were delivered (Objective 1b).

Figure 2: Overview of the Sequential Exploratory Mixed Methods Study Design



*The orange arrows indicate the points were the qualitative and quantitative datasets are mixed.

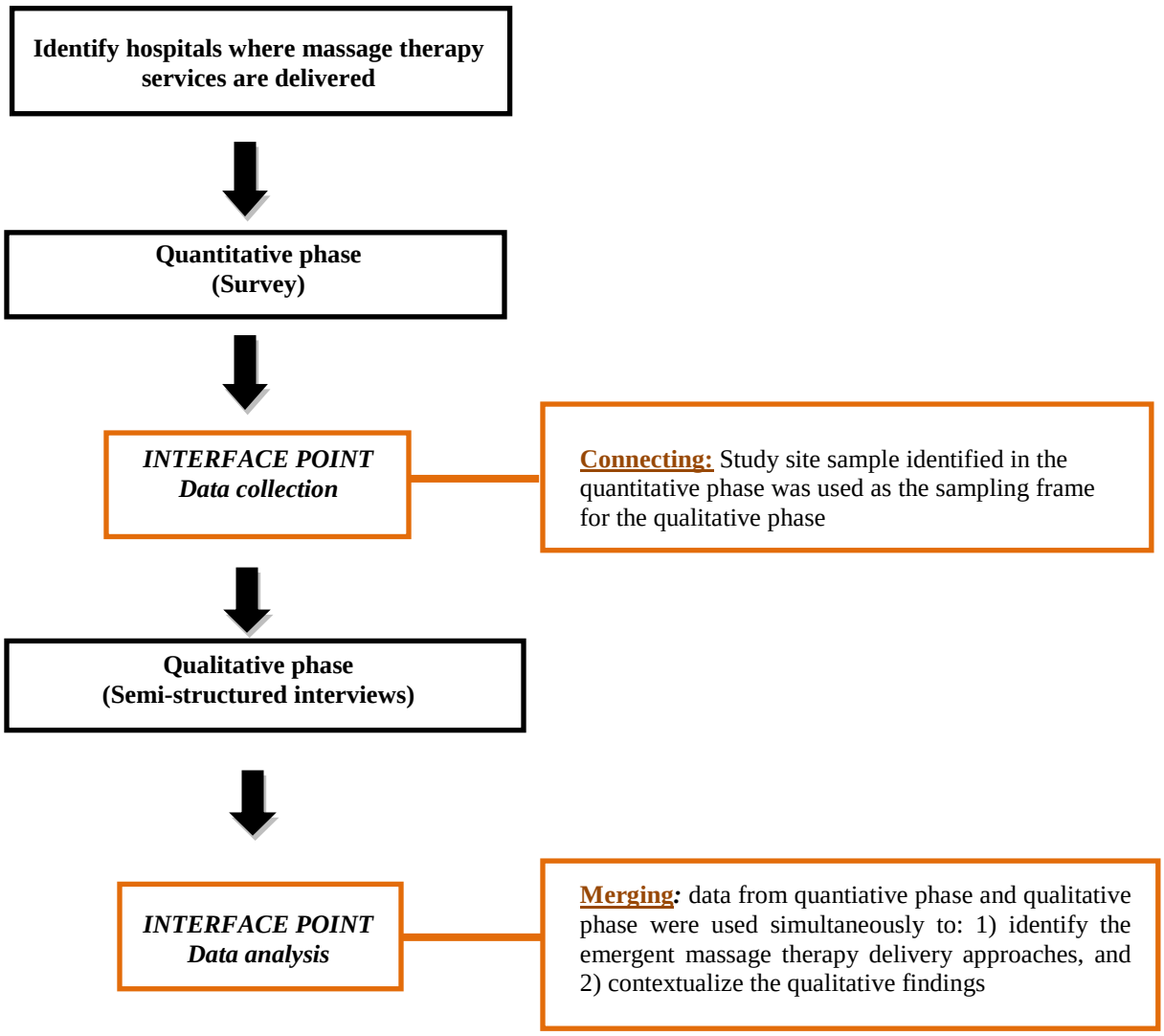
3.3.3 Mixing of the Quantitative and Qualitative Datasets

In this study, the quantitative and qualitative datasets were mixed at two points of interface during the research process - data collection and data analysis. This is visually depicted in Figure 3. Datasets were mixed using two procedures: connecting data and merging data. Connecting data, as described above, involves the use of results from one phase to inform the subsequent phase or enhance the depth or breadth of findings. In this study, results of the quantitative phase – identification of hospitals where massage therapy services was delivered to patients - were used to identify the sampling frame for the qualitative phase. Merging data, as described above, involves the simultaneous use or presentation of qualitative and quantitative data to generate new or additional findings that go beyond what each phase alone could produce. In this study, two analytical approaches were used to merge the quantitative and qualitative datasets. First, using a modified decision tree, specific data from the quantitative and qualitative datasets where mixed to identify emergent massage therapy delivery approaches. Second, using descriptive matrices, qualitative findings were contextualized across the study sites and in relation to team member status. Both analytical approaches are described in more detail in section 3.7.

3.3.4 Study Parameters

This study is focused on the delivery of massage therapy in Canadian urban hospitals by licensed massage therapists. For the purposes of this study, *hospitals*, as defined by Industry Canada, are facilities licensed by provincial health ministries and the federal government, which engage in primarily providing “medical, diagnostic and treatment services, and specialized accommodation services to in-patients …by an organized medical staff of physicians, nurses and other health professionals, technologists and technicians. Hospitals may provide a wide variety of out-patient services as a secondary activity” (Industry Canada, 2007). An *urban center* is a census metropolitan area (CMA), which is defined as “a center with a core population greater than 100,000” (Statistics Canada, 2012). Based on the Canadian census data available from Statistics Canada at the time of the writing of the proposal for this study, there were 33 CMAs

Figure 3: Interface Points at the Data Collection and Data Analysis Stages



across the ten Canadian provinces (Appendix A). The decision to focus on hospitals in urban areas was based on two reasons. First, the vast majority of hospital programs that integrated CAM-based therapies, as identified in the literature, are located in urban centers (Ananth, 2011; Boon & Kachan, 2008; Oneschuk et al., 2007; Vohra et al., 2005). Second, preliminary background information indicated that hospitals in urban areas were more likely to deliver massage therapy.

The study was conducted at a national level (excluding the terriorities). There were two reasons for this. Given the barriers to the integration of CAM therapies, such as massage therapy, into conventional health care systems (Boon & Kachan, 2008; Hollenberg, 2006; Nichols & O'Malley, 2006), it was anticipated that the uptake of massage therapy by hospitals may be limited. To maximize the sample size, urban hospitals across all provinces were included. The option of narrowing the scope of the study to the three provinces where massage therapy is regulated was considered. However, initial searches identified massage therapy in hospitals located in non-regulated provinces. These were included to, again, maximize the size of the hospital sample.

3.4 Identification of Study Sites

Prior to initating the survey, the first step was to identify the Canadian urban hospitals where massage therapy services were delivered. This step was determined to be necessary as currently there is no available information or research on this specific area of hospital care. A national level systematic search was conducted to: 1) generate a comprehensive list of hospitals in Canadian urban centers, and 2) identify the sample of hospitals that deliver massage therapy services. The search was conducted by the researcher and a research assistant (HR) between November 2011 and January 2012.

3.4.1 Generating List of Canadian Urban Hospitals

A list of Canadian urban hospitals was obtained from The Canadian Medical Directory, which compiles a comprehensive list of all healthcare facilities, including hospitals, operating in Canada. The most recent edition at the time of this study was used. It was published in 2010 and provided data collected up to 2008. The list was cross-referenced with other sources, including

the websites for provincial ministries of health and the Canadian Institute for Health Information (CIHI), to ensure a complete and up to date list of hospitals in the 33 urban centers.

3.4.2 Identifying Hospitals that Deliver Massage Therapy Services

Once the comprehensive list of Canadian urban hospitals was generated, the next step was to identify the sub-set of hospitals that delivered massage therapy services. The following inclusion criteria were used to define the hospital sample at this stage:

Massage therapy services were:

1) Organized by the hospital or the patient,
2) Provided by massage therapy students or by licensed massage therapists,
3) Made available to patients taking part in a massage therapy related study, and
4) Provided to any patient population, including in-patients, out-patients, community clients and employees.

Several strategies were used to identify hospitals delivering massage therapy services. First, a thorough review of hospital websites and available documents was completed. Requests for information regarding massage therapy services were made via telephone (to the general information line) and email (general contact address provided on hospital websites). If that information was not available, contact information for the individual that would have that information, such as a massage therapist or manager, was requested. If such an individual was identified, he/she was contacted to confirm massage therapy service delivery and establish contact for follow up. Second, a request was sent to massage therapy professional associations and regulatory colleges across Canada to distribute a research notice (see Appendix B) to their members. Letters of support for this study were received from five professional associations (British Columbia, Alberta, Ontario, New Brunswick, and Saskatchewan) and one regulatory college (Ontario). The research notice contained a request for massage therapists who worked in a hospital to voluntarily contact the researcher and provide the following information: hospital name, the hospital ward where they provided massage therapy services, and who they reported to at the hospital. The notice included a brief overview of the project, contact information for the

researcher, and a statement regarding the anonymity of the therapist and confidentiality pertaining to the information provided.

3.5 Quantitative Phase

The quantitative phase consisted of a cross-sectional survey of hospitals in order to address objective 1:

a) Identify and describe Canadian urban hospitals that delivered massage therapy services to patients by licensed massage therapists.
b) Describe the ways in which massage therapy services are incorporated into hospital structures and patient care processes.

A survey is a study design in which quantifiable data are collected in a structured manner on more than one case (or study site) in order to "describe what exists, in what amount and in what context" (Isaac & Michael, 1997, pg 136). A survey design was selected for this phase as it is the most suitable approach for collecting descriptive data on study sites and elements specific to the delivery of massage therapy services.

3.5.1 Method

A questionnaire was used to collect data on quantifiable descriptors of hospitals delivering massage therapy and service delivery elements. The inclusion criteria at this stage were narrowed to include hospitals where massage therapy services were provided to patients by licensed massage therapists. Hospitals were excluded if massage therapy services were provided only to hospital employees, organized by the patient, provided by a massage therapist from the community, provided only by massage therapy students, and when massage therapy was provided as part of a study.

3.5.2 Respondents

Respondents were either a massage therapist (eight sites) or a manager of the hospital ward[3] where massage therapy services were incorporated (seven sites).

3.5.3 Sampling

A convenience sampling strategy was used. Preference was for the manager of the unit where massage therapy services were incorporated to complete the questionnaire. Managers were identified by the massage therapist or by human resource personnel. If a manager was unavailable or unresponsive to the participation request, the massage therapist was then approached to complete the questionnaire.

3.5.4 Respondent Recruitment

Individuals at hospitals meeting the inclusion criteria were invited to participate in the survey via email. The survey recruitment email (see Appendix C) included information about the study, what participation would entail, and proposed dates and times for completion of the questionnaire. Electronic copies of the questionnaire (see Appendix D), and a one-page overview of the study (see Appendix F) were also included with the recruitment email. Once an individual agreed to participate, a date and time for a telephone meeting suitable to the respondent to complete the questionnaire was determined. During the telephone meeting, prior to administration of the questionnaire, the hospital inclusion criteria were verified. If a response to the participation request was not received, a follow up recruitment email was sent the first week and, if needed, three weeks later. If a response was not received by week four, a follow up telephone call was made in order to establish contact with potential respondents.

3.5.5 Data Collection

Data were collected using The Hospital-Based Massage Therapy Questionnaire (HBMTQ) (Appendix D). The questionnaire was developed for the purposes of this study as, to

[3] Hospital ward is defined as a "block forming a division of a hospital (or suite of rooms) shared by patients who need a similar kind of care" (The Free Dictionary). It is a generic term for a hospital program, clinic, or unit.

date, no surveys have been published specifically on the delivery of massage therapy in Canadian hospital settings. Data for the quantitative phase were collected between February and May 2012; one study site submitted the questionnaire in April 2013. It aimed to collect descriptive data on the characteristics of hospitals, the ways massage therapists are incorporated into the hospital structures and patient care processes, and the organization of massage therapy services.

3.5.5.1 Questionnaire Development:

The questionnaire consisted of two sections. Section 1 included items specific to the organization of massage therapy services. Variables to describe massage therapy service delivery were based on: 1) The NREM, 2) previous surveys (Ananth, 2011; Oneschuk et al., 2007), and 3) the clinical experience of the researcher (AK). Section 2 included items specific to hospital characteristics.Variables include commonly used metrics by hospitals, including number of patient beds, staff, and volunteers, and annual budgets. Hospital type was based on the peer group methodology developed by CIHI. The number of patient visits was not included given the inconsistency in how this information was captured across the study sites. For example, some hospitals reported only emergency care visits whereas others reported all patient visits. Annual budgets were not presented in the results as this information was not available for more than half of the study sites.

The questionnaire consisted of primarily closed-ended questions. The response option of "other" was included for all items to ensure all possible responses were captured. Two open ended questions were included at the end of each section to enable participants to contribute any additional information not captured by the questionnaire items.

The questionnaire was available in English and French (see Appendix E). The questionnaire was translated into French by a billingual researcher with content expertise in CAM and interprofessional collaboration (Dr. Isabelle Gaboury, Sherbrooke University).

3.5.5.2 Testing of the Questionnaire

Following development, the questionnaire was tested to establish face validity. Although more extensive pilot testing was considered it was not pursued given the limited number of

potential respondents available. The questionnaire was tested with nine individuals from across Canada who were recognized experts (practitioners, researchers, and educators) in the field of massage therapy or CAM (6) and hospital administrators (2 hospital managers and 1 hospital executive). The testing was based on the cognitive interviewing approach – thinking aloud and verbal probing - advanced by Willis (Willis, 2005). This approach was developed to assess the validity of questionnaire items, by assessing consistency in the way they were interpreted. It provided a way of identifying potential sources of misinterpretation, such as formulation of the questionnaire items. In addition, this process was used to identify any major gaps in the information being collected and confirm relevance of the questionnaire items to the topic under study. A combination of thinking aloud and retrospective verbal probing techniques were used. In *thinking aloud*, the participant is instructed to think aloud as they answer the questionnaire items in order to understand the processes they used to generate their response. *Retrospective verbal probing* provides the researcher with an opportunity to ask additional questions specific to the questionnaire items or responses. Probes include questions specific to the meaning of terms and concepts, paraphrasing of the questionnaire items and/or responses to check clarity or understanding, clarifying how a response was generated and the certainty level of the response, and assessing the difficulty of providing a response.

Comments and suggestions from participants resulted in changes to wording of items, response options for two items, and modification of one questionnaire item in order to be compatible with Quebec context. Changes were also made to the item order to facilitate flow.

3.5.5.3 Questionnaire Administration

The questionnaire was administerd as a structured telephone interview by the researcher. The option to self administer the questionnaire and return it to the researcher by fax or email was also available so as not to limit the inclusion of any potential study site. The questionnaire took approximately 30 minutes to complete. Each item was asked exactly as it appears on the questionnaire (wording and item order). All responses were recorded by the researcher. Any clarifications of questionnaire items or responses were addressed at the time of administration. Participants in the French speaking province of Quebec were given the option to complete the questionnaire in English or French. The French version of the questionnaire was administered at

two study sites in Quebec by a bilingual research assistant (KO) from Dr. Gaboury's team at Sherbrooke University. According to the information obtained from the University of Calgary Conjoint Health Research Ethics Board (CHREB), if a participant voluntarily responds to a recruitment email, which includes information about the study, their action provides "implied" consent to participation. However, additional verbal consent to participate was also obtained from the participant prior to the questionnaire administration.

3.5.5.4 Document Review

Many of the respondents were unable to respond to some of the items in Section 2, focused on hospital descriptors such as number of patient beds or number of staff. To supplement and/or confirm responses, relevant information specific to hospital descriptors was also obtained through a review of publicly available documents. The documents included hospital annual reports, official hospital websites, and reports by the CIHI on hospital care.

3.5.6 Data Analysis

All completed questionnaires were de-identified and data were entered into Microsoft Excel, where they were cleaned and verified. Descriptive statistics such as counts and percentages were obtained for all variables. Further inferential analyses were not conducted as the main purpose of the quantitative phase was descriptive, with the aim of identifying a sampling frame for the qualitative phase and enabling the contextualization of the interview findings. Furthermore, the small sample size precluded any comparative analyses across study sites that could be statistically evaluated.

3.6 Qualitative Phase

This phase of the study employed a qualitative descriptive approach (Sandelowski, 2000) to address Objective 2: Explore and describe the role of massage therapists in patient care in hospital settings as perceived by massage therapists who provide patient care in hospitals and members of patient care teams that included at least one massage therapist.

The lack of research on this topic indicated the need to explore the perceptions and experiences of massage therapists and other HCPs working in hospital settings in order to

generate an understanding of the massage therapists' professional role. Qualitative description enables the perceived roles of massage therapists to be based on the experiences of the participants and presented in their language (Sandelowski, 2000). Such an approach also allows for the experiences of participants to become part of the evidence-base on massage therapy service delivery (Webster et al., 2012).

3.6.1 Method

Semi-structured in-depth interviews were used to explore and describe perceptions and experiences related to the massage therapists' role. The purpose of a qualitative interview is to generate an in-depth description from textual data (Pope, 2000). The semi-structured approach keeps interviews connected to the research objective and enables comparability across interviews but with a built-in flexibility that enables exploration of the topic, concept, or phenomenon under study. This method is particularly useful for an in-depth exploration and to develop an understanding of individuals' perspectives and experiences (Bryman, 2012; Curry et al., 2009). The interview guide is provided in Appendix G.

3.6.2 Context

The sample of urban hospitals where massage therapy services were delivered to patients by licensed massage therapists identified in the quantitative phase was used as the sampling frame for the qualitative phase. Given the small sampling frame (n=16) and low number of massage therapists working at each site (most sites had less than 3), all study sites were included.

3.6.3 Participants

Licensed massage therapists who provided patient care in Canadian urban hospitals and other HCPs (e.g. nurses, physiotherapists, occupational therapists, social workers, physicians) who were members of patient care teams that included at least one massage therapist.

3.6.4 Sampling Strategy

A maximum variation sampling strategy was used to generate the sample of massage therapist participants. This sampling strategy was considered most appropriate to capture the

potential range as well as common patterns in the experiences and perceptions of massage therapists' working in the different contexts (Miles & Huberman, 1994). For massage therapists, 42 potential participants were identified and efforts were made to contact all for involvement in the study. Using an iterative process of sampling, data collection and analysis, sampling continued until thematic saturation - when additional interviews do not identify any new or additional themes (Pope et al., 2000) - was determined during the analysis.

For the other HCPs, the goal was to generate a sample that included at least one individual for each of the health care professions on a patient care team to generate a diverse "other HCP" perspective regarding massage therapists' roles. It is important to note that challenges with recruitment in this participant group (described further in Chapter 5) resulted in the generation of a convenience sample and thematic saturation was not determined.

3.6.5 Participant Recruitment:

Potential participants were invited to participate in the interview in one of three ways. If the name and contact information of the potential participant were available, an interview recruitment email was sent directly. The interview recruitment email included information about the study, what participation would entail and proposed dates and times for the interview (see Appendix I). Names and contact information of potential participants were obtained from public listings, the massage contact or manager at the hospital who had permission to share contact information, and/or massage therapists responding to the "research notice" circulated by the professional associations and regulatory body. If contact information was unavailable, the massage contact or manager were asked to circulate the recruitement email to potential participants. Individuals interested in participating were asked to contact the researcher directly.

Once an individual responded expressing interest in participation, a date and time to complete the interview suitable to the participant was determined. Prior to the interview, each participant was pre-screened to ensure that they met the inclusion criteria for participation. If a response to the first recruitment email was not received, follow up emails were sent one and three weeks later. If no response was received by week four, a final follow up email was sent and a telephone call was placed if the telephone number was available.

3.6.6 Data Collection

Semi-structured in-depth interviews were conducted by telephone. All interviews were conducted by the researcher and digitally recorded. An interview guide was used (Appendix G). However, the specific wording and order of the questions was modified during the interview to facilitate flow and allow for topics or issues raised by the participant to be explored further. Questions were also modified to the professional group being interviewed – massage therapists or othe HCPs. Topics covered during the interview included: a description of the setting, characteristics of the participants, perceived roles (e.g. expectiations, responsibilities, activities, tasks), issues relevant to understanding roles derived from the role literature, and factors impacting roles. Verbal consent to participate was obtained prior to the interview (see Appendix H).

3.6.7 Data Analysis

The analysis procedure was based on qualitative content analysis (Hsieh & Shannon, 2005; Graneheim & Lundman, 2004; Sandelowski, 2000). Qualitative content analysis is a systematic, yet flexible, method used for analyzing textual data. It is oriented towards summarizing relevant textual data into content categories based on specific coding procedures, which are described in more detail below. The codes and themes in the analysis were determined inductively, emerging out of the data during the analysis (Hsieh & Shannon, 2005; Sandelowski, 2000). As the emphasis of this study design is placed on the qualitative phase, a more detailed description of the analytical procedures is provided.

Analytical approach:

All interviews were transcribed verbatim. Interview transcripts were imported into NVIVO 9.0 software, a qualitative analytic software, to support data management and facilitate the analysis. Prior to analysis, each transcript was cross-checked and verified by the researcher by reading the transcript while listening to the interview recording to ensure accuracy of the transcription.

To facilitate the analytic process, the first step was to reduce the data into more manageable groups through topical categorization (Saldana, 2009). This involved coding the data into broad categories based on the interview topics. As noted above, the topics included: roles;

description of setting (team, hospital unit, patient population); participant characteristics; and factors impacting massage therapists' roles. Within each broad topic category, meaning units were coded. Meaning units are coherent and distinctive parts or fragments embedded within the data that maintain the integrity or essence of an idea or meaning. One word or a sentence or phrase can constitute a meaning unit. Here they are referenced as codes (Graneheim & Lundman, 2004; Ratner, 2002). Using an iterative process, prior interviews were re-analyzed in order to check the applicability of new codes emerging from subsequent interviews. Codes were then systematically compared and, through several successive sorting stages, condensed into higher level or broader conceptual categories (group of codes that share a commonality) and themes (reoccurring aspect creating a link across categories). Based on similarities, patterns, and relationships, these categories and themes were then configured into overarching themes. The final set of emergent categories and themes was then augmented using concepts derived from the literature, in particular Role Theory and the NREM.

3.7 Mixed Analysis

Once the separate analyses for the quantitiative and qualitative phases were completed, the next step was to mix, by merging, specific data from the qualitative and quantitative datasets in order to contextualize massage therapists' perceptions of their roles across select contextual factors (study sites and team member status) (objective 3). The decision was made during the study to also mix the datasets in order to further enhance the descriptions of the ways in which massage therapy service delivery was organized (objective 1b). This was not planned for initially and emerged during the course of the study.

3.7.1 Emergent Massage Therapy Delivery Approaches (Objective 1b)

The survey data were useful in providing descriptive information regarding massage therapy service delivery across the study sites for a number of pre-defined variables. During the course of the qualitative interviews, all participants were asked to describe the settings in which they worked, including the hospital ward(s) (e.g. program or clinic) where massage was incorporated, the clinical team, and patient care processes. The data where the setting was described provided additional information and insights that were not captured through the

survey. Although both datasets pointed to a high degree of diversity in the ways massage therapy services were organized, during the later stages of the analysis, three approaches to the delivery of massage therapy services began to take shape. To further explore this and disentangle what appeared to be a high degree of diversity in massage service delivery, a mixed analysis was conducted applying a decision tree.

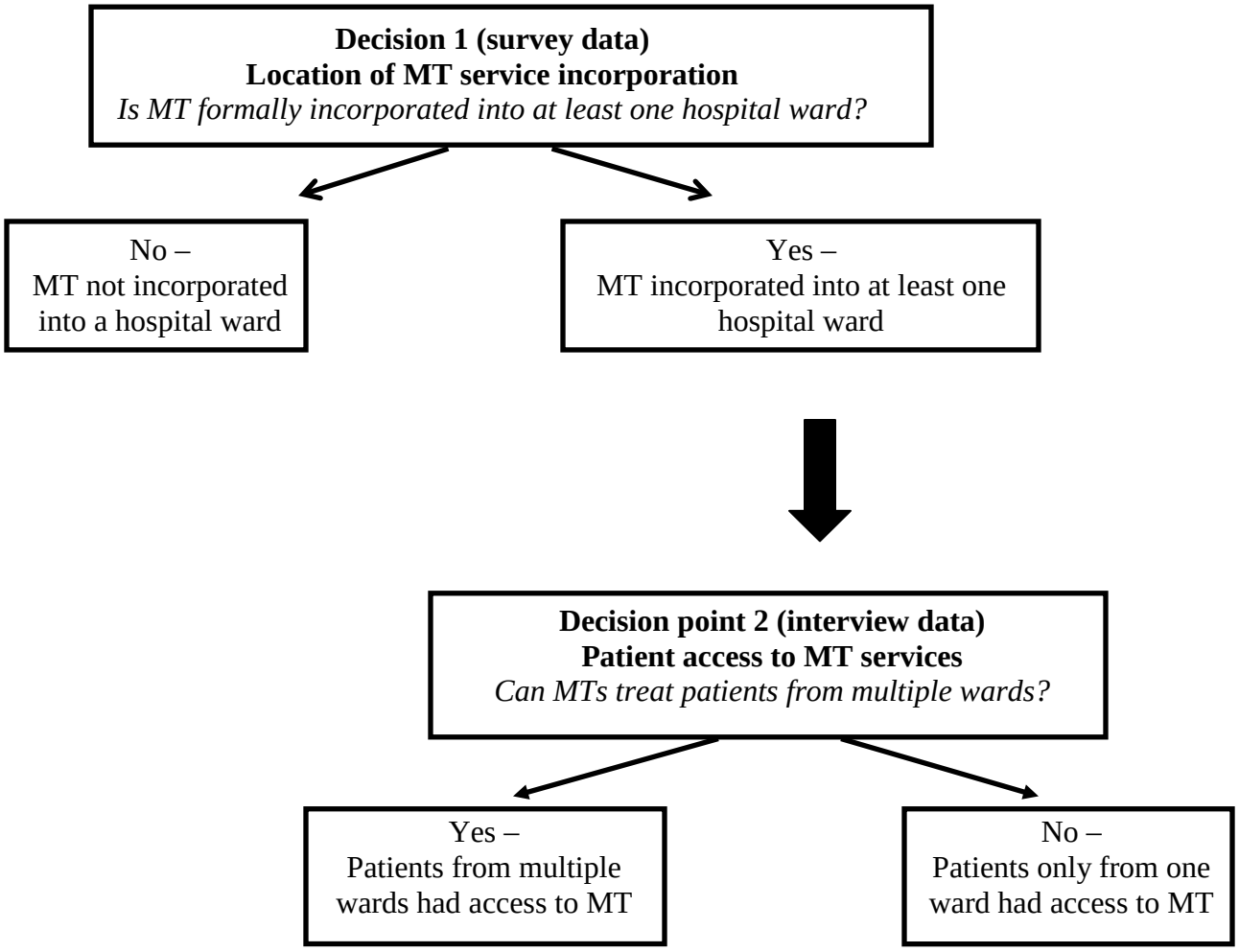
Analytical Approach:

A decision tree is a tool used to visually represent possible options or courses of action. A decision tree is built on nodes, branches and outcomes. The nodes represent decision points, the branches represent alternative options, possible events, or choices that can be made, and terminal nodes are identified as the outcomes or result of a specific decision path. It is most commonly used to model sequential decision making and possible outcomes when multiple alternative options or choices are available (Onwuegbuzie & Dickinson, 2008; MindTools). In a decision tree analysis, values (probabilities) are assigned to choice options and outcomes in order to assist in determining the best decision making course (Scarrot, 2007). The decision tree used for these purposes was modified. Probabilities of each course of action were not calculated as the goal was not to identify the best outcome. Rather, the goal was to identify all possible outcomes, which reflected the distinct massage therapy service delivery approaches.

The decision tree was based on two questions or decision points: 1) Is MT formally incorporated into at least one hospital ward? and, 2) Can the massage therapist(s) treat patients from multiple hospital wards?

The first question was answered using the survey data; specifically the response to item 1.1. This was also confirmed with interview data. The second question was answered using the interview data. Textual data which described the sites were extracted and details specific to patient access were coded into one of two categories: 1) patients from across multiple hospital wards were able to access massage services, and 2) only patients from the ward where massage was formally incorporated were able to access massage services. Data for the two questions were then combined using a modified decision tree (see Figure 4). Using the two questions as decision points, the decision tree provided a useful means of categorizing the study sites in order to identify potential massage therapy delivery approaches.

Figure 4: The Decision Tree to Identify Massage Therapy Service Delivery Approaches



3.7.2 Contextualization of Qualitative Findings (Objectives 3):

Although qualitative research is contextually bound (Graneheim & Lundman, 2004), Ayres et al. (2003) argue that through the qualitative analytic process, findings are in fact decontextualized. The categories and themes generated, although important in and of themselves, are removed from the context within which they emerged. As such, it is important to re-contextualize the findings by reconnecting the self-contained themes to the context(s) from which they originated.

In a general sense, to contextualize means to place something (e.g. experience, idea, or event) in a particular context (Merriam-Webster Dictionary). In this mixed methods study, contextualization refers to the process of situating the emergent role findings in the external contexts from which they emerged and examining how they vary across these contexts. Such a process can enhance the understanding of the massage therapists' professional role and potential for transferability of the findings.

To contextualize the emergent findings, a mixed analysis was conducted using descriptive matrices. Descriptive matrices (Onwuegbuzie & Dickinson, 2008; Averill, 2002; Miles & Huberman, 1994) were used to display and examine, in an exploratory manner, if and how the emergent themes varied across contexts - study sites and in relation to team member status.

Analytical Approach:

A matrix is defined as "a set of numbers or terms arranged in rows and columns; that within which, or within and from which, something originates, takes form" (Agnes, 2000, p. 887). A descriptive matrix depicts existing conditions or situations (Averill, 2002) within one case or across cases. Although matrices are used for a range of purposes, they are recognized as a useful analytic tool in the presentation of qualitative findings and in mixed methods studies. They are particularly useful in showing systematic similarities, differences, and patterns. Thus, a matrix enables the researcher to combine data that enables a deeper and richer understanding of the phenomena under study (Onwuegbuzie & Dickinson, 2008; Averill 2002; Miles & Huberman, 1994).

For inclusion in a matrix, themes reflecting the perceived roles of massage therapists and role related experiences were transformed. This was achieved by "quantitization of qualitative

data" (Creswell & Plano-Clark, 2011; Teddlie & Tashakkori, 2009), whereby qualitative data are converted, or transformed, into quantitative (or dichotomous) categories. By quantitizing, each theme was coded as present (√) or not present (blank cell) in the matrices. For sites where there were multiple massage therapists, all perspectives informed the decision. If the theme was present in at least one interview, it was indicated as present in the matrix for that site. The analysis was exploratory as the low number of study sites identified precluded comparisons that could be statistically evaluated. Although not conclusive, such an exploratory examination does provide useful insights as to how contextual factors may influence the roles and role related experiences of massage therapists in hospital settings.

The contextualization of emergent role related themes was made across the study sites and in relation to one context variable – team member status[4]. Study sites encompass the set of characteristics and local conditions within which roles are enacted. Hence, contextualization at the study site level provides the opportunity to gain an overall sense of the similarities and differences in how perceived roles and role related experiences manifest across the different practice settings. Team member status refers to whether or not the massage therapist was a recognized member of a patient care team. It was selected given the current focus on team and collaborative practice in health care provision, the importance of role clarity in effective collaborative work, and the fact that not all massage therapists were members of patient care teams. Team member status was based on the response to questionnaire item 1.26 and confirmed through triangulation with interview data.

[4] In addition to team member status, examination of the qualitative findings in relation to other context variables for which data were collected in the survey and one's which were identified as important through the interviews with massage therapists and the literature (e.g. employment status, funding) were considered. However, the small sample size precluded meaningful interpretations.

3.8 Methodological Rigor

Rigor of a mixed methods study is dependent on maintaining the methodological integrity of each strand (Curry, et al., 2013; Teddlie & Tashakkori, 2009; Morse, 2003). As such, issues pertaining to rigor are presented separately for the qualitative and quantitative phases, in order to adhere to the assumptions and underlying philosophies of each approach.

3.8.1 Qualitative Phase

According to Teddlie and Tashakkori (2009), trustworthiness of qualitative findings is the "degree of fit between the participant's realities and the investigator's construction and representation of those realities". Various strategies can be used to assess and strengthen the credibility and dependability of qualitative findings. For the purposes of this study, the following were employed: member checking, peer debriefing, and reflexive journaling.

Member checking: involves asking participants for critical feedback on the findings, interpretations, and conclusions (Teddlie & Tashakkori, 2009). Member checking was undertaken at two stages during the study process. First, during data collection, the researcher would paraphrase or say back statements to the participant to confirm clarity and understanding of a participant's response. Upon completion of the analysis, participants were invited to review and provide critical feedback of the findings. All participants who responded were satisfied with the findings and interpretations, and confirmed validity of the findings. One participant requested that a specific quote be removed since she felt the connection to her and her colleague was too apparent and may be compromising. The requested change was made; the quote was removed and the point was incorporated into the text.

Peer debriefing: involves including other individuals during the data collection and analysis process to provide feedback which enables the researcher to identify potential areas of omission or bias and clarify interpretations (Morse et al., 2008). Throughout the study process, feedback on the emergent findings and processes used to combine the qualitative and quantitative datasets was sought from the supervisory committee. In addition, a random selection of interview transcripts from both participant groups were reviewed by the supervisor (Dr. Marja Verhoef) to verify the coding structure, emergent categorization, and resulting themes.

Reflexive journaling: involves the researcher taking personal notes regarding responses to participants, interpretations, and methodological decisions that provide a space for processing issues that may impact or bias findings (Walker et al., 2013). Throughout analytic process, memos and notes were written to track initial analytic thoughts and the researcher's reflections and responses to participant's comments. In addition, prior to data collection, the research spent some time to reflect on and recognize their own perspective on the topic, which involved responding to the questionnaire and interview questions.

3.8.2 Quantitative Phase

To ensure the validity and reliability of the quantitative results, the following strategies and processes were used: face validation of the questionnaire, administration using structured interviews, and triangulation of results for confirmation.

Questionnaire testing: involves procedures which aim to establish the validity and/or reliability of an instrument in order to reduce the potential of errors during data collection and analyses processes (Bryman, 2012). Face validity of the questionnaire was established using cognitive interviewing techniques. Specifically, the aim was to establish that the questionnaire was comprehensive and that questionnaire items and response options were clear, understandable, and adequately presented the variables. Suggestions, modifications, and additions were incorporated into the questionnaire during the testing phase. As already noted previously, although pilot testing to establish content validity was considered, given the limited number of potential respondents available, this level of validation was not pursued so as not to lose valuable information sources.

Structured interview: involves collecting data where exactly the same questions are asked in the same order and participants are asked to select their response from predetermined answers. This mode of questionnaire administration afforded the researcher and/or participant the opportunity to clarify questions, responses options, and/ or responses provided. This supported the collection of more accurate data and helped to prevent non-response errors.

Triangulation: involves comparing findings from different sources to corroborate findings (Moran-Ellis, et al. 2006). For the purposes of this study, specific qualitative findings were used to confirm results obtained from the questionnaire. Specifically, the two variables that were cross

checked with the qualitative findings were the hospital wards where massage therapy was located and administratively incorporated (questionnaire item 1.1) and the team member status of massage therapists (questionnaire item 1.26).

3.9 The Research Team

This study was conducted and lead by the researcher (doctoral candidate – Anna Kania-Richmond), the supervisor (Dr. Marja Verhoef), the supervisory committee (Dr. Esther Suter and Barb Reece), and three research assistants (Heidi Rasmussen, Gillian Richmond, and Kathleen Oulette). The researcher conceptualized the study, developed the study protocol, conducted the research (data collection, analysis and interpretation), and was responsible for managing the progress of the study. The researcher is also responsible for all completed and planned information dissemination activities. The supervisor and supervisory committee provided consultative support throughout the entire course of the study, including study design, implementation, and the analytic approach. The supervisor was also involved in verification of the interview analysis by reviewing transcript coding at two stages. The research assistants were involved in generating and cross checking the comprehensive list of hospitals in the 33 CMAs, verifying and cross-checking of massage therapy service delivery at these hospitals, and recruitment and questionnaire administration at the study sites located in Quebec.

3.10 Ethical Considerations

In accordance with standard research practices, the study protocol was submitted for ethical review prior to the initiation of the study. Ethical approval was received from the Conjoint Health Research Ethics Board, Office of Medical Bioethics at the University of Calgary, in November 2011. Data collection commenced in January 2012. Various strategies were applied throughout the course of this study to ensure high ethical standards of the research process, which included:

- Prior to administration of the questionnaire or conducting of the qualitative interview, consent was reviewed. The researcher informed each participant of their rights to decline responding to any of the questions, their right to withdraw from further participation at any time, and that participation was voluntary. Any questions from participants were also addressed. Consent for

participation and to digitally record the interviews was obtained verbally over the telephone prior to data collection commencing.

- To ensure confidentiality and anonymity, participant's personal information (e.g. name, gender, job title, contact information) was removed from data files and will not be included in any information dissemination activities. Any direct quotes used in the presentation of qualitative findings will not be identifiable to the participant. Although permission to indicate the name of the study sites was obtained from the questionnaire respondents, it was later recognized that not all had the authority to give such permission. As such, to ensure confidentiality of the sources, the research team decided not list the names of the study sites.
- Data files which contained identifying information (name, contact information) were retained by the researcher in a secure location and were accessible only to the research team.
- All data collected during the course of the research was stored on a password-protected computer at the University of Calgary and an external hard-drive. All physical files (paper files, etc.) were maintained in a locked area during the course of the research and will be shredded upon completion. All electronic copies of collected data and analysis documents will be retained for 5 years, in accordance with the Conjoint Health Research Ethics Board standards, on a password protected external USB stick. Procedures used for the storage and disposal of research records were approved by the ethics office.

Chapter Four: Results – The Quantitative Analysis

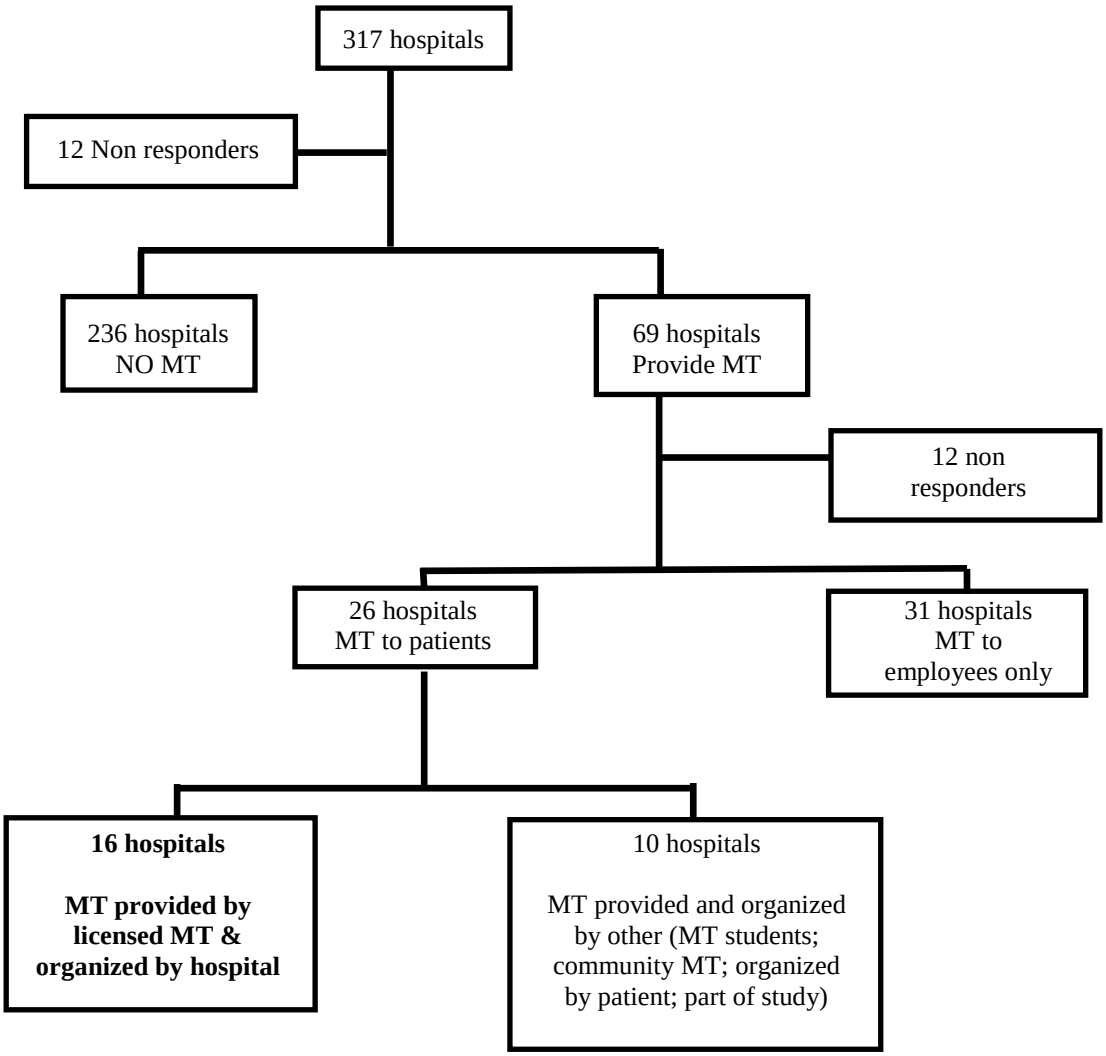
4.1 Introduction

This chapter presents the findings of the quantitative descriptive analysis conducted to address objective 1. Description of the study sites is presented in section 4.2. The ways massage therapy services are organized in the hospitals is presented in section 4.3. The descriptive survey analysis is based on questionnaire data collected at 15 (of 16) study sites. The questionnaire was not completed at site 16 as permission from upper management was not obtained.

4.2 Description of Study Sites

Figure 5 outlines the process for identifying the sample of study sites surveyed. Out of 305 hospitals in Canadian urban centers that responded, provision of massage therapy services was confirmed at 69 hospitals (22%). Of these, 57 responded to the request for further information to assess study eligibility; the inclusion criteria were provision of massage therapy services to patients by a licensed massage therapist which were organized by the hospital. Out of the 57 hospitals, massage therapy services were provided to patients at 26 hospitals. In 16 of these hospitals, massage therapy was organized by the hospital and provided by licensed massage therapists, and thus met the inclusion criteria for this phase of the study. These 16 hospitals, referenced as study sites from this point forward, comprised the study sample for the quantitative phase and the sampling frame for the qualitative phase. At more than half (31/57), massage therapy was a service provided or available only to .hospital employees.

Figure 5: Identification of Study Sites



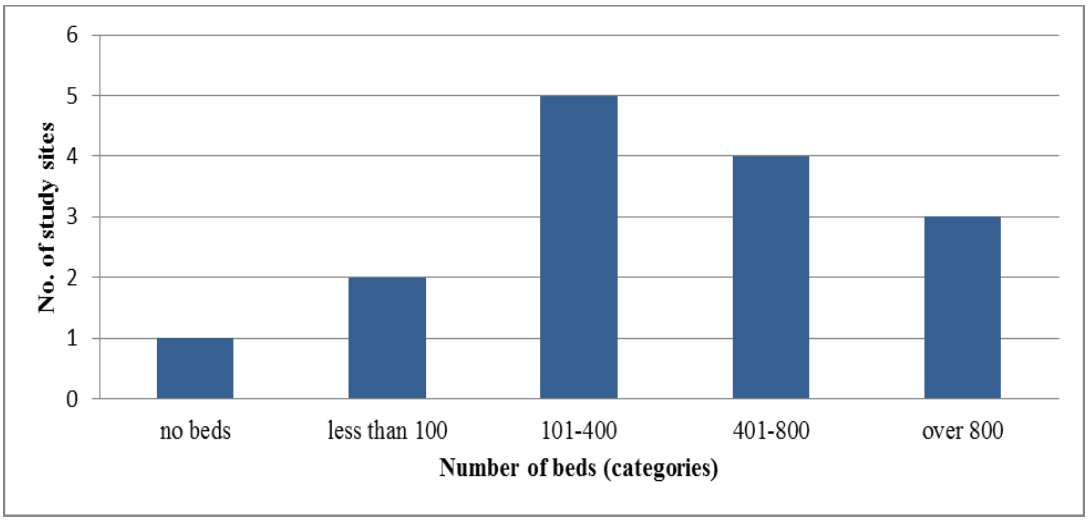
The HBMTQ was emailed to all 16 sites. A total of 15 questionnaires were completed. The questionnaire was not completed at one site as permission from upper management for the clinic to be involved in the study was not obtained. Thirteen were completed by telephone; the respondents were six managers and seven massage therapists. Two respondents, one massage therapist and one manager, opted to complete it independently and submit it via fax and email.

The 15 study sites were located in four provinces across Canada; ten were located in Ontario, two in Alberta and Quebec, and one in Nova Scotia. Interestingly, hospitals in only one of the three provinces where massage therapy is regulated, Ontario, provided massage therapy services to patients by licensed massage therapists. Just under half (6/15) of the sites were categorized as teaching hospitals; five were categorized as large community hospitals and four as small community hospitals. With the exception of one private hospital, all were public health care institutions.

Nine of the sites were formally affiliated with a university, including the University of Toronto (4/15), University of Ottawa (1/15), Dalhousie University (1/15), University of Alberta (1/15), University of Montreal (1/15) and McGill University (1/15). Eight of the sites provided focused areas of care. Three were specialty hospitals focusing on HIV/AIDS, cancer, and abdominal hernias, respectively. Two sites primarily provided rehabilitation services. One site was focused on women's health. Two sites were dedicated pediatric hospitals. The remaining seven study sites provided various services and programs for a broad range of patient populations.

The number of patient beds ranged from 13 to 2424. The highest number of sites (5/15) had between 101 and 400 beds (see Figure 6). One site had no beds as it functioned only as an ambulatory care facility. The total number of staff ranged from 26 to 13,113, with an average number of 3907 staff members per site. The number of volunteers ranged from 175 to 1200, with an average number of 512 volunteers per site. Only one site had no volunteers.

Figure 6: Number of Patient Beds Across Study Sites



Provision of CAM therapies by trained CAM practitioners, other than massage therapy, was available at less than half of the study sites (5/15) and included: chiropractors, acupuncturists, an art therapist, a music therapist, a reflexologist, a reiki practitioner, and a therapeutic touch practitioner. The most common CAM were chiropractic and acupuncture (3/15). When present, they were included in the same hospital ward as massage therapy. In addition to massage provided by massage therapists, provision of massage by other HCPs was reported at six sites. Specific massage techniques (e.g. manual lymph drainage) were used by physiotherapists at five sites and by nurses at one site.

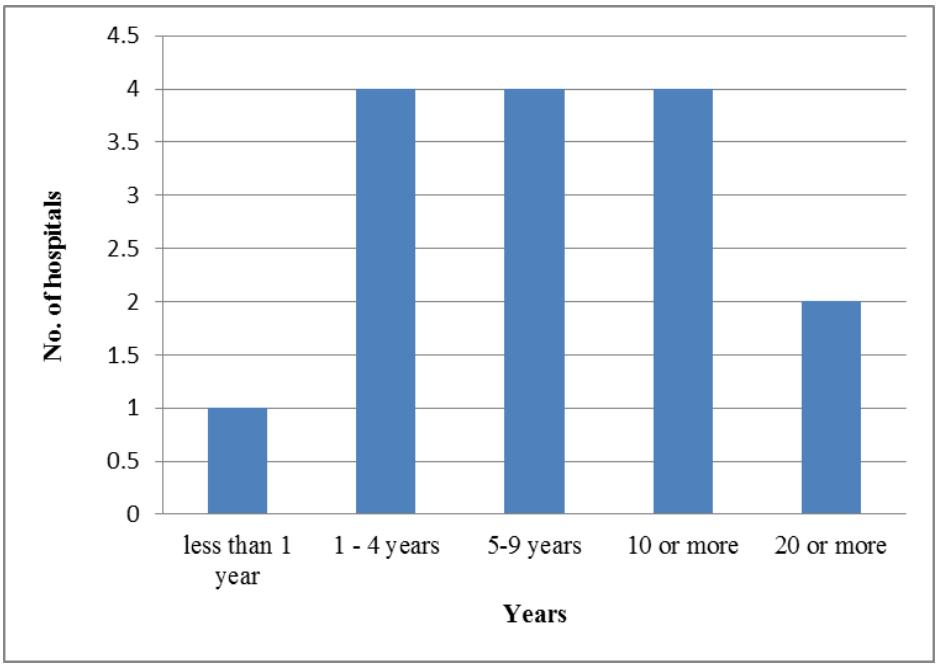
4.3 Delivery of Massage Therapy Services

4.3.1 Incorporation of Massage Therapy into the Hospital Structures

Delivery of massage therapy services at the study sites spanned a period of 24 years (see Figure 7). This included massage therapy services that have been provided between less than one and more than 20 years. At the study site where massage therapists were present for less than one year, the delivery of massage therapy services was just being developed and implemented within a private outpatient clinic. At the time the questionnaire was completed, the massage therapist had not yet been hired. At two of the study sites where massage delivery was present for more

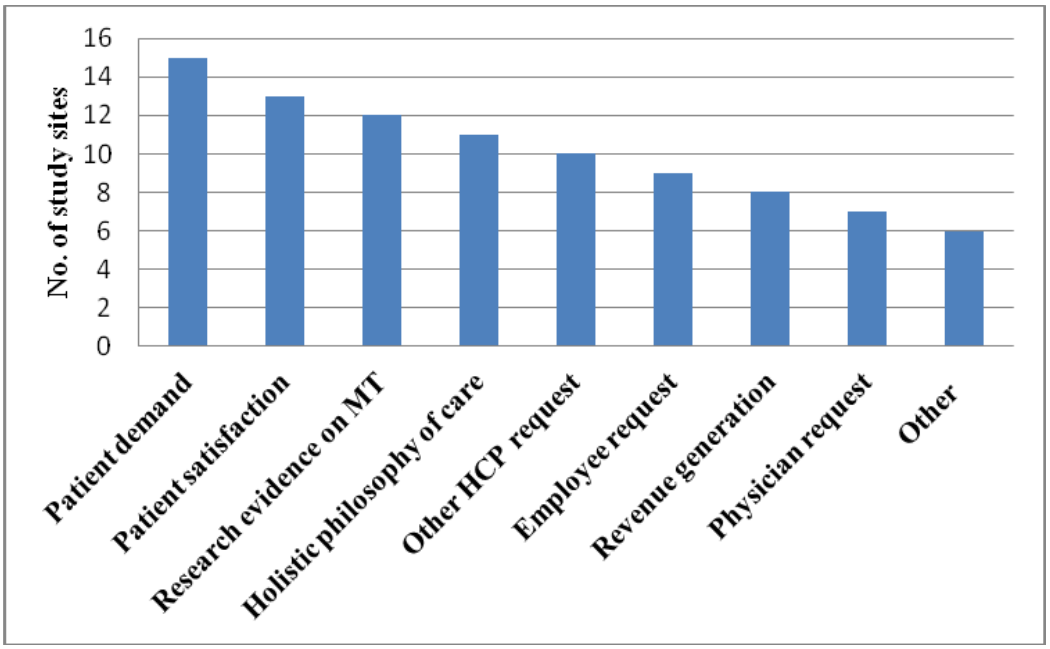
than 20 years, the services were well established within specific hospital programs and perceived to be an integral part of the care required by the patient population serviced. The average number of years massage services were delivered was ten years; this was spread out relatively evenly across a time period between two to 15 years for the remaining 12 sites.

Figure 7: Number of Years Massage Therapy Services Delivered at Study Site



A number of criteria were used by hospitals to determine the inclusion of massage therapy services (see Figure 8). Patient demand was the most common factor and was identified at all sites. This was closely followed by patient satisfaction (13/15), evidence of massage therapy effectiveness (12/15), and an overarching holistic philosophy of care of the institution (11/15). Employee requests and request by other HCPs for massage therapy services were reasons identified at just over half of the study sites. Physician request and revenue generation were reasons identified at around half of the study sites. Several additional reasons for inclusion were identified by the respondents, including: technical expertise of massage therapists, family requests, and a holistic philosophy of the funder of massage therapy services.

Figure 8: Criteria for Inclusion of Massage Therapy Services



4.3.1.1 Administration of Massage Therapy Services

The administration of massage therapy services were organized in one of three ways. At the majority of the sites (10/15), massage therapy was formally incorporated into a designated hospital ward such as a department, program, center or clinic. At two of the study sites, massage therapy services were incorporated into private clinics established on hospital grounds and accessible to patients. Lastly, it was organized as a stand-alone entity at three of the study sites, administered independent of any hospital ward. Massage treatments took place in a designated massage treatment space (13/15), patient rooms (9/15), and/or a common area shared with other HCPs (3/15).

4.3.1.2 Patient Populations

Massage therapy services were incorporated into the care of a broad range of patient populations. The majority of the patients treated by massage therapists were attending a rehabilitation program for treatment of injuries resulting from motor vehicle accidents, work site

accidents, sports injuries, neurological impairments resulting from strokes, and post-operative recovery (e.g. hernia and knee or hip replacements). Five of the study sites provided massage therapy to adult and pediatric cancer patients. Other specific patient populations with access to hospital massage services included: HIV/AIDs, high risk pregnancy, chronic pelvic pain, and palliative.

4.3.2 Incorporation of Massage Therapy into Patient Care Processes

4.3.2.1 Referrals to Massage Therapy

Across all study sites, HCPs internal to the hospital, including physicians, nurses, and allied health professionals (e.g. physiotherapists, occupational therapists and social workers) were able to refer patients to massage therapy. At the majority of the sites (10/15), patients could be referred to massage therapy services by HCPs external to the facility. Permission from a physician or a doctor's order to access massage therapy services was a requirement at four of the sites. In addition to referrals from HCPs, at more than half of the sites (9/15), referrals to massage therapy could be made by staff members such as managers, the patient's family, and insurance companies. Patients were able to self-refer to massage therapy at 13/15 of the sites.

4.3.2.2 Working with Others

Massage therapists across all sites had some level of interaction with other HCPs in relation to patient care. However, they were identified as members of patient care teams in less than half of the sites (6/15). At these six sites, massage therapists worked with a range of HCPs in delivering patient care. Most commonly it was physiotherapists and occupational therapists (5/6), followed by physicians (4/6), and nurses, psychologists, and social workers (3/6). Other HCPs included: a speech language pathologist (2/6), a nutritionist (2/6), an athletic therapist (1/6), a pharmacist (1/6), and a recreational therapist (1/6).

Massage therapists participated in various inter-professional activities. They documented on team charts (7/15), attended team meetings (8/15), contributed to formal patient reports (8/15), and had access to patient charts (11/15). With the exception of those at three sites, massage therapists who were members of patient care teams had access to patient charts,

documented their work on team charts, contributed to patient reports, and attended team meetings (see Table 3).

Table 3: Interprofessional Activities of Massage Therapists Who Are Team Members

Study Site	Access to Chart	Team Charting	Reporting	Team Meetings
1	√	√	√	√
2	√	NO	√	√
4	√	√	√	√
5	√	√	NO	√
8	√	√	√	√
9	√	NO	√	√

Massage therapists not recognized as team members (9/15 sites) were less involved in interprofessional activities than those who were team members. Their involvement in specific activities was also more variable. Massage therapists at five of these sites had access to patient charts. Massage therapists documented on team charts and contributed to patient reports at only three sites, and attended team meetings at two of the nine sites (see Table 4).

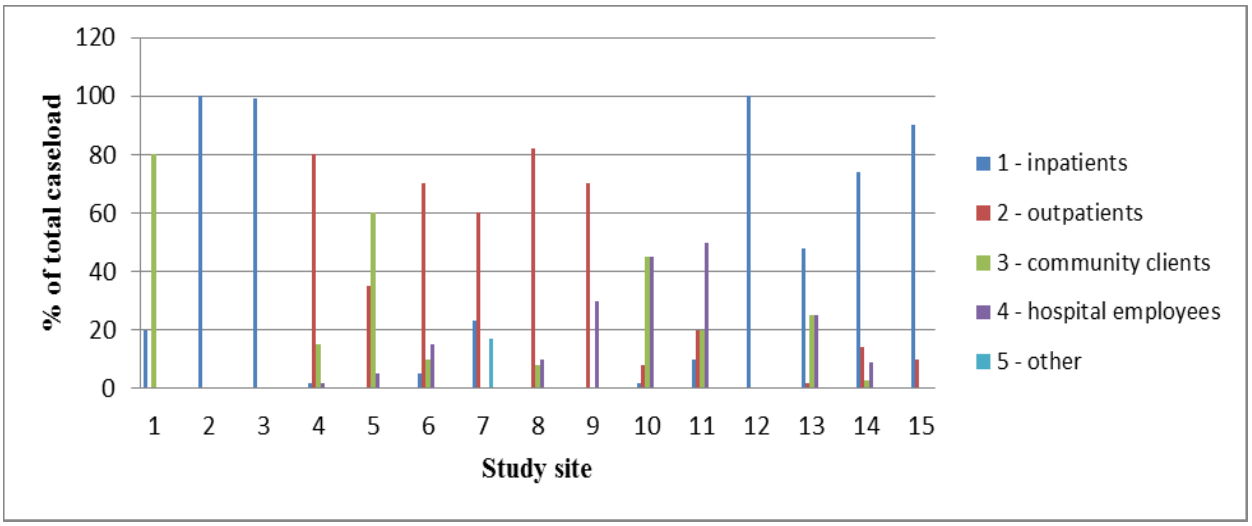
Table 4: Collaborative Activities of Massage Therapists Who Are Not Team Members

Study Site	Access to Charts	Team Charting	Reporting	Team Meetings
3	√	NO	NO	NO
6	√	√	√	√
7	NO	NO	NO	NO
10	√	√	√	NO
11	NO	NO	√	√
12	√	√	NO	NO
13	NO	NO	NO	NO
14	√	NO	NO	NO
15	NO	NO	NO	NO

4.3.2.3 Massage Therapists' Caseload Mix

Massage therapy services were accessible to inpatients, outpatients, community clients, and hospital staff[5]. Provision to only one type of patient group occurred at three sites. At nine of the sites, the patient caseload was predominantly comprised of one patient type and included a small number of other patient types. Otherwise, the patient mix making up the massage therapists' caseload was highly diverse and consisted of various combinations of inpatients, out-patients, community clients, and hospital employees (see Figure 9).

Figure 9: Composition of Massage Therapists' Caseloads



4.3.3 Organization of Massage Therapy Services

Massage therapy office hours were set Monday to Friday 9 to 5pm at around half of the sites (8/15). Otherwise, massage therapy services was available across a range of days and times, which included weekends, evening appointments, and a standing monthly occurrence.

Treatment duration options ranged from 15minutes to 90 minutes. The most common durations for massage therapy treatments were 30 and 60 minutes (13/15), at an average cost of $50 CDN and $76 CDN, respectively (See Figure 10). The fee schedules for the different treatment duration options varied across the study sites, with differences in fees ranging from $7 CDN for 15-minute treatments, to $50 CDN for 60-minute treatments (see Figure 11).

[5] Community clients were distinguished from outpatients as those who may be registered patients of the hospital but only accessed the massage services. Hospital employees were also designated as a separate out-patient category to distinguish the hospitals that organized massage services only for hospital employees.

Figure 10: Durations and Average Cost (CDN dollars) of Massage Therapy Treatments

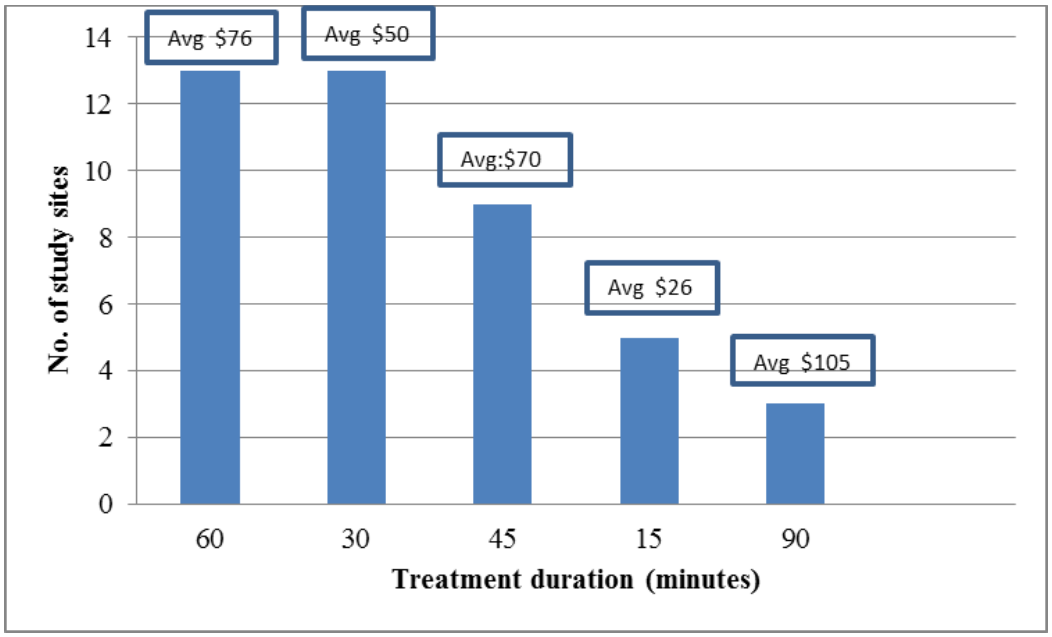
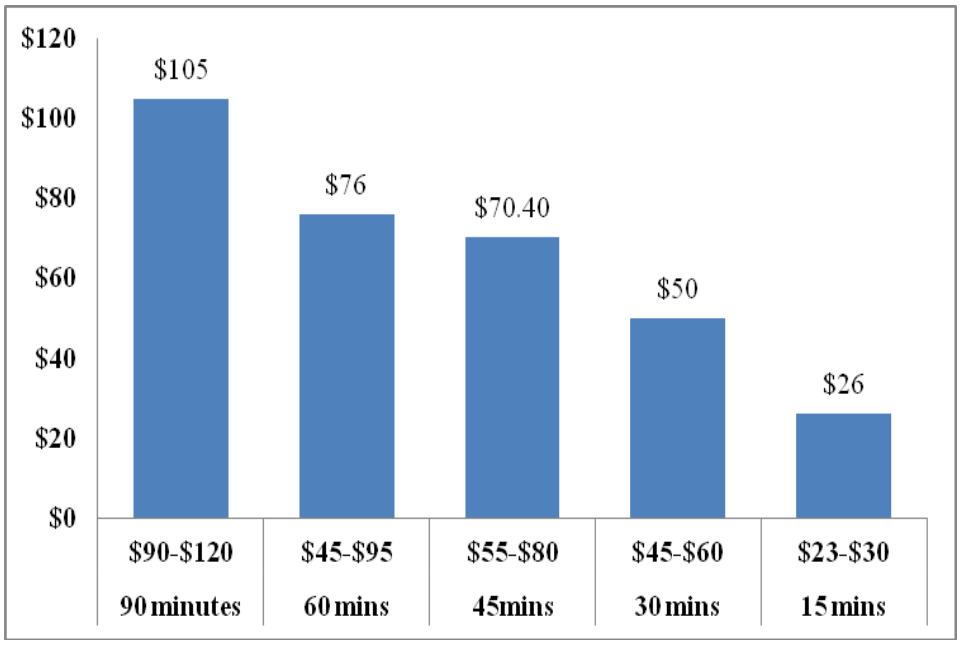


Figure 11: Average cost (CDN dollars) and Pricing Range for Massage Therapy Services.



The number of treatment hours provided per week per massage therapist ranged from less than five to over 30. It is important to consider that 20 treatment hours per week is considered a "full time caseload" for an average Canadian massage therapist in a private practice[6]. Massage therapists provided less than 15 treatment hours per week at five study sites, between 16 to 25 treatment hours at six sites, and over 25 treatment hours at two sites. There was also a high degree of variability in the number of treatment hours week to week, with the greatest range being from 10 to 35 hours. A consistent number of treatment hours per week were reported at only one site, which was 5 hours per day for 4 days of the week.

4.3.3.1 Funding of Massage Therapy Services

Massage therapy services were funded in a variety of ways. At ten of the sites, massage therapy was a direct out-of-pocket expense to the patient. It is important to note that at seven of these ten sites, coverage for massage therapy through extended health care benefits, such as employer benefits or Blue Cross, was reported. Other private insurers (motor vehicle insurance providers and workers' compensation) were reported as funding sources at seven sites. Massage therapy services were supported through donations and hospital foundations at four of the sites. At five sites, there was no charge for massage therapy services to the patients, since services were either fully financed through the hospital foundation (2/5), an external charity (1/5) or provided by volunteers (2/5). At around half of the study sites massage therapy services were funded through multiple sources. Seven sites relied on a mix of two sources, which most commonly included the patient and an insurance company. At one site, massage therapy was funded through three sources - the patient, insurance companies, and donations.

[6] This average is based on the researcher's experience as a massage therapist and information provided by two study participants during the qualitative interviews (site 1 and 4).

4.3.3.2 Employment of Massage Therapists

Of the 15 study sites where massage therapy was provided to patients by licensed therapists, nine employed less than three massage therapists. The greatest number of massage therapists at one site was nine, all of whom were volunteers. At around half of the study sites (8/15), massage therapists were hired as independent contractors. At five sites massage therapists were hospital employees, and at two sites they were volunteers. Of the hospital employees, four of the massage therapists were hired as casual staff, three were in full time positions, and one was in a part time position. All massage therapists hired as independent contractors worked part time hours. The volunteers work casual hours, most commonly a two to four hour shift once per month.

For hospital employees, salary reimbursement was based on an hourly salary or payment per treatment completed. Hourly salary rates ranged from an average of $21 to $50 per hour. If paid per treatment or as an independent contractor, reimbursement was based on a percentage split of the treatment fee of completed treatments. The most common percentage split was 60/40, where 60% of the fee was allocated to the massage therapist and 40% to the hospital. It is important to note that with the percentage split approach for service reimbursement, massage therapists were not paid for the time spent on administrative tasks, appointment cancellations, or if patients did not show for scheduled appointments. Massage therapists were reimbursed for services provided through a direct salary from the hospital (6/15), by invoicing the hospital (4/15), through direct billing to an extended health care insurance company (2/15), by an external charity that funded the massage therapy service (1/15), and by invoicing the private clinic operating on hospital grounds (1/15).

Hospital requirements specific to qualifications included licensing, insurance coverage, education, and professional experience. With the exception of one study site, all hospitals required massage therapists to hold a license to practice. In non-regulated provinces, this was a provincial business license. Practice and liability insurance coverage was a requirement at 12 of the sites. Educational requirements, reported by 11 of the sites, included graduation from an accredited school, successful completion of a 2200-hour massage therapy training program (reported only at study sites located in non-regulated provinces), and post graduate training in specialized manual techniques, for example, manual lymph drainage. Two of the sites required

direct patient care and treatment experience. At the majority of the study sites (11/15), the verification of credentials was assigned to the unit manager or director where massage therapy services were incorporated. At two sites, it was the responsibility of a specifically appointed massage therapist.

Chapter Five: Findings – The Qualitative Analysis

5.1 Introduction

This chapter presents the findings of the qualitative data analysis conducted to address objective 2. The chapter is organized into two sections. Section 5.2 presents the findings from interviews with massage therapists. Section 5.3 presents the findings with the other HCPs. Each section begins with a description of participant recruitment, the interview process, and participant characteristics. A brief overview of the findings is then presented, including a summary table of the emergent themes, which the reader is invited to use as a reference point when reading the subsequent detailed descriptive narrative of the qualitative findings. The qualitative analysis is of the in-depth interviews conducted with massage therapy participants recruited from 13 (of 16) study sites, and other HCPs participants recruited from four study sites.

5.2 Findings – Interviews with Massage Therapists

5.2.1 Participant Recruitment

Utilizing the sampling frame generated in quantitative phase of this study, 42 massage therapists were identified across the 16 study sites. Given the low number of potential participants and aim of generating a diverse sample, all were considered potential participants. Of those contacted, 25 volunteered to participate in the study and all completed one telephone interview. All of the massage therapists identified to be members of patient care teams (10/10) were interviewed. For massage therapists who were not members of patient care teams, 15 were recruited. Of those who did not participate, two were on maternity leave and could not be reached. Interviews with the remaining massage therapists were not pursued as it was determined that thematic saturation within this group was achieved.

5.2.2 Interview Process

Interviews were conducted between February 2012 and April 2013. A total of 25 interviews were conducted; one interview per participant. Most of the participants were excited about the project, eager to participate, and share their experiences. Several expressed that this was their contribution to the building of an evidence-base for the massage therapy profession. Participants appeared to respond to interview questions freely and many provided a significant

amount of detail pertaining to their experiences. Several of the participants found the interview challenging or thought provoking as they recognized that the concept of role is not one which they thought about often; they "simply did it". Interviews generally began with a discussion of tasks and functions. Most became more in-depth as the participants began to explore and talk through the various experiences and understandings about their role, and how they function within it.

5.2.3 Participant Descriptions

The majority of the participants were females (21/25), with a mean age of 45.9 (ranging from 26-59 years of age). The mean age of male participants was 41.8 (ranging from 36-54 years of age). Collectively, the average number of years the participants were practicing as massage therapists was 13.1 (ranging from 3 to 30 years); however, they ranged from new graduates with less than 5 years of experience (4/25), to massage therapists with 5-15 years of experience (13/25), to those with over 20 years (8/25). All participants had completed a 2200-hour training program (a standard set in the regulated provinces) at six schools in three provinces (four in Ontario, one in Nova Scotia, and one in Alberta). With the exception of two participants, all were trained in massage therapy only. For the two exceptions, one participant had previously trained as a social worker but was no longer working in that capacity and the other one was primarily working as a psychotherapist. Almost all participants had gained their professional experience at the current hospital only; three had experience from different hospitals. The number of years practicing in the hospital setting ranged from less than one year to 14 years, with the majority of participants practicing between one and five years.

5.2.4 Overview of Findings

From the perspective of the massage therapists, there role encompassed a number of different components or functions and they had various experiences pertaining to their roles, which are briefly outlined below (see also Table 5). The findings which arose from the qualitative descriptive analysis of interviews were classified into two overarching themes: a) role components and b) role related experiences. The primary clinical role identified by the participants was that of a health care provider, which included providing massage treatments,

conducting assessments, treatment planning, and reporting. A number of additional role components were also identified, which included: 1) Team member, 2) Program/clinic support, 3) Educator, 4) Promotor of the massage therapy profession, and 5) Researcher. Experiences related to their role which emerged out of the interview data included: 1) Role ambiguity, 2) Role overlap, 3) Role overload, and 4) Role conflict.

Table 5: Summary of Interview Findings with Massage Therapists

Over Arching Theme	**Theme**
Role components	Health care provider
	Team member
	Program/clinic support
	Educator
	Promotor of the massage profession
	Researcher
Role related experiences	Role ambiguity
	Role overlap
	Role overload
	Role conflict

5.2.5 Detailed Presentation of Thematic Findings

The findings are presented as emergent themes and related categories, supported by illustrative quotes which are incorporated into the text or referenced in Appendix J. Although a rich dataset was generated from the interviews with the massage therapists, in order to maintain an acceptable length of this document, only the most pertinent quotes are included. As noted in

the overview, findings were classified into one of two overarching thematic categories: a) role components, and b) role related experiences.

5.2.6 Role Components

When the question of "what is your role" was asked, almost all participants described activities, tasks, and functions that that they carry out as part of their daily routines and protocols. These were discussed in relation to patients care and, given the multi-professional nature of the environment, the other HCPs massage therapists interacted with. Participant's experiences suggested that functioning as a massage therapist also meant representing and establishing the massage therapy profession to a certain extent, which seemed to result in the development of other non-clinical roles, such as educator and promotor of the massage profession.

5.2.6.1 Health Care Provider

As health care providers, their responsibility was to provide massage interventions that were safe and they were expected to work and perform their therapeutic duties to the best of their abilities. In addition to expert knowledge of specific techniques or modalities, massage therapists were expected to have a working knowledge of the patient population(s) they provide care to. This includes an understanding of the condition and related signs and symptoms, and also more broadly the specific or unique needs of the patient population (see quote 1, appendix J). The core aspects of their function as a health care provider were: assessment, treatment provision, treatment planning, and reporting their work and observations.

Assessment: Massage therapists assess the soft tissues (musculature, fascial structures) and related injuries, gait, posture, and joint mobility. Applying an individualized approach to the care they provide, assessments are conducted to not only determine the massage treatment, but also the patient's ability to receive massage therapy and whether it is indicated. Furthermore, massage therapists are expected to be able to determine the boundaries of their professional scope and assess the need for referrals to other HCPs to ensure that adequate and quality care is provided to the patient (see quote 2). For a few of the massage therapists, conducting assessments was not a primary function as it was completed by the other HCPs as part of a

sequence of steps of the approach utilized in the clinic or program. In such situations, they would conduct assessments as it was a requirement of their professional regulating bodies. However, the assessment findings would not be formally incorporated into the overall team plan; rather they were used to confirm the team assessment, form the basis for massage treatment, or for completing any paper work requirements from the regulatory college.

Treatment: As HCPs, the primary therapeutic role of massage therapists was to provide hands-on massage treatments. For two of the participants, both from the same study site, their primary role was to teach self-massage to patients. Massage therapists applied modalities such as hydrotherapy, ultra sound, and provide exercise prescription, ergonomics assessments, and postural education. Massage was most commonly used for pain management, swelling management and reduction, and reducing soft tissues restrictions (e.g. muscle tightness, muscle spasms, trigger points, and scar tissue). At one site, the potential use of massage therapy to reduce post-operative infections at the incision site is currently under investigation. Another common use of massage therapy was to provide "comfort" in order to induce relaxation and a sense of calm. Lastly, although massage therapists are not trained to provide psychological treatment, almost all of the participants indicated that providing psychological support at some level was a part of their role.

The participants' experiences point to a number of reasons for the emergence of massage therapists in a psychological support role, most of which seem related to the nature of the massage therapy intervention. The quiet space where massage therapy takes place seems to be conducive to patients overall well-being - it provides "*a quiet place to get away from the chaos*" (P1, site 1). The length of the massage session ranging from 30 to 60 minutes of uninterrupted time provides an opportunity for "undivided attention" that creates a sense of connection and relation to one another. This was perceived to be an important support mechanism, especially for patients who are alone and/or institutionalized. Several participants recounted experiences where patients "emotionally opened up" during a massage session. This referred to a process whereby a patient would begin to talk about various issues and experience emotions related to those issues that were not intentionally pursued for therapeutic purposes by the massage therapist (quote 3). One participant explained that the reason for such occurrences is that treatment on the physical level and with it the release of physical tensions often has an impact on the psychological level

leading to the release of related or underlying emotions. The relaxation focus or orientation of massage treatments may also play a role. In addition to facilitating an overall reduction in stress and anxiety, the massage session may also provide the space where patients "let go" and release physical and emotional tensions (see quote 4). A couple of participants also explained that patients were not expected to talk about their problems or issues during their massage sessions, which may be the very reason why patients did open up to massage therapist. They were there to listen and support during the course of a massage - "*There's lots of times where the client is looking for an ear, someone to listen to…. So I can't say 100% that it's always physical. There's definitely an emotional side and um a social side too" (P1, site 1).* Lastly, massage therapists were perceived to be supportive through what a few participants referred to as providing "*the good touch*" (P6, site 4). Rather than being associated with medical "poking and prodding", it was a gentle or kind touch associated with creating a sense of well-being for the patient (see quotes 5 and 6).

Many participants described their approach in treatment provision as health-oriented and comprehensive. For some this meant providing massage within a compensatory approach to treatment. In such an approach, the focus was on the treatment of various areas, including but not exclusive to the site of injury or disease, in order to support the overall functioning of the patient, promoting healing and tissue health. For example, several participants commented on treating areas of the body which were not injured directly, however, were negatively impacted due to the injury sustained or a disease process (see quote 7). Such an approach meant providing a general or non-specific treatment to the full body, and potentially focusing on specific problem areas as they were identified. For several participants, this meant being aware of and taking into consideration emotional and social issues relevant to the patient. Lastly, the term "holistic" was used by a couple of participants in describing their work as a mind-body-spirit approach. Other participants reacted more negatively to the use of the term holistic in reference to massage therapy practice as they felt it did not reflect massage therapy practice. Notably, one massage therapist commented that in order to be taken seriously in a hospital setting, massage therapy had to be positioned as a physical treatment (see quote 8).

The hands-on approach to treatment seemed to be a unique and key aspect of massage therapy provision. Based on the participants' perceptions, it appeared that massage therapy is one

of the only therapeutic interventions that predominantly utilizes and applies manual techniques to the body. The hands-on approach also extended to teaching of massage techniques to patients as a self-care tool. Several participants emphasized that through the manual work, they provided the often lacking but needed touch component of care; it is the massage therapists who provide this element of care that is no longer carried out by other HCPs, such as nurses or physical therapists. Some of the participants' experiences pointed to the idea that the direct touch contact through manual manipulation of the body tissues and structures appears to be an important component of the therapeutic effect of massage therapy. It is seen as often vital for the wellness of individuals, especially those who are not touched or isolated because of their illness or injuries: *"Like I've treated people post cancer patient, where nobody touches them when they are sick so just a simple touch for them is huge."* (P9, site 6). Touch through massage was also conceptualized as a communication vehicle. This emerged in the context of care for those at the end of life who can no longer communicate verbally. As one participant reflected - *"I find that massage provides that bridge across the isolation. So I think it's one of the most significant things that it does" (P22, site 12).*

Treatment Planning: Massage therapists are self-determining professionals. They are expected to and fully responsible for determining the treatment plan specific to the massage intervention. Their professional judgement determines which techniques are applied, duration of each treatment, and frequency of treatments. Although access to massage was often dependent on referrals from other HCPs, the massage therapists determined their own treatment plans. As one participant stated: *"once the door closes, it's pretty much discussed with me and my client" … (P7, site 8).*

Reporting and Documentation: All participants reported that they were expected to complete documentation specific to their observations, detail the massage treatment, and outline treatment objectives going forward. In addition, most massage therapists also indicated that they were required to complete additional documentation as per the hospital requirements – providing massage therapy specific notes in team charts and workload tracking. They also have input in most reporting required by external parties (e.g. insurance companies) regarding patient progress, however, they do not have the authority to sign off on such reports. In addition, a few massage therapists identified that their role also required them to directly report any changes in a patient's

status or the development of new issues to the health care professional(s) in charge. Interestingly, several participants commented that they are often the first to notice changes given the nature of contact they have with the patients (see quote 9).

5.2.6.2 Team Member

For almost all participants, working in a hospital setting meant they were engaged in some form of interaction with other HCPs in order to provide patient care. The nature of how massage therapists worked with others varied across the study sites, and seemed to be significantly dependent on the context of their position as a member of a clinical or patient care team. Ten participants working at seven of the study sites[7] were identified as team members. However, even as team members, that did not mean that they were part of the team for every patient admitted. Massage therapy may be excluded due to financial reasons, in order to try other treatment options first, or because it was not considered to be an appropriate therapy for addressing the patient's needs or goals (see quote 10).

When massage therapists did identify as team members, a number of indicators were used by them to assess their acceptance or recognition as members of clinical or patient care teams: documenting on shared patient charts, access to all patient information, actively participating in and contributing to team meetings, receiving referrals from other clinicians, their clinical opinion being heard and taken into account, and consistent work hours. Although these varied from participant to participant and across settings, two key components of functioning as a team member and working with others which emerged out of the data were: communication and care coordination.

Communication: Massage therapists communicated with other HCPs regarding their progress, treatment plans, findings and patient updates using several methods: charting, during team meetings or rounds, email, and informal in-person consultations. Although not all massage therapists attended or participated in team meetings, and chart notes were not always the primary

[7] Two massage therapists at one study site which did not complete the questionnaire were identified as team members through the qualitative interviews. Therefore, massage therapists are members of patient care teams at total of seven (of the 16) sites.

source of information exchange, consulting with others seemed to be a core aspect of working with others. Several participants noted that consultations were not a top down directive from one HCP to another (e.g. physiotherapist to a massage therapist). Rather, they were based on an equal exchange of *"conferring back and forth with each other" (P1, site 1)* to share findings and generate ideas for complementary treatment plans (see quote 11). One participant also stressed the importance of consultations in the solving of problems related to treatment of complex patient cases:

> *"…some patients are very difficult because not only do they have lymphedema they have other co-morbidities. So sometimes the swelling, we try many different things but nothing seems to work so we'll consult with one another about what to do…Or other things sometimes, patients are more prone to cellulitis which is an infection, and often call one another in to see what we think. We cannot diagnose cellulitis of course, but we can call one of the physicians in to make that diagnosis. But usually we go to another." (P3, site 2)*

Therefore, it seemed that consultation enabled good patient care through a clear understanding of which component of a treatment plan each member is responsible for, the ability to problem solve together, opportunity for feedback and clarification, and timely adjustments to any new issues that may arise within a treatment session.

Care coordination: Providing patient care in a multi-professional environment and often across a continuum of care requires coordination of health care activities to ensure effective care and efficient use of resources. Based on the experiences of the massage therapists, care coordination often entailed referrals, scheduling, and task assignment.

Referrals, whether to massage therapists or made by massage therapists to other HCPs, were key in creating the team that would work together in addressing a patient's care goals. As massage therapists were often not part of a core clinical team, their inclusion on the team and in patient care was often dependent on referrals from the other professionals, in particular that of the medical doctors. When treating patients, several participants identify that one of their responsibilities was to identify appropriate referrals to other professionals in order to address any patient needs beyond their scope of practice (see quote 12).

Scheduling to ensure patients were able to access the various services was another important task in the coordination of patients' care. Given the limited or competing schedules of the various team members, it was an activity that most participants referenced challenging, but recognized it required attention for team work to be effective (see quote 13). Although some participants' experiences reflect that treatment schedules were accommodating to the massage therapists given their unique skill sets or contribution to patient care, some went through great effort to fit it into other's pre-set schedules. One participant stated:

> "*I try to coordinate my treatment with theirs (the physiotherapist). So if the PT is doing an exercise program, I'll always try to get the massage in after rather than before. That kind of stuff."* (P17, site 8)

At sites where massage therapists were incorporated into a specific program or clinic and were recognized team members, often the areas of expertise were well established. However, the day to day routines still involved regular communication to determine schedules and task assignment. Various factors could impact task assignment, including: 1) which team members were involved in care provision and their areas of expertise, 2) availability of the clinicians and patient, 3) duration of a treatment and what could be effectively covered in that time frame, and d) the sequence of therapies.

5.2.6.3 Program/Clinic Support

Some of the participants had an active role in the development and management of the massage therapy practice or the massage therapy component of a program. In this case, massage therapists assumed a range of responsibilities related to billing; organizing the massage therapists' schedules, and managing the caseloads; liaising with supervisors or the hospital management to address massage therapy specific issues; marketing; website maintenance; and running orientations sessions which introduced massage therapy to new patients.

One participant's role in program development went beyond massage therapy. In collaboration with a colleague, the recreational therapist, the participant initiated and managed the development of a wellness program. This program aimed to provide a range of resources, including but not limited to CAM therapies, to support the physical, mental, social and financial well-being of long term patients upon discharge and re-entry into the community.

Massage therapists also undertook a range of supportive tasks and activities. Many engaged in the development of materials such as intake forms and information pamphlets. A few were involved in training of new staff in areas such as crisis prevention or CPR. They carried out various tasks to ensure the efficient functioning of the clinic. For instance, replenishing basic supplies, maintaining the cleanliness of the treatment areas, and ensuring flow in the clinic by assisting patients as needed to proceed to the next point in their visit. Lastly, some were involved in planning activities to improve patient care and or team processes.

5.2.6.4 Educator

Many massage therapists functioned as educators in several ways within the hospital setting. Through formal and informal interactions with staff and patients and information materials like brochures and pamphlets massage therapists provide information and knowledge about the profession, often clarifying misconceptions and potentially incorrect labels (see quote 14). Many organized and ran educational sessions for staff as a means of building awareness about massage therapy and the massage services provided and potential therapeutic benefits. In the context of patient care, teaching patients self-care exercises and activities of daily living was a common component of the massage treatment protocol. Some participants provided training to patients in application of specific massage techniques. For example, teaching self-massage to lymphedema patients as a self-care tool or teaching infant massage techniques to new parents.

Participants were involved as educators in non-massage therapy related areas as well. For example, at one study site, the massage therapists were involved in providing education sessions on the health condition of concern, related risk factors and recommendations for treatment, for patients attending a specialized out-patient program. At the same site, they also taught non-massage techniques to colleagues to support their skill development in specific bandaging and taping procedures used in the management of swelling (lymphedema).

5.2.6.5 Promotor of the Massage Therapy Profession

Several accounts suggest that a number of massage therapists actively engaged in activities not only to promote their services but also more broadly the massage therapy profession. Direct promotional activities were often tied to core business processes of the clinic

or program to generate referrals and build or maintain active caseloads. A number of participants also recognize that their educational roles often overlapped into a promotional role where they used the educational session for staff and patients as an opening to build awareness of and create support for the massage therapy profession within their respective settings.

Promoting the massage therapy profession also emerged through the development of a professional voice. The ability to share their clinical opinions and be heard not only enabled participants to contribute to patient care, but it was also perceived to help build the credibility of the massage therapy profession as a whole:

> *"I speak up enough with my opinion …I think that how I conduct myself professionally makes it the product that it is. So if I was a therapist that attended rounds and didn't say anything and didn't add input and I didn't even talk what it was that I was working on with a client, then I could be perceived as not a health care professional but a complementary person on staff. But it's something that I feel um…like I always feel obligated to show that side because it's important for the profession, a little bit, like for credibility." (P1, site 1)*

One massage therapists framed her promotor role directly in that she wanted to help the massage therapy profession by using her experience to "open the doors" for its incorporation into hospital settings across Canada:

> *"And the other role that I feel that I'm trying to fill is to widen the array of places where RMTs (registered massage therapists) could work. I would like to use the work that I am doing there to open up doors to as many hospitals as possible." (P4, site 3)*

5.2.6.6 Researcher

Although several participants commented that they were involved in research processes to evaluate their practices, their role as a researcher in these settings really emerged through interviews with two specific participants (P2 and P4). Both of the participants described activities related to developing and undertaking research projects for the purpose of investigating specific outcomes of the massage therapy intervention they were providing. It is important to note that neither had any formal research training, and, research was not a requirement or defined function of their position.

Participant P2 took the initiative to develop an evaluation of the massage therapy protocol that had been implemented. The project was formally supported by the hospital and her

immediate manager, and funding was secured through a national level funding competition. It was implemented in collaboration with two medical students at the local university registered in an elective course on determinants of community health who expressed interest in the topic.

Participant P4 also aimed to evaluate the massage therapy service and related outcomes. Her first self-guided research-type endeavours involved the collection of demographic information to understand the types of patients that were self-selecting to receive massage therapy. Her second foray into research was in response to physicians' resistance to massage, specifically the effect of massage therapy on post-surgical outcomes. With approval and guidance from the chief surgeon, she conducted a preliminary analysis of outcomes that were highly relevant and quite contentious to the setting. The findings suggested a positive impact of massage therapy and she proactively continued to seek out support to conduct a more formalized analysis of the data compiled within the hospital's patient database.

5.2.7 Role Related Experiences

In discussing their roles, a number of themes emerged out of the participants' experiences related to the development of their roles, positioning of the massage therapists' role within this specific health care setting, and undercurrents of tension that impacted how massage therapists functioned within their role.

5.2.7.1 Role Ambiguity

Ambiguity about massage therapists' role on the part of massage therapists and other professionals emerged as a common theme for almost all of the participants. A number of factors that may contribute to this occurrence were identified in the interviews. First, formalized procedures or processes which explicitly defined the role of the massage therapist either in the hospital or within the specific hospital unit where massage therapy was incorporated were uncommon. Aside from providing effective and safe massage treatments, it appeared that expectations and responsibilities were infrequently discussed or determined (see quote 15). The inability of participants to respond or elaborate on the responsibilities and expectations of massage therapy was reflective of the lack of clear delineation of the massage therapists' role (see quote 16). A second reason may be related to the fact that massage therapy is not an

established profession in the hospital setting. Several of the participants perceived the other HCPs and hospital administrators as having a limited understanding of what massage therapy is or what massage therapist can do in the hospital context (see quote 17). The ambiguity about the massage therapists' roles was evident in the types of perceptions and assumptions held about massage therapy by other hospital staff that the participants encountered or were confronted with. Several commented on the fact that massage therapy is seen only as an intervention "just for relaxation". This was interpreted by participants as implying that it had minimal medical value or that it was less valued than standard medical procedures. An understanding of the massage therapists' ability to also effectively address, for example, soft tissue dysfunction or pain was perceived to be lacking (see quote 18).

Another perception which reflected the lack of understanding of massage therapists' roles as HCPs was its association with a spa service. The implications of this perspective resulted in the positioning of massage therapy not as a health care service but rather as a commercial or revenue generating service. For example, a marketing strategy proposed at one of the sites involved selling of packages of massage sessions, where the fifth or tenth session would be discounted or free, in order to generate business. However, as one participant pointed out, the key issues with such a strategy are that this is not allowed according to the massage therapy regulating body and it would devalue massage therapy as a health care service (see quote 19).

The response of surprise from other HCPs to a massage therapist's knowledge and ability to contribute to solving clinical problems is also an example of how the massage therapists' role as well trained and educated therapists are not recognized by other HCPs:

> *"I think it's vital how much education the massage therapist has about the body and how much we study about pathology and neurology and physiology. Because, when you are participating in rounds, you understand the entire medical lingo. And that is really really huge. And there are times that you will recognize something that's happening with the client that maybe the medical team doesn't pick up on. So it's always surprising to them when you say, "hey I think it's this" and they're like "oh, I never thought of that". (laughs). So I think there is an element in this day and age where people think that all we do is massage but it's very unique how educated the massage therapist of Ontario are." (P1, site 1)*

Lastly, the lack of clarity regarding massage therapists' roles is also reflected in reasons for referral to massage therapy or massage consults. Frequently other HCPs may not fully

understand the scope of massage therapy practice or skills that lend themselves to treating certain patient populations. However, some were open to exploring massage therapy as a treatment option and sought out the input of the massage therapist. Some massage therapists received this positively and as an opportunity to further develop or define their roles. For others, it signified a point of disconnect and clear lack of understanding.

> *"There are…a lot who don't understand…like when we get called into ICU…well, I can't do much, you know. It's…and it seems like there is a disconnect between what everybody really does." (P19, site 10)*

However, participants acknowledged that there were times when it was the other HCPs who contribute to the clarification and further development of the massage therapists' role:

> "*And I've also worked with people for quite a while and then the situation changes. They go into basically, end of life. When I first started working there, I used to say to the nurses maybe he doesn't need massage maybe he just wants to be left alone. And they would all say no, go and work because it is really comforting. And that's the thing, if you're not sure just go and ask the nurses. They always know what's going on. They're really good" (P21, site 12)*

The impact of role ambiguity on the participants regarding their own roles varied across the sites. It ranged from a sense of functioning in "*no man's land*" (P15, site 7), to a perception that massage therapy was less valued, to a sense of frustration. Lack of role clarity contributed to the underlying tensions or challenges specific to the massage therapists' roles, which are discussed at a later stage in this chapter in context of role conflict.

5.2.7.2 Role Overlap

Role overlap with other HCPs was acknowledged by many of the participants; interestingly, the perceptions regarding the degree of overlap ranged from "very little" to "tremendous". It was recognized as inevitable when working with other HCPs and in a collaborative practice context. It did not appear to be a source of tension or conflict between the massage therapists and other professionals. Although not perceived as an issue that required resolution, it was something to be avoided or prevented. It was recognized that the overlap may create duplication that would be problematic or cumbersome for the patient.

The massage therapists' roles seemed to overlap most frequently with physiotherapists and less so with the other HCPs they interacted with, such as occupational therapists and an athletic therapist. There was no report of overlap with nurses, psychologists, or social workers. It most commonly occurred with the use or application of the same techniques or modalities on the same patient for the same purposes by two or more different therapists. This included, stretching, ultra sound, hydrotherapy, compression bandaging, and techniques such as muscle energy, trigger point therapy, rib springing, and specific massage techniques. Other areas of overlap included: exercise prescription, assessment, and reinforcement of self-care activities. In a few instances, overlap occurred in terms of assessment or related protocols due to the requirements of the different professions. Recognition of overlap was based on a general understanding of other areas of practice, information obtained from the patient about their therapies, and for those who have access, through team meetings, when care plans were discussed.

It appeared that role overlap or the potential of overlap was dealt with in several different ways. Most commonly it was through consultations with the other HCPs with whom overlap did or could occur. The consultations were often informal and participants who were involved in such processes indicated that the exchange was equal and mutual; therefore, it was initiated by any of the clinical staff involved in a patient's care. Through the consultation process, the involvement of each HCP was discussed in context of the patient's needs and overall treatment goals. The HCP who would be most suitable in providing specific therapeutic elements or components within an overall treatment approach would be identified. Interestingly, even then the massage therapists might still include elements into the massage sessions that are the primary domain or focus of another profession. For example, exercise recommendations, which were considered to be the therapeutic domain of a physiotherapist. In such situations, again consultation was used as a tool to inform others and to obtain feedback (see quote 20). In several settings, there was an established predetermined understanding amongst the HCPs as to who took on which components of treatment when all were involved in the care of the same patient. This understanding was based on recognized areas of expertise of each of the professionals involved. In such situations, the massage therapists were commonly identified as the soft tissue and manual techniques experts:

> *"Um, that is usually very simple. I don't' think it's ever really been spoken out load. I basically back off on the exercise portion of it and the PT and at usually say I'm not going to do the soft tissue stuff because there is someone else who can do that. So we each kind of focus on our areas of expertise." (P8, site 5)*

Overlap was also circumvented by taking the perspective that patients often had multiple issues and not all could be effectively treated or addressed by only one practitioner. As such, an overall treatment plan could involve each practitioner treating one of several issues the patient is presenting with (see quote 21). Such plans were often developed with input from team members and translated into a treatment schedule for the patient.

In these ways, massage therapists modified and adapted their scope of practice specifically in response to situations where overlap did occur or the potential of overlap existed. Participants did not appear to perceive this as a limitation or an inability to fully practice, but rather an inherent part of working in a team or in situations where multiple HCPs were engaged in patient care.

5.2.7.3 Role Overload

Almost all of the participants were hired or contracted by the hospital explicitly for the purpose of providing hands-on massage treatments. However, it became apparent that the work of the massage therapists extended beyond the provision of massage treatments only. Many of the participants were engaged, formally and informally, in various types of additional activities and assumed responsibilities that included administration of the massage practice, education about massage therapy, research, and being an active team member. For example, one massage therapist quickly listed off the various tasks she regularly carried out during the short periods between patients:

> *"…and then there is also website maintenance, files, making sure any money is coming back in, the notes that required, any extra hospital documentation that is required. Booking, invoicing, answering phone calls…you know, just your typical run of the mill office stuff. So yeah, we do a little bit of everything." (P19, site 10)*

Most seemed to take pride in their work and accepted these responsibilities, as they perceived it was what needed to be done for massage therapy to be incorporated and accepted

within the hospital setting. For some, however, this clearly led to role overload, where they felt that the demands were very high and they were unable to perform their roles adequately.

The occurrence of role overload was often related to a lack of time. Completing multiple tasks within a limited time frame were a commonly reported source of perceived role overload (see quote 22). The time factor was also evident in participants' experiences when they were unable to include or carry out certain activities within the allocated work hours. The following participant noted how just managing the full caseload and demands to fit in new patients took time away from other activities that would enable the massage practice to grow and expand:

> *"Yeah, there's a lot of things that we would like to do, but it's just that our practices are so jam packed and busy, we haven't really had the time to really expand. We have plans to do more public speaking with and for the public. It's just that it's just been too crazy."* (P19, site 10)

Role overload also stemmed from to the lack of human resources and limited space to meet the increasing demand for the massage services, which was often perceived to be not supported or addressed by hospital management. As a result, some of the participants worked extended hours and prolonged shifts in order to meet the demands of the patients, and to some extent, expectations of the employer in maintaining a busy or profitable practice (see quote 23). The effects of limited staffing and resulting overload were also experienced by massage therapists who were new to hospital based practice. Training and orientation provides new staff the opportunity to understand their responsibilities and what is expected of them within the specific unit and broader hospital setting. Lack of training poorly prepares the therapists for the job at hand and may lead to a sense that the demands exceed their capabilities or ability to perform adequately. One participant's highlights how staff shortage meant having to quickly take on the full set of responsibilities with limited training and preparation, and the sense of overload that was experienced:

> *"…we had training days, with one of the other therapists had just left and we were overloaded with patients and they were like here you go have a nice day. I'll give you an hour at the end of the day with (name) to answer any questions. And it was pretty much like sink or swim. We did have training but we were also just put into that role with a full patient load." (P6, site 4)*

For a few participants, the overload was associated with a sense of overwhelm in treating certain patient populations. The ability to effectively function as a therapist or maintaining morale when dealing with challenging patients on a regular basis may lead to a sense of overload. One participant's reflections capture this point:

> *"I would say the biggest challenge is that we follow a harm reduction role model here. So that can be very challenging because we are working with some very self-destructive individuals. So that can have a negative impact on staff. It can be very difficult to deal with." (P 1, site 1)*

Addressing or dealing with situations that result in role overload was challenging, perhaps as challenging as identifying when it is occurring. However various strategies to reduce or minimize overload or its impact were identified in the experiences of the participants. For example, two of the participants reported that the approach to dealing with high demand for massage therapy and few therapists who had limited availability was to restrict access to massage therapy to a smaller area of the hospital or patient population. At another site, the massage therapists began to prioritized patients based on the expectations set by a directive from upper management. The participants treated patients with a specific condition first, after which, if there were appointment times available, patients with other complaints could be scheduled for a massage treatment (see quote 24).

5.2.7.4 Role Conflict

Conflicts relating to roles arise when different individuals, including the role occupant, hold incompatible or conflicting expectations of or in relation to the same role. Overt conflict pertaining to their role appeared to be rarely experienced by the participants. However, throughout the interviews, albeit subtle and often indirect, tensions pertaining to the massage therapists' roles became apparent. These resulted from a lack of understanding about massage therapy, lack of acceptance of the massage therapists, adapting the massage therapists' role into a hospital setting, and differential access to opportunities.

Lack of understanding about massage therapy: Most of the challenges experienced by massage therapists seemed to be related to the establishment of their role, which involved an understanding of what massage therapists do and the emergence of their role within the hospital setting. The association of massage therapy with a spa service, as discussed above, was perceived by almost all participants as incongruent with how they perceived their professional role within the hospital setting. For some participants, this became a challenging association to overcome in establishing their role as HCPs (see quote 25). Another key issue creating tensions between massage therapists and other professionals was the lack of understanding of massage therapy practice – the types of techniques used and applied by massage therapists, treatment decision making, and knowledge (anatomical, pathology etc.) that forms the basis of the massage therapy practice. This was reflected in situations where massage therapists were reprimanded for a course of action that falls within their scope of practice but was perceived by others as overstepping into another's professional domain or territory (see quote 26).

Lack of acceptance of massage therapists: The lack of acceptance of massage therapists was apparent in the experiences of several participants where the massage therapists were relegated by others to a peripheral position in the patient care processes. For example, massage therapy was resorted to when a patient's issue was not resolving with standard care processes – "*the last ditch effort*", as one massage therapist referred to it (P8, site 5). The lack of acceptance was particularly challenging for massage therapists who were identified as team members, and yet, not fully integrated into the team processes. This is reflected in the experience of two participants from one site. Although massage therapy was recognized as a core component of the clinical team, unlike the other team members, massage therapists were not incorporated into various activities shared by others within the trans-disciplinary team model used in the clinic. The inconsistency in the discussion and actual practice of massage therapists' involvement in team activities was a source of frustration and discontent voiced by the two participants.

Incongruence of expectations were also evident in situations where massage therapists were hired and directed to provide massage treatments yet patient access to massage therapy was actively restricted by other HCPs. One participant described situations where some medical doctors took action to intentionally exclude massage therapy from patient care, and to publicly slander the massage therapist (as expressed by the participant). The resulting conflict was

particularly poignant in that the reasons and accusations underlying their actions appeared to be based on incorrect information and personal preferences or beliefs about massage therapy (see quote 27).

Although functioning on the periphery or in a marginalized position is frequently cited as a source of tension, it may also be a reason for the lack of direct conflict reported. As one massage therapist pointed out: *"… I think it's because we are so invisible that there is nothing to be conflicted about, which is good." (P20, site 12)*

Adapting the massage therapists' role to hospital settings: For some of the participants, challenges relating to their role arose when adapting their practice to the requirements of a hospital setting. Adjusting how they worked and maintained control over their work proved to be challenging for some. This was especially the case when their scope or breadth of practice was reduced or restricted within the hospital boundaries in comparison to their private practices. Some participants' experiences point to the difficulties of negotiating between conflicting expectations between hospital management, themselves, and their patients. For one participant this meant choosing to provide treatment in order to address a patient concern or need that, although within their scope, went outside the specified requirements of the hospital or hospital-determined roles.

Differential access to opportunities: Outside of patient care, situations were identified which suggested incompatibility between the expectations of massage therapists and others (e.g. HCP, managers) related to the massage therapy position. The experience of one massage therapist in particular provides a suitable example. At this setting, as hospital employees, all HCPs were provided with various educational or mentorship opportunities to advance their professional/career development. Although the massage therapists had the same employment status and professional recognition as the other HCPs, they were not afforded the same opportunities as the others. They had limited support or access to educational or mentorship opportunities to advance or support their career development. The differential treatment of massage therapists, who were otherwise recognized as employed HCPs as the other HCPs, created a conflict in the expectations specific to the massage therapists' position.

When conflicts or challenging situations specific to massage therapists' roles manifested, not all participants actively pursued a course of action to address or deal with the issues. A few of the participants did not want to exacerbate the situation and so chose to leave it alone or avoided the individuals that were involved – "*…I just didn't want to make any waves"* (P4, site 3). It was also recognized that since massage therapy is not a standard intervention in the hospital setting, an adjustment period to adapt and learn about massage therapy and how it may contribute to patient care and outcomes was necessary:

> *"…I didn't make a big deal about it because I know that some people need a little bit more time to adjust to a new program. You know, they don't know me, they're not sure how it's going to work. So yeah, I didn't want to be too harsh on them for being cautious". (P4, site 3)*

Some however, chose to address the problems or deal with the sources generating the challenges regarding their role directly. To that end, two approaches for managing tensions and to align expectations of the various stakeholders involved regarding massage therapists' roles were described by participants: using a mediator and education.

Using a mediator: At several sites, when an issue specific to the massage therapists or massage therapy provision did arise, it was brought to the attention of and dealt with by an identifiable mediator – an individual removed from the specific situation and one who was in a position to deal with the conflict-oriented situations. This was not one consistent individual or position; depending on the site and the arrangements within the hospital this included a "massage lead" position, the chief of staff, program coordinator or manager, or the head nurse of a unit.

Education: Several of the participants indicated that their primary way of addressing challenges resulting from a lack of understanding of massage therapy or clarity regarding massage therapists' roles was through education. A range of strategies were used to educate or disseminate information about the benefits massage therapy and its position as a health care profession, including: marketing materials, seminars, observation for medical students, or promotional massage treatments for staff. Although the direct impact of such interventions was not measured or reported, for massage therapists who had the abilities or the time to pursue such a strategy, they reported a positive impact through a change in attitudes towards massage, which was most often reflected in referral patterns to massage therapy.

5.3 Findings – Interviews with the Other Health Care Professionals

5.3.1 Participant Recruitment

The other HCP participants were recruited from study sites where massage therapists were identified as members of patient care teams through the survey. The purposive sample sought was one where each profession on the team was represented by at least one participant. It was decided by the researcher and supervisory committee that this would provide a meaningful depiction of the "other HCPs" perspective regarding massage therapists' role. Although recruitment efforts were made for one year (March 2012 to April 2013), it proved to be highly challenging. Despite numerous emails and follow up phone calls with potential participants and internal contacts (predominantly the massage therapists and managers at three sites) to facilitate recruitment, it was limited. In response to the research request, 12 individuals volunteered to participate. Although a range of health professions were represented, the purposive sample sought was not established and thematic saturation was not achieved.

5.3.2 The Interview Process

A total of 12 interviews were conducted; one interview per participant. All of the participants responded to interview questions and were engaged in the topic of discussion. Many experienced and voiced difficulty in responding to some of the questions and most referenced their own role as a means of generating a response to some of the questions. The majority of participants discussed massage therapy in an affirmative manner and appeared to have good working relationships with the massage therapists. It is important to note that the positive attitude towards massage therapy may be a reflection of the sample – individuals who were directly approached by the massage therapist or self-selected to complete the interview. As such, it can be assumed that the perceptions of the massage therapists' roles presented by this group are from an accepting perspective.

5.3.3 Participant Descriptions

The purposive sample of 12 participants comprised of: managers (3); a social worker (1); a recreational therapist (1); physiotherapists (2); a medical doctor (1); registered nurses (2); a nutritionist (1); and, an athletic therapist (1). Almost all of the participants were female (10/12).

The years of professional experience at the study site ranged from less than one year to over 15 years. For the majority of participants (9/12), their current position at the study site was their first exposure to working with massage therapists in a health care setting.

5.3.4 Overview of Findings

Although the recruitment process resulted in a sub-optimal sample and lack of thematic saturation, in consultation with the supervisory committee, the decision was made to present the findings from the available data. Given the inherent limitations, the findings of interviews with the other HCPs are presented and interpreted with caution. The limitations of this dataset also precluded the ability to make conclusive statements and compare the perspectives of other HCPs to those of the massage therapists. However, these findings do provide some interesting insights and are informative regarding the perceptions of massage therapists' roles by others. The findings which arose from qualitative interviews with the other HCPs are briefly outlined next and summarized in Table 6.

The perspectives of the other HCPs are based on the direct and indirect contact with massage therapists not only in context of patient care, but also through non-clinical activities such as committee work, program development, and research. Findings were classified into two overarching thematic categories: 1) roles components, and 2) role related experiences. From the perspective of the other HCPs, the primary components of the massage therapists' role were that of a health care provider and team member. Additional non-clinical components included: Program or clinic support, Educator, and Researcher. Perceptions regarding the massage therapists' role were reflected in the following themes: 1) Massage therapists are valued, 2) Role overlap, 3) Massage therapists provide a supportive therapy, 4) Increasing acceptance of massage therapists, 5) Massage Therapists are on the periphery, and 6) Ambiguity about massage therapists' roles.

Table 6: Summary of Findings – Perspectives of Other Health Care Professionals About Massage Therapists' Role and Role Related Experiences

Over-Arching Theme	Theme
Role Components	Health Care Provider
	Team Member
	Educator
	Program and Clinic Support
	Researcher
Role related experiences	Massage Therapists are Valued
	Role Overlap
	Massage Therapists Provide a Supportive Therapy
	Increasing Acceptance of Massage Therapists
	Massage Therapists are on the Periphery
	Ambiguity About Massage Therapists' Roles

5.3.5 Detailed Presentation of Thematic Findings

The following is a detailed presentation of perceptions of other HCPs related to the massage therapists' role. The findings are presented as emergent themes and supported by illustrative quotes, which are incorporated into the text or referenced in Appendix K. In order to maintain an acceptable length of this document, only the most pertinent quotes are included. As noted in the overview, findings were classified into two overarching thematic categories: a) role components, and b) role related experiences.

5.3.6 Role Components

All participants interviewed were able to explain, at least to some degree, the role they perceived the massage therapists they worked with to hold and carry out. In addition to clinical roles, several other role components were identified, which provided useful insights into how massage therapists' roles are perceived and received by other HCPs.

5.3.6.1 Health Care Provider

The clinical role of the massage therapists as a health care provider was the most commonly identified and discussed. Massage therapists were expected to provide massage-based assessments and treatments to address a range of issues, including pain, swelling, soft tissue tightness and restrictions, and mental health issues such as stress, depression and anxiety. The massage therapists' niche or areas of expertise appeared to be in palpation-based assessment of soft tissue and application of manual techniques to achieve both physical and mental health outcomes (see quote 1, appendix K). In addition, massage therapists were expected to have a working knowledge and understanding of the patient population, including symptoms, specific issues, and potential needs. For instance, a manager at study site 1 explained:

> *"So she has to be up to date with HIV and all of the concepts, and the massage, what am I touching and who I am doing this for. And she has to have a working knowledge not only of the disease process of HIV but what are the substances doing for this client? What are the mental health issues? Do I need to make sure they see our consulting psychiatrist? If they are only my client, how do I impact on the other parts of their health that's there for them?" (OP1, site 1)*

Although massage therapists were perceived as HCPs, massage therapy was viewed by some as a non-medical intervention. From their perspective, massage therapy was not about administration of medications or addressing the disease-related processes. For one participant, unless a therapy is funded through the (provincial) ministry of health, then it is not considered to be part of the medical care (OP 9, site 3). As a non-medical intervention, participants described massage therapy as providing "*a holistic approach"* (OP2 and OP3, site 2) or a "*total care and wellness approach"* (OP1, site 1). This was meant to reflect the fact that massage therapists treated within a more comprehensive plan of care, considering physical and mental health outcomes, and not a localized focus on the area of injury or disease process. Intentionally framed as being different from a medical approach, this was perceived as a positive contribution of massage therapy to patient care and a team-based approach to care provision.

Some of the participants expressed that their scope, in terms of what modalities they included in their treatments, was affected by the presence of the massage therapist(s). For example, one participant, an athletic therapist, explained that with the availability of massage therapy, she no longer included any specific manual work on soft tissues as that had become the role of the massage therapist. Another participant, a physiotherapist, explained that although her training included an exam on massage techniques, she now leaves the massage component of her treatment to the massage therapist.

5.3.6.2 Team Member

The fact that the massage therapists were considered as team members was also apparent in the ways the other HCP participants related to them and inclusively referenced massage therapy; the position taken was that of "us" rather than "they vs us". For example: "*we do this*…" (OP12, site 5) or "*I think there is a good respect between us. That we do recognize each other's roles*" (OP4, site 1). The fact that massage therapists were considered integral to the patient care teams was also evident from various comments made by participants. For example:

> "*…she's just such an important part of the team and I feel very lucky that we have a full time massage therapist. And it wasn't full time back in the beginning. But I think it's just so important."* (OP2, site 1)

> "*Again, I would just echo that they are a truly integral part of our team. I don't think it would be the same if they weren't a part of it. So we are truly value what they do and are happy to have them as part of our team." (OP5, site 2)*

As team members, massage therapists were expected to communicate their observations and findings, consult with others to determine treatment plans and scheduling, and provide recommendations regarding the appropriateness of massage therapy on a case-by-case basis. They were expected to participate in overall care of patients by notifying others when issues of concern arise that require attention to ensure quality care provision and safety of the patient. As one manager stated:

> *"I think it is the same as for any of the other team members in the sense that we all have professional conduct, we all work from a framework of patient centered care, where we listen to the patient, what their needs are, what their issues are, we try to screen for any other issues such as pain, or psycho-social needs. I know the* massage therapists, *often times the patients may feel comfortable with them and other issues may arise such as difficulties dealing with psycho-social issues, or um, you know an issue around pain. So the* massage therapists *will hear those things and make the appropriate referrals." (OP5, site 2)*

Opinions regarding the position of massage therapists as team members were mixed. At one site, some of the participants positioned massage therapy as a member of the clinical team because it provided a useful health service to the patients. However, massage therapists were not perceived as a team member by the remaining participants interviewed and, incidentally, one of the two massage therapists. One explanation for this perspective was that massage therapy was perceived as:

> "*…a separate entity. It doesn't really affect us in terms of our care. And it's kind of her thing. I don't discourage it if a patient asks me. I encourage it because I think they seem to do well with it. But I don't really think it's part of our role."* (OP10, site 3)

5.3.6.3 Educator

Providing education was a recognized function of almost all massage therapists. As educators, massage therapists presented seminars and orientation sessions, and prepared materials for clinical colleagues and patients about what massage therapy is, the therapeutic benefits of massage (see quote 2), and on massage and non-massage (e.g. compression bandaging) techniques (see quote 3). The educator role appeared to be not only important for

establishing the massage presence, but also for the professional credibility of the massage therapist.

5.3.6.4 Program/Clinic Support

The massage therapists' involvement in administrative duties to support the functioning of a program or department, which included scheduling, billing and developing documentation forms or templates, was recognized by the other HCPs. They were also involved in the development of frameworks for patient programs and generating ideas for enhancing or improving program delivery mechanisms. Most often their activities in this area were specific to the massage therapy program, where they were the entrepreneurial spirit that brought and developed the massage service component within the hospital. However, massage therapists were also accepted as leads in the development of non-massage therapy programs. For example, at study site 1, the massage therapist, in collaboration with the recreational therapist, was recognized as initiating and leading the development of a general wellness programs to support overall health goals of patients (see quote 5). As described by the recreational therapists, the wellness program "*…didn't come from management. That came from her own initiative*" (OP3, site 1)

5.3.6.5 Researcher

The massage therapists' initiative to undertake research activities and establishing an evidence-based practice was also recognized by other HCPs. Similar to the educator component, the pursuit of research activities and the findings generated provided valuable information that attracted others' attention and further solidified the massage therapy position within the hospital or the specific program context. For example, one manager shared the implementation of a new patient care initiative resulting from a research project undertaken by the massage therapists:

> *"….like the whole idea of the massage technique refresh class for patients (a new initiative within a program) came from the massage therapists as a result of a research project. They piloted it over a summer, and now it's part of our standardized care, part of our clinic.*" (OP 5, site 2)

At a world renowned surgical hospital, the medical doctor who was working with the massage therapists in analysing patient outcomes specific to the massage intervention stated:

> "*I was a bit skeptical at the start but the results have been rather startling to put it mildly. So I have been quite involved, and recently she has been bringing me her findings and so on."* (OP9, site 3)

5.3.7 Role Related Experiences

5.3.7.1 Massage Therapists are Valued

Massage therapists were described by the participants as an asset, a real benefit, important, and useful. They appeared to be valued for several reasons. Massage therapists provided an overall health benefit to the patient and was enjoyed by the patients. Massage therapy provided a non-medication based alternative in the care plan. Several participants commented on the highly developed palpation skills and knowledge of manual techniques of the massage therapists, which were often recognized to be superior to their own skill levels or not provided by anyone else.

> *"Looking at mostly muscle tension, stiffness and pain, (the massage therapist) is very good. She's done a lot of additional training in other areas so she can do…she does wonders with people. So we let her work. She can just achieve a lot more than I can." (OP12, site 5)*

> *"And she can sense with touch the restrictions that I don't pick up on. Like I measure ranges and look at how the limb fits or the tension of the muscles when they are sitting there. Whereas she can touch things and feel things like it's this muscle and not this one or this is a fasical restriction and this is a muscular restriction." (OP12, site 5)*

At one study site, participants recognized that delivery of the program was dependent on the expertise of the massage therapists. The program was based on providing education and self-care tools to patients as an approach to the management of cancer-related lymphedema. The lymphatic massage techniques and bandaging, both taught by the massage therapists, were a core element of the program. The massage therapists were the only ones with the specialized training to teach these two modalities. As the nurse at this site explained:

> *"They are the ones with the, the intense training. So, for instance, I've done an intro of Vodder as have some of my colleagues. But we don't have the intense training in*

lymphedema as they do… we depend hugely on the expertise of the massage therapists." (OP6, site 2)

5.3.7.2 Role Overlap

With the exception of participants from one study site, almost all of the participants recognized and acknowledged some degree of overlap between the massage therapists' role and the roles of other HCPs on the team. Overlap seemed to occur in terms of the types of clinical goals and/or the types of activities or interventions used to achieve those goals. For example, it is recognized that pain management or supporting smoking cessation are goals addressed by all professions, albeit in different ways. Exercise as a specific modality can be prescribed by physiotherapists, athletic therapists, and massage therapists. Massage was also a technique that could be used by nurses, physiotherapists, occupational therapists, and athletic therapists.

The occurrence or potential of role overlap between massage therapists and other HCPs did not appear to be an issue for the participants. Perspectives of the other HCPs suggest several reasons for this. They saw massage therapy as being quite different from the other professions; as discussed earlier, massage therapy was perceived to use a holistic approach and was often perceived as a non-medical intervention. Several of the participants openly recognized that their massage skills were inferior to those of massage therapists (see quote 6) and they did not appear to have an issue leaving that aspect of the treatment to the massage therapists (see quote 7). Similar to the perspective of the massage therapists, role overlap appeared to be recognized by other HCPs as an accepted aspect of multi-professional work. Most participants appeared to see overlap as an opportunity to collaborate rather than compete for position or status (see quote 5). Almost all of the participants identified communication as a key aspect of working out the best approach when overlap did or could occur.

5.3.7.3 Massage Therapists Provide a Supportive Therapy

It was recognized by the participants that, similar to their own position, massage therapists were expected to provide support to a patient above and beyond the specific requirements of their scope of practice. This was frequently discussed in settings where the

patient population was challenged by chronic or long-standing conditions and social level issues such as poverty and isolation.

The perception of massage as a supportive therapy also extended to how it was perceived in relation to the other HCPs on the team. Although the unique knowledge and skill set of massage therapists appeared to be recognized and often described as a complement to the work of others, in this capacity, massage therapists were also positioned in a subordinate position to the other HCPs. For example, comments made by almost all of the participants suggest they perceived massage therapy as a tool to enhance or facilitate their work. Therefore, although many spoke of collaboration with massage therapists, in practice, it appeared that massage therapists functioned as a support mechanism within a professional hierarchy. This is reflected in statements made by two participants (bold used to place highlight on specific statements):

> *"If I note that there is tightness in the hip flexors and they've been stretching and stretching and it's not releasing then likely it's a fascial restriction. Then she can help reduce that fascia and doing fascial release to allow them stretch more effectively.* ***So what she does is enhance what I've given people to do or allows them to do it more effectively.*** *Like with massage she can reduce pain as well. So if they are in less pain or discomfort, they are able to do the things I want them to do. So it works so well together." (OP12, site 5)*

> *"Now if I am not there, I will often discuss with the massage therapist* ***what I'm doing so that she can help reinforce when I'm not there****. So she will help out on that point. So we collaborate for that reason." (OP4, site 1)*

It is important to recognize that other HCPs also helped reinforce or support the work of the massage therapists. For example, one nurse participant commented that in follow up appointments, they would ask to see the self-massage techniques taught by the massage therapists to reinforce the learning, which was the primary function of the massage therapists.

The fact that the massage therapists were perceived to function in a subordinate position was also apparent in the perspective that they play a small role in determining what their role is or should be. When asked who determines the massage therapists' role, almost all participants indicated that massage therapists had some input; however, it was most often based on referrals from other HCPs or directive from management. The massage therapists' position as autonomous or self-determining professionals, if recognized, was infrequently stated.

5.3.7.4 Increasing Acceptance of Massage Therapists

Several participants' perceptions suggested that recognition and establishment of massage therapy as a health care profession and hospital service was a work in progress. Within these settings, the initial barrier of entry into the hospital setting had been overcome; still, establishing an accepted and recognized massage therapy role took time and was dependent on relationship building. For example, one participant reflected that with feedback from patients and opportunities to learn about massage therapy, their understanding of massage therapy expanded, which led to more collaborative opportunities:

> *"I think feedback from patients probably broadened my understanding and led to more discussion and collaboration between us. And also enlightened me to some of the things she can do. So actually it means I have referred more clients to her. …I didn't have a good knowledge before of what she did. But over the 4 years (of working at the study site), I have much more collaboration with her directly than before. There is much more ongoing discussion and feedback about what the approach should be to client care." (OP4, site 1)*

The experiences and perspectives of some participants suggested that acceptance of massage therapy within their work environments also involved a change from perceiving massage on the periphery to being a key or core component of the care being provided. This is captured in the following quote from one of the participants:

> *"So we encourage it (receiving massage) with some patients. But we certainly don't ah actively encourage it. I mean people ask we are like sure give her a call and see if you can get it. So I wouldn't be negative about it. Well it's true it's a little new and it's a little separate than what we are supposed to be doing, you know. I mean hopefully in time it will be a part of us."(OP10, site 3)*

After a brief pause, however, the participant went onto say *"well, I mean it is now because it (the massage practice) has been running pretty good since she has been there."* (OP10, site 3)

An important insight was that massage therapists were not alone in the peripheral orientation or going through a process of incremental acceptance of their position becoming solidified within a particular setting or team. For example, one participant noted that over time, and as the program became established and team matured, all HCPs grew into and/or expanded their roles, including the massage therapist. As such, similar to the other professions, massage

therapy *"grew and became an entity on its own, rather than something on the side of the clinic"* (OP12, site 5). Another participant shared that her experience of establishing her role also took time and required a proactive approach on her part:

> *"I don't know how many doctors will actually mention that (the nutritional consult) to the patient, as far as an option. I know that it's taken a while for them to start referring to myself. And I am sitting here in the clinic every day. So slowly, just with my presence here, they started referring to me. But it has taken a while. And I know that even now they forget about me sometimes and will send somebody who needs to lose 50lbs out the door without seeing me. So I keep an eye on the patients who are waiting and try to be a little proactive myself." (OP11, site 3)*

5.3.7.5 Massage Therapists are on the Periphery

Although most participants expressed at least a general acceptance of massage therapy, descriptions of the day to day activities and actions by the some suggested otherwise, reflecting a reality where in some cases, massage therapy is situated in a marginal position; as reflected in one participant's comment: "*Massage therapy is an adjunct service not an essential service*" (OP8, site 3). Regarded as an adjunct or a patient-driven service where the patients can choose to receive it voluntarily resulted in massage therapy being positioned on the outside of standard care processes.

As noted above, participants identified the massage therapists as a member of patient care teams. However, when probed to explain why they considered massage therapists to be team members, a disconnect perception and action or behaviour became apparent. For example, at one site, the individual to whom the massage therapist reported was unable to identify the responsibilities of the massage therapist. At another site, massage therapists were recognized members of a trans-disciplinary team. Yet, the participants acknowledged that the massage therapists, although capable, were excluded from performing certain tasks and responsibilities which were otherwise shared by the rest of the team members. The reason for the exclusion unclear (see quote 8).

5.3.7.6 Ambiguity About the Massage Therapists' Role

For the most part, participants were able to identify the clinical and various non-clinical components of the massage therapists' role. However, almost all had difficulty or felt uncertainty

describing what the massage therapist did or what constituted a massage therapy treatment. Some of participant's experiences suggested the apparent ambiguity may be due to the lack of direct interaction with or visibility of massage therapists when they are working. The nature of massage work is to be in a quiet space, "*behind a closed door*" (OP4, site 1), removed from the team milieu. The separation created a perception gap in that the others were unable to see the massage therapists working. This created a sense of vagueness as to what they did and potentially limited their understanding of the massage therapists' role.

> *"I think she works around the incision. She doesn't do the back, neck and all that stuff. I think it's more on the abdomen. She increases the circulation with the …I think with the massage she decreases the lymphatic fluid. But seriously, I've never watched her do it, so I don't know." (OP10, site 3)*

Another potential reason for this lack of clarity was identified by one participant – namely that massage therapists did not promote themselves enough:

> *"I think the only comment that I would make is knowing, because I go to a massage therapist fairly regularly, and I know how knowledgeable she is and she and I talk at the same level all the time, I think maybe for whatever reason, massage therapists don't promote themselves enough. I mean I learned from her that 'massage therapist' is a protected term and I didn't know that before, and I am an educated health care professional... So I would just like to see them promote themselves a little bit more and do a bit more education. Because if you are going to try to get them into the hospital setting, it's kind of like, like we hardly have any chiros in that setting because they just haven't tapped into that niche and gone that route. But if massage therapists wanted to be in, they would just have to kind of toot their own horn a little bit more." (OP7, site 2)*

Hence, conceptualization of massage therapists' roles appeared to be based on information provided by the massage therapists, reference to their own roles, feedback from patients, their own personal experience of receiving a massage, and expectations held of all HCPs.

Chapter Six: Results – Mixed Analysis

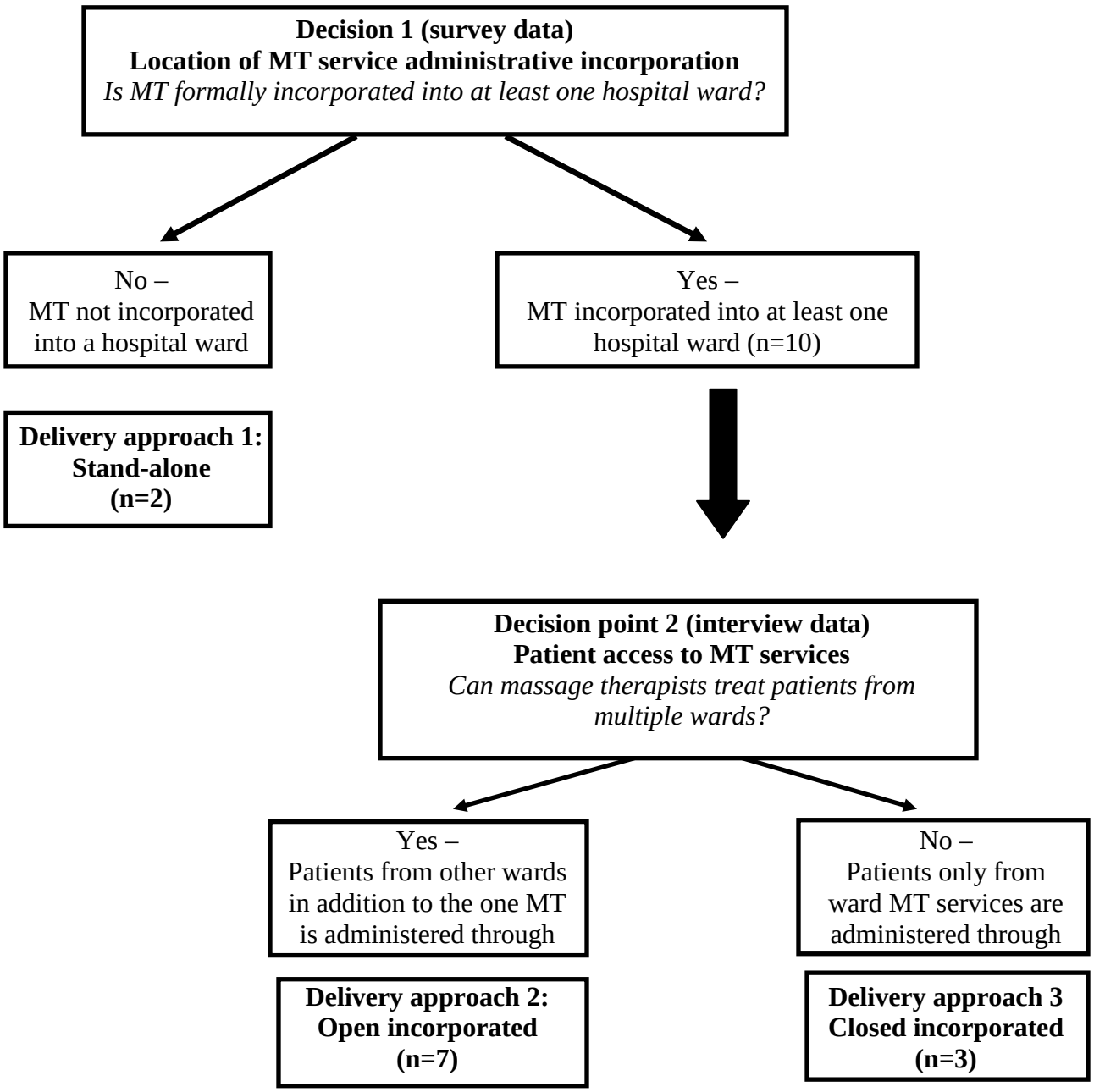
6.1 Introduction

This chapter presents the findings of the mixed methods analysis (Onwuegbuzie et al., 2007). Specific data from the quantitative and qualitative datasets were mixed for two reasons. First, to enhance the description of the ways massage therapy services are delivered (objective 1b). The findings of this mixed analysis are presented in section 6.2. Second, to contextualize the qualitative findings from the massage therapy interviews by comparing them across two contextual factors identified in the quantitative phase - study site and team member status (objective 3). The findings of this mixed analysis are presented in section 6.3. The mixed analysis was based on quantitative data collected in the survey and during the qualitative interviews with massage therapists at 12 sites. Four sites (sites 11, 14, 15, 16) were excluded from the mixed analysis as both datasets were not available. No massage therapy interviews were conducted at sites 11, 14, and 15, and the survey was not completed at site 16.

6.2 Emergent Massage Therapy Delivery Approaches

The following presents the three emergent massage therapy service delivery approaches, which were identified through a mixed analysis of survey and interview data using a decision tree approach (see Figure 12).

Figure 12: Decision Tree Diagram Identifying the Three Emergent Massage Therapy Service Delivery Approaches

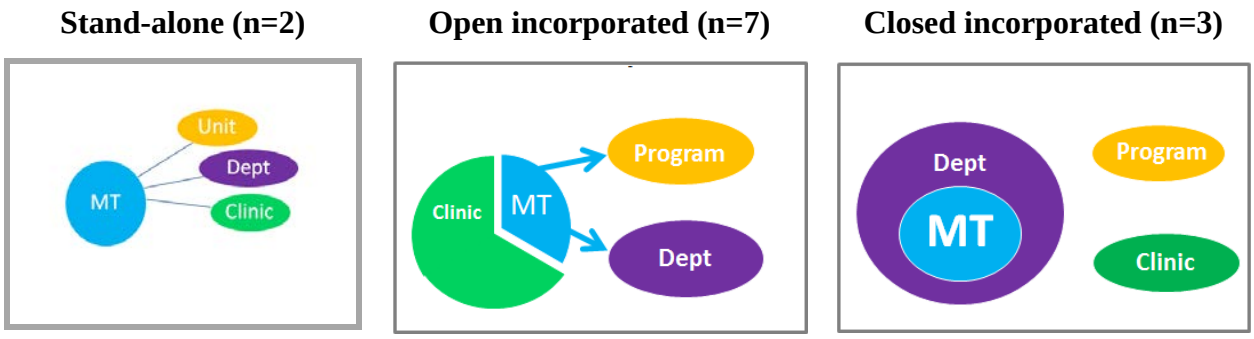


Decision point 1: Results obtained from the responses to item 1.1 of the survey indicate that massage therapy was incorporated into either at least one hospital ward (e.g. a clinic, program. or department) or it was set up as a stand-alone practice that was not affiliated with any existing hospital wards. This provided the two options which were used to categorize the 12 study sites at the first decision point. At two of the sites, massage therapy services were organized and administered separately from any of the hospital wards, and functioned as a stand-alone practice. Massage therapy services at the remaining ten sites were formally incorporated in at least one hospital ward and administered through a hospital ward.

Decision point 2: Descriptions of the practice setting provided by massage therapist participants during the interviews indicated that massage therapists treated patients either from one ward only (the ward through which massage therapy services were administered) or from multiple hospital wards. These included wards other than the one massage services were administered through. This defined the two options at the second decision point, which were used to categorize the 10 study sites identified at the preceding decision point. Massage therapy services were accessible only to the patients of the ward through which massage therapy was administered at three of the sites. At the remaining seven sites, massage therapy could be accessed by patients from multiple wards, in addition to the one massage therapy was administered through. In terms of patient access, when massage therapy was a stand-alone unit, it was most often available to patients from multiple wards; it was not restricted to a specific ward or patient population. However, access was often dependent on approval or referral from the attending physician or allied health care staff.

The following section details the emergent massage therapy service delivery approaches identified above (see Figure 13). Data collected through the survey and the interviews is included in order to provide a more comprehensive description and to indicate areas of distinction and overlap across the three service delivery approaches. The data used in these descriptions were: employment status of massage therapists, reimbursement methods, funding sources, treatment location, inclusion as a member of patient care teams, and clinical and non-clinical role components.

Figure 13: Emergent Massage Therapy Delivery Approaches



6.2.1 Delivery Approach 1: Stand-Alone

In the approach used least (2/12 sites), massage therapy services were set up as a separate entity from any of the existing hospital wards. It functioned as an independent and fully self-sufficient program not affiliated with any hospital ward (e.g. unit, department, or clinic). While a physical space was dedicated to accommodate massage treatment rooms and supplies, massage therapists also performed treatments in the patients' rooms for those who were unable to come to the massage area. Patients from across any of the hospital wards could access massage therapy services, unless there were specific restrictions for certain patient populations determined by upper management and/or attending physicians. In addition to patients, the massage services were also open to hospital employees and community clients. Payment for massage services was based on a fee-for-service structure, which meant a direct out of pocket expense to the patient. Massage therapists were usually contractors and not hospital employees. They were reimbursed on a per treatment basis, which was based on a negotiated split of the treatment fee between the therapist providing the service and the hospital. Administrative tasks such as scheduling, billing, and promotional activities were the responsibility of the massage therapist and were not considered billable time. Massage therapists were not members of clinic or patient care teams in the hospital, and thus, they were dependent on referrals from other HCPs and patient self-referrals to generate and maintain active caseloads.

6.2.2 Delivery Approach 2: Open Incorporated

An open incorporated delivery approach was most common (7/12 sites). In this approach, massage therapy services were formally incorporated into a hospital ward such as a program, department, clinic, hospital wing, or a private clinic set up on hospital grounds. Administration of massage therapy services (e.g. billing, payroll and scheduling) was incorporated into and streamlined with the administrative processes of the hospital ward. A physical space was dedicated to accommodate massage treatment rooms within the ward.

Massage services were not restricted to patients of this ward alone; patients from the other hospital wards or areas where able to access the massage service. When treating patients from other wards, massage therapists most often worked in the patient's room or in a space shared with other HCPs. In addition, hospital employees and community clients were also able to access the service. Most commonly, massage therapy services were direct expenses incurred by the patient and others using massage therapy. However, other methods of payment or funding of massage therapy services were also applied, including direct billing to a private insurance provider or funds allocated through a hospital foundation.

Generally massage therapists were hired hospital employees or independent contractors, mostly on a part-time basis. If hired as independent contractors, they were reimbursed for their services on a per treatment basis by the hospital. As employees, they were paid an hourly salary. Time dedicated to administrative tasks was commonly included in a salary-based position. Being an active member of a patient care team was more likely to occur on the ward where massage therapy is formally incorporated and less likely to occur on other wards where only select patients may be receiving massage therapy.

6.2.3 Delivery Approach 3: Closed Incorporated

The closed incorporated massage therapy service delivery approach is distinct from the other two outlined above in that massage therapy services are formally incorporated into only one hospital ward and only patients from that ward have access to massage services (3/12 sites). Administration of massage therapy services was incorporated into and streamlined with the processes of that ward. A physical space dedicated to massage treatment rooms and supplies. Although massage therapy services may be an expense incurred directly by the patient, more

commonly massage services were covered through direct billing to a private insurance provider or funding through a hospital foundation.

In this delivery approach, it was more common for massage therapists to be hospital employees, but they might also be hired as contractors. Similar to the open incorporated approach, contractors were reimbursed on a per treatment basis and employees were paid an hourly salary, which included administrative time. Massage therapists were often members of patient care teams albeit not core members and thus did not see all patients admitted into the ward. Therefore, massage therapists depended on referrals from other HCPs to build and maintain active caseloads. As members of patient care teams, they held responsibilities beyond massage therapy alone.

It is important to emphasize that the three delivery approaches presented are emergent as the decision to conduct this analysis was made during the course of the study, based on information which emerged during the qualitative interviews. The proposed delivery approaches are also conceptual; they are not distinct and clearly defined typologies of delivery approaches or models employed across the 12 sites. Rather, they should be considered as distinctive points along a continuum defined by the degree of administrative incorporation into hospital structures and processes.

6.3 Contextualizing Thematic Findings

Thematic findings emerging from the qualitative analysis presented up to this point are based on the perceptions and experiences of all massage therapy participants irrespective of how their professional role is situated or enacted within a particular hospital setting. Although the type of setting (Canadian urban hospital) within which massage therapists' professional role was examined is the same, each participant's experience is also potentially influenced by the characteristics unique to each of these settings. Merging the thematic findings and specific context factors (study site and team member status) identified in the quantitative phase using a descriptive matrix, contextualized the thematic findings. This added an additional layer to the qualitative findings, which enabled a more in-depth understanding of massage therapists' role and role related experiences.

6.3.1 Contextualizing of Thematic Findings Across Study Sites

The main finding of the mixed analysis is a high degree of variability in how the role components and role related experiences manifested across the study sites. Upon closer examination, however, several patterns became apparent. These are now described and themes are presented under the sub-headings of the over-arching themes: role components and role related experiences.

6.3.1.1 Role Components

Table 7 displays the distribution of the components of massage therapists' professional role within a descriptive matrix. In considering each of the role components (columns), a clear trend is that the health care provider appears to occur consistently across all sites. This role component encompassed provision of treatments, conducting assessments, reporting, and documentation. However, variations in terms of the clinical functions of the health care provider role were identified during the interviews and are important to highlight. Although provision of massage treatments was standard across all of the sites, at site 1 the massage therapists predominantly taught self-massage and spent minimal time providing hands-on massage treatments. Assessments were carried out by massage therapists at ten of the sites. At two of the sites, massage therapists did not conduct a formal assessment. At site 2, assessments were conducted by other members of the trans-disciplinary team. At site 7, massage therapists provided primarily basic or relaxation massages, and assessments were not part of the protocol. All massage therapists across the sites were expected to maintain documentation regarding massage treatments. This, however, ranged from informal notes to documentation on massage-only charts and team charts.

Table 7: Role Components Across the Study Sites

	Role Components - Themes:					
Study Site	**Health Care Provider** (includes treating, assessing & documentation	**Program/ clinic support**	**Promotor**	**Educator**	**Researcher**	**Team member**
S1	√	√	√	√		√
S2	√	√	√	√	√	√
S3	√	√	√	√	√	
S4	√			√		√
S5	√	√		√		√
S6	√	√	√	√		
S7	√		√			
S8	√			√		√
S9	√	√	√	√		√
S10	√	√	√	√		
S12	√	√				
S13	√	√				

Massage therapists were identified as members of patient care teams at half of the sites. At more than half of the sites, massage therapists' role appeared to include actively promoting the massage therapy profession (7/12), providing support (administrative and program development) in the functioning or running of the ward where massage therapy was based (9/12), and carrying out various types of activities to educate others about massage therapy (9/12). Researcher is the least common component of the massage therapists' role, emerging at two sites. The massage therapists at these two sites (sites 2 and 3) self-initiated specific research projects to investigate certain aspects of the care they were providing.

Drawing attention to each study site (rows in Table 8), a high degree of variability is again apparent in terms of which of the six role components are encompassed within the professional role of the massage therapists at each of the sites. The full complement of role components occurred at only one of the sites (site 2). Uptake of five of the role components occurred at three of the study sites (sites 1, 3, 9). The same configuration of five role components was present at two of the sites (sites 1, 9). It included all of the components except researcher. Uptake of four of role components was apparent at three of the study sites (sites 5, 6, 10). Sites 6 and 10 have the same component configuration. At two sites (sites 4, 8) the massage therapists' role encompassed half (three) of the role components. At three of the study sites (sites 7, 12, 13), the massage therapists' role encompassed two role components. The same configuration of two role components (health care provider and program support) was identified at site 12 and 13. Lastly, at none of the study sites did the professional role consist of only the health care provider component. This suggests that the massage therapy professional role extends beyond only massage treatment provision.

Table 8: Configurations of Role Components within the Study Sites

	Role Components – Themes:					
Study Site	**Health Care Provider**	**Program Support**	**Promotor**	**Educator**	**Researcher**	**Team Member**
S2	√	√	√	√	√	√
S1	√	√	√	√		√
S3	√	√	√	√	√	
S9	√	√	√	√		√
S5	√	√		√		√
S6	√	√	√	√		
S10	√	√	√	√		
S4	√			√		√
S8	√			√		√
S7	√		√			
S12	√	√				
S13	√	√				

6.3.1.2 Role Related Experiences

A high degree of variability is also apparent in relation to the role related experiences *(*see Table 9*)*. No one theme occurs across all of the study sites and the distribution of the themes across the study sites is variable. Role overlap was most common role related experience, occurring at more than half of the sites (9/12). At half of the study sites, ambiguity, overload, and conflict pertaining to the massage therapists' role emerged as key themes shaping the experience of massage therapists working in these settings.

Table 9: Role Related Experiences Across the Study Sites

	Role Related Experiences – Themes:			
Study Site	**Role Ambiguity**	**Role Overlap**	**Role Overload**	**Role Conflict**
S1	√	√		
S2		√	√	√
S3			√	√
S4		√	√	√
S5	√	√		
S6	√	√	√	√
S7	√			
S8		√		
S9		√		
S10	√	√	√	√
S12	√	√		√
S13			√	

6.3.2 Contextualizing Thematic Findings in Relation to Team Member Status

Determination of massage therapists' recognition as members of patient care teams was based on the response to item 1.26 in the questionnaire and confirmed with interview data. Across the 12 study sites included in this analysis, massage therapists were identified and confirmed as members of patient care teams at half of the sites (sites 1,2,4,5,8,9) and not recognized as team members at the remaining six sites (sites 3, 6, 7, 10, 12, 13) .

6.3.2.1 Role Components

Table 10 presents the descriptive matrix used to display the presence of massage therapists' role components in relation to team member status. Irrespective of team membership, all massage therapists were engaged in providing patient care. Findings from interviews provided additional information pertaining to the health care provider component for team members and non-team members. Massage therapists who were not members of patient care teams more often provided relaxation-based massage treatments and were less likely to complete full or comprehensive assessments. In addition, a greater emphasis was placed on their supportive role, particularly psychological support, for the patient. For the remaining role components, there are no consistent patterns across the two groups. A potential trend maybe towards massage therapists who were team members to be more likely to carry out functions and activities related to education. Whereas massage therapists who were not members of patient care teams may be more likely to carry out functions specific to program support and promoting the massage therapy profession. These potential differences are difficult to ascertain given the small differences and small sample size. The role of researcher was equally uncommon across both groups.

Table 10: Relationship Between Role Components and Team Member Status

	Role Components - Themes:					
Team Status	**Health Care Provider**	**Program Support**	**Promotor**	**Educator**	**Researcher**	**Study Site**
Team Member	√	√	√	√		**S1**
	√	√	√	√	√	**S2**
	√			√		**S4**
	√	√		√		**S5**
	√			√		**S8**
	√	√	√	√		**S9**
NOT Team Member	√	√	√	√	√	**S3**
	√	√	√	√		**S6**
	√		√			**S7**
	√	√	√	√		**S10**
	√	√				**S12**
	√	√				**S13**

6.3.2.2 Role Related Experiences

Table 11 presents the descriptive matrix used to present thematic findings of role related experiences between massage therapists who were members of patient care teams and those who were not members of patient care teams.

Table 11: Relationship Between Role Related Experiences and Team Member Status

	Role Related Experiences – Themes:				
Team status	**Role Ambiguity**	**Role Overlap**	**Role Overload**	**Role Conflict**	**Study Site**
	√	√			**S1**
Team Member		√	√	√	**S2**
		√	√	√	**S4**
	√	√			**S5**
		√			**S8**
		√			**S9**
NOT Team Member			√	√	**S3**
	√	√	√	√	**S6**
	√				**S7**
	√	√	√	√	**S10**
	√	√		√	**S12**
			√		**S13**

There appeared to be less perceived ambiguity about their roles when the massage therapists were members of patient care teams. Similarly, the experience of tension arising from challenges or conflicts pertaining to the massage therapists' roles appeared to be less common for those who were team members. Massage therapists on teams also seemed to experience less role overload than those who are not on teams. Role overlap appeared to be identified or recognized less commonly by massage therapists who were not team members.

It is important to note that the presentation of role components and role related experiences across the study sites and in relation to team member status is made with caution. The role components and role related experiences (relating to ambiguity, overlap, overload, and conflict) examined are based on participants' perceptions and experiences. They are not based on

an accurate measurement of the concepts, which were used in this study to label emergent themes. In addition, the small sample of hospitals and study design did not allow for comparative analysis to more conclusively determine suggested differences. However, the mixed analysis, although exploratory, provided a useful first step in generating an understanding of the potential relationship between the role themes and context within which the massage therapists' professional role is enacted.

Chapter Seven: Discussion and Conclusions

7.1 Introduction

The final chapter of this thesis begins with a summary of the research findings in section 7.2. This is followed by a discussion which compares the survey results and thematic findings from the interviews to the role literature in section 7.3. Interpretation of the findings from the mixed analysis contextualizing qualitative themes across study sites and team member status is presented in section 7.4. The study strengths and limitations are reviewed in section 7.5. This is followed by a discussion of the practice and education implications of the findings in section 7.6. Recommendations for future research are presented in section 7.7. A conclusion statement brings the chapter to a close.

7.2 Summary of the Findings

This study focused on massage therapy services that were organized by the hospital and provided to patients by a licensed massage therapist. Sixteen hospitals (5% of Canadian urban hospitals) in four Canadian provinces (Alberta, Ontario, Quebec and Nova Scotia) met these inclusion criteria. The majority of these hospitals were located in Ontario, a province in which massage therapy is regulated. While the provision of massage therapy services in Canadian urban hospitals is infrequent it is not new, ranging from less than one to over 20 years. The type of hospitals where massage therapy services were provided varied, and included specialized small community hospitals, teaching hospitals, and large multi-complex hospitals. The most common reason for providing massage therapy was patient demand. Massage therapy services were provided to a range of in- and out-patient populations, most commonly those in a rehabilitation program. The majority of the hospitals had less than three massage therapists who were hired as hospital employees or independent contractors, and most commonly worked on a part-time basis. Massage services were paid for directly by the patient, private health insurance, and through fundraising efforts of hospital foundations. The survey results indicate considerable diversity in the ways that massage therapy services were delivered across the 16 study sites. However, adding qualitative data to the quantitative information provided more insight into these results. Three massage therapy service delivery approaches emerged: stand-alone, open incorporated, and closed incorporated.

Qualitative findings indicated that the massage therapists' professional role encompassed several components. In addition to health care providers and team members, massage therapists also functioned as educators, program/clinic supporters, promotors of the massage therapy profession, and researchers. Findings of the mixed analysis, which contextualized the emergent themes, indicated that the configuration of role components appeared to be context specific. Emergent role related experiences were role ambiguity, role overlap, role overload, and role conflict. Findings of the mixed analysis show that role related experiences vary across the study sites. Patterns suggesting differences in the role related experiences were apparent in relation to team member status. Massage therapists who were members of patient care teams seemed to be less likely to experience role related ambiguity, overload, and conflict. On the other hand, role overlap was less commonly experienced by massage therapists who were not members of patient care teams.

7.3 Comparisons to the Literature

The descriptive survey results presented in Chapter 4 and thematic interview findings presented in Chapter 5 are now compared to the existing literature, with attention on how this research contributes to the growing knowledge base on hospital based massage therapy. Sub-section 7.3.1 discusses the survey results. Sub-section 7.3.2 presents a discussion of the emergent themes.

7.3.1 Comparison of Survey Results to the Literature

To date, there is no research on the delivery of massage therapy services in Canadian hospitals. However, a limited amount of research does exist on the integration of CAM into Canadian hospital settings, which provides a suitable, albeit not direct, comparison regarding the delivery of massage therapy services in Canadian hospital settings.

The results of the survey support and follow previous research regarding the inclusion of CAM in hospital settings in Canada. Specific issues related to service delivery identified in this study that are comparable to previous findings include: 1) the small number of CAM practitioners dispersed throughout the hospital or concentrated within a core unit (Vohra et al., 2005), 2) the limited number of salaried positions (Hollenberg et al., 2011), 3) practitioners

predominantly working on a part-time basis as independent contractors (Berger et al., 2013; Soklaridis et al., 2009), and 4) the marginalization of CAM practitioners from interprofesssional activities such as team charting, attending rounds or team meetings, and accessing patient information (Hollenberg, 2006; Soklaridis et al., 2009).

A significant amount of attention pertaining to the incorporation of CAM services in hospital settings has focused on high level conceptualization of issues such as the marginalization of CAM providers, and barriers to inclusion of these services (Hollenberg et al., 2011; Boon & Kachan, 2008; Hollenberg, 2006; Vohra et al., 2005). Although it is important to generate an in-depth understanding of CAM incorporation within institutional settings, there has been limited discussion of the practical issues related to the incorporation of these services within existing hospital infrastructures. The survey results from this study contribute to the growing body of literature on hospital-based CAM in the Canadian context by clarifying structural and process components of massage therapy service delivery, including types of employment arrangements, funding sources, reimbursement methods, interprofessional activities, service fee schedules, and location of massage services and treatment.

7.3.2 Comparison of Thematic Findings to the Literature

The following presents a discussion of the emergent themes related to massage therapists' professional role. This is the first study to examine massage therapists' professional roles within the Canadian hospital setting. Roles and role related issues have been studied to a limited extent in the context of other CAM practices (e.g. midwives) and more extensively in relation to conventional HCPs (e.g. nursing, physiotherapy, and occupational therapy). This section includes a comparison of 1) the role components to the NREM (sub-section 7.3.2.1), and 2) role related experiences, ambiguity, overlap, overload, and conflict (sub-section 7.3.2.2), to available literature presented in Chapter 2.

7.3.2.1 Role Components

The NREM was identified in Chapter 2 as a useful framework to inform the design of this study. First, because it is one of the very few frameworks available that provides an explicit delineation of the professional role in a health care context. It clearly identifies that the

professional role of a HCP, in this case an ACNP, is multi-faceted, encompassing several components. It also brings attention to the fact that a HCP's role may involve more than only clinical or patient care functions. Although specific to nursing, the NREM provides a useful comparison for the components of massage therapists' role which emerged in this study.

The *Health Care Provider* role of massage therapists is analogous to the *Practitioner or Clinician* role of ACNPs defined in the NREM. Both describe the types of activities and tasks carried out specific to patient care, although some of the activities were different. For example, unlike ACNPs, massage therapists did not perform or conduct diagnostic activities or prescribe medications. Although both ACNPs and massage therapists were responsible for providing patient education, it was categorized under different role components. In the NREM, patient education was indicated as a responsibility under the Practitioner component. In this study, provision of patient education was categorized under the Educator component. The NREM further describes the practitioner role as entailing independent, interdependent, and dependent role functions. Similar to the ACNP, the massage therapists' care provider role involves primarily independent and interdependent role functions. Although dependent on referrals, massage therapists appeared to work relatively independently. This was particularly the case when they were not members of patient care teams.

The role of *Educator* in the NREM is also comparable with the emergent educator component of the massage therapists' role. However, differences in the educator function were apparent. For instance, education provided by massage therapists focused on massage therapy and was primarily provided to staff and patients. None of the study participants discussed providing education to medical or nursing students or providing mentorship to massage therapy students as part of their professional role in the hospital setting.

The *Researcher* role component described in the NREM was also identified in this study. For both ACNPs and massage therapists, this included activities related to the application of research findings in practice as well as initiation of activities which aim to evaluate practice. There is a key distinction in the researcher component between massage therapists and ACNPs. Whereas for ACNPs research related activities were an expectation, for massage therapists it did not appear to be a requirement of their job. Rather it was an activity some independently opted to pursue in order to evaluate outcomes of their treatment or inform practice protocols.

Some components of the massage therapists' role diverge from those in the NREM in several ways. The *Administrator* role component in the NREM involves participation on hospital committees and development of department and hospital policies and procedures. Although one participant reported being involved on hospital committees, administrative functions at a unit or hospital level did not emerge in relation to the massage therapists' professional role. However, the *Program/clinic support* role identified in this study could be considered similar to the Administrator role of the ACNP. In the role of *Program/clinic support*, massage therapists were responsible for managing the business end of their practice, providing information and guidance on how to position massage therapy services in the hospital, as well as leading the implementation of massage-specific initiatives. The emergence of this role component may be related to the fact that massage therapy services were not funded through global public funding sources and, thus, massage therapy is a revenue generating service which often requires specific business management activities.

Two distinct role components for massage therapists not identified in the NREM emerged in this study: *Promotor of the massage therapy profession* and *Team member*. Although not discussed within the NREM, activities which promote and market not only services but also the profession were recognized to be important in other studies examining the establishment of professional roles of other HCP. For example, research by Donnelly et al., (2013) and Kinn and Aas (2009) reported the use of promotional activities by occupational therapists to clarify or establish their professional roles. In this study, more than strategies, such activities were framed as a specific component of the massage therapists' role. Lastly, *Team member* was identified as a distinct component of the massage therapists' professional role. This may be relevant specifically to massage therapy, as ACNPs within hospitals settings are always members of a core medical or patient care team. This is not always the case for massage therapists working in a hospital setting. Many functioned in their role outside or on the periphery of team care processes, as is evident in this study.

The comparison of the massage therapist role components to the ACNP role components in the NREM was a useful exercise for several reasons. Given the differences between the nursing and massage therapy professions (e.g. level of education, research activity, regulation), the degree of similarity between role components was surprising. This may point to the fact that

there are certain role components, such as practitioner and educator, which may be fundamental to all HCPs. The differences in role components also provide useful insights. For instance, even for similar components, it was apparent that the functions or activities encompassed within them may vary across professions, as is apparent in the practitioner role component. The divergent findings suggest that certain components may develop in response to specific needs or situations of the profession, such as team member. This underscores the need to develop a massage therapy specific understanding of professional role rather than basing it on knowledge gleaned from other professions.

7.3.2.2 Role Related Experiences

Inherent to functioning as a HCP in a hospital setting is the need to negotiate professional boundaries. Participants' experiences point to several core issues related to their ability to establish and define their professional role within the parameters of a hospital setting. In the next section, findings specific to the role related experiences including ambiguity, overload, overlap and conflict, will be discussed and compared to the current literature on professional roles.

Role Ambiguity

In the report by the Interprofessional Education Collaborative Expert Panel (2011) on competencies for interprofessional practice, the authors point out that professional roles may vary in response to the parameters of different health organization and actual roles may change or be adjusted depending on specific care situations and patient needs. As such, it is acknowledged that professionals may find it challenging to identify, be clear about, and communicate their own roles and responsibilities to others. This was reflected in the findings of this study. Although most massage therapist participants were able to describe daily tasks and activities, many found it challenging to not only articulate their role but to also define it within the unique context of a hospital setting. Working in a hospital setting often requires modification of standard massage therapy practice because of factors such as unique needs of hospitalized patients, regular or close interactions with other HCPs, different physical treatment space (Healey, 2012), and practice specifications determined by the hospital. Few of the massage therapist participants had any prior experience of working in a hospital setting and it was not part

of their education or training. This lack of preparation for hospital practice may account for the lack of role clarity that emerged from the survey.

Perspectives of the other HCP participants indicated that they too lacked clarity about the massage therapists' roles, suggested by the difficulties in articulating the tasks, functions and responsibilities of their massage therapy colleagues. This is comparable to the findings of Johnston et al. (2012) and Smith and MacKenzie (2011), who identified lack of clarity regarding the roles of physiotherapists and occupational therapists by other stakeholders.

Despite the apparent occurrence of role ambiguity regarding massage therapists' roles, the experiences and perceptions of participants (both, the massage therapists and other HCPs) indicated that massage therapists were recognized to contribute to patient care in a distinct way, which was valued by other HCPs. This is important as recognition of expertise and contribution of a profession is considered a key indicator of role clarity (MacDonald et al., 2010). The contributions of massage therapists identified by participants are as follows: massage therapists were perceived to be experts in the application of specific manual techniques, such as manual lymph drainage or trigger point release. They were also recognized as having highly developed palpation skills, which enabled them to assess soft tissues in a way that no other HCPs can or do; therefore a palpation based assessment maybe a unique aspect of the massage therapists' work. Massage therapists were recognized to provide an important touch component to patient care. This appeared to be particularly salient in the care of institutionalized or socially isolated patients.

Role Overlap

Study findings indicated that role overlap was recognized to occur most commonly for massage therapists who were members of patient care teams and most often in relation to physiotherapy. A somewhat surprising finding was the lack of perceived role overlap with nursing and mental health care professionals. Several studies indicate the provision of massage by nurses in acute care settings (Shorofi & Arbon, 2010; Chu & Wallis, 2007). This was not reflected in the interview findings of this study; although provision of massage by nurses was reported at one study site during the survey. Second, although participants identified that providing psychological support

was part of their care provider role, none indicated any role overlap with the mental health care professionals (psychologists, social workers or counselors).

The fact that role overlap was considered an accepted aspect of team work or working in multi-professional settings is echoed in several studies which explored the issue of overlap between different HCPs (Booth & Hewison, 2012; Smith & Roberts, 2005; Nancarrow, 2004; Brown et al., 2000). However, the findings of some of these studies also indicate that role overlap was perceived as threatening in that it challenged role security (Booth & Hewison, 2012) and enforced distinctions between professions rather than supporting shared work across professional boundaries (Smith & Robarts, 2005; Brown et al., 2000). This is in contrast to the findings of this study which suggest that role overlap between massage therapists and other HCPs did not appear to be perceived as problematic or an issue of concern - by the massage therapists or the other HCPs who worked with massage therapists. Although surprising, insights from participant interviews suggest that few of the other HCPs provided massage and if they did, they ceased further application of massage techniques recognizing the higher skill level of the massage therapist. For massage therapists, areas that were clearly within the expertise of other HCPs became less of a priority in the massage treatment (e.g. exercise prescription). Overall, it appeared that regular and direct communication were an effective strategy in directly addressing overlap.

Role Overload

Factors resulting in role overload, as perceived by the massage therapists, were most often related to staffing shortages and limited availability of therapists to accommodate the demands for massage therapy services. Role overload was experienced by new massage therapists who felt unprepared to take on the full responsibilities of their role due to lack of training. It was also experienced by veteran therapists, who had taken on additional responsibilities such as managing the massage practice. These experiences are comparable to findings in the nursing literature. For example, in an exploratory study of nurse roles, MacCallin and Frankson (2010) found that the number of tasks and responsibilities placed demands on nurses that were unmanageable given limited resources. Similar to the findings on role related stress of nurses by Santos et al. (2003), significant role overload was associated with situations

of increased workload unsupported by needed resources and inadequate preparation to carry out the duties and tasks of their job.

Role Conflict and Power Struggles

From the literature, it is evident that conflicts related to roles and professional boundaries occur within health care settings and are often related to power struggles for professional status (Powell & Davies 2012; Salhani & Coulter, 2009; Hollenberg, 2006). The findings of this study suggest that overt conflict between massage therapists and other HCPs was rare[8]. What was apparent, however, were underlying tensions related to the massage therapists' professional role. These appeared to be related to underlying power struggles which took place as the massage therapists' role was formed and defined through inter-professional work relations.

The massage therapists' experiences indicated that their professional position was different from that of the other HCPs. This was not only in terms of their inconsistent participation in patient care (e.g. team member status), but also in their limited ability to access resources, such as professional development support. Perspectives of the other HCP participants pointed to their use of subtle power positioning tactics in relation to the massage therapists. For example, although the work of the massage therapist appeared to be valued by other HCPs, they perceived massage therapists in a subordinate position to their own. The massage therapists' clinical role was often positioned as supportive or an adjunct to the work done by others in order to enhance or facilitate what they referred to as their work in achieving their outcomes. The perceived lower status of the massage therapists was also underscored by the lack of recognition by the other HCP participants of massage therapists as self-determining. Some acknowledged that the massage therapists had input regarding their work. Most however perceived massage therapists' roles to be predominantly determined by others through directives or referrals. These findings are in line with Hollenberg's (2006) conclusions that conventional practitioners perpetuate patterns of power and dominance over CAM practitioners by maintaining control of

[8] Although several massage therapy participants appeared to be quite candid about their conflict experiences, given the sensitivity of topic, it was reasonable to expect that participants may have been cautious in what or how much they shared. Recognizing this, I went back to four participants during the course of the analysis where the discussion seemed incomplete to further probe at this issue. My follow up inquiry provided additional insights to conflict related issues that were not discussed during the initial interview.

patient care processes (demarcationary closure tactics) and restricting access to resources (exclusionary closure tactics).

7.4 Interpretation of Contextualized Thematic Findings

An important and innovative aspect of this study was the mixed analysis which involved contextualizing the qualitative findings. In this study, contextualization refers to the process of situating qualitative findings within the context from which they emerged and examining how they vary across these contexts. This provided an additional layer to the analysis which enhanced the qualitative findings. These findings are important enough that they warrant a separate discussion point to present the interpretation of these findings.

7.4.1 Contextualization of Role Components

Six role components of the massage therapy professional role emerged - health care provider, educator, team member, program/clinic support, promotor of massage therapy profession, and researcher. However, not all six were assumed at each study site. In fact, at only one site all six components comprised the role of the massage therapist. Across the remaining sites, there was variability in terms of which components comprised the massage therapists' professional role. Minimal patterns were identified suggesting differences in role components assumed by massage therapists based on team member status. This suggests that the primary or core function of a massage therapist is providing care through the provision of massage-based treatments. The variability of the remaining role components may results from a range of factors, including expectations of massage therapists and other HCPs, structures in the practice environment, and patient care processes. The impact of factors in the hospital setting on the massage therapists' professional role warrants further investigation. The variation or lack of consistency may also be indicative of the fact that, in general, the massage therapists' professional role is not yet fully developed or clearly defined. These findings make an important contribution in developing a comprehensive articulation of the massage therapists' professional role.

7.4.2 Contextualization of Role Related Experiences.

The role related experiences varied across the study sites, with role overlap being most common. In relation to team member status, differences in role related experiences were apparent. Several factors gleaned from the participants' experiences provide potential reasons for these differences.

Massage therapists who were members of patient care teams experienced less ambiguity and fewer conflicts related to their role. As team members, massage therapists seemed to have more opportunity to share and educate others about the nature of their work and to be involved in collaborative processes concerning patient care. Also, they needed to have a clear understanding of what and how they specifically contributed to the team approach, which appeared to be effectively negotiated with the other HCPs. Role overload was also experienced less frequently by massage therapists who were team members. This may be related to the fact that massage therapists who provided care outside of a team context were often responsible for the additional tasks involved in running and managing the massage practice to ensure its viability. Massage therapists who were on teams contributed to some of the administrative tasks, however, the majority of their time appeared to be dedicated to direct patient care. Role overlap appeared to be more common for massage therapists who were team members. This may be related to the fact that massage therapists who function on patient care teams often carried out a more treatment-focused massage rather than a general relaxation massage, which required the application of techniques or modalities which also fell within the scope of practice of other HCPs (e.g. ultra sound, scar massage, hydrotherapy, and exercise prescription). Furthermore, the degree of communication and access to information from others is much greater when one is part of a team. As such, massage therapists who were members of teams were likely more aware of what the others were doing and, hence, better able to assess or determine when or if overlap occurred.

7.5 Strengths and Limitations of the Study

7.5.1 Strengths of the Study

This study addressed an important yet under-explored topic with practical relevance. Given the lack of research or information on hospital based massage therapy in Canada, the

study required taking some risks. For instance, it was initially unknown how many hospitals provided massage therapy services and whether a sufficient sample size would be reached for a meaningful study. However, if advances are to be made into new areas of inquiry, such risks need to be taken.

A key strength of this study was the application of a mixed methods design. The study design enabled a more comprehensive understanding of hospital based massage therapy in the Canadian context than either method alone could have achieved.

The study also derived its strength from the collection of data from a range of hospital types providing massage therapy services. This in turn enabled recruitment of massage therapist participants from a wide range of settings, providing opportunity to capture a diversity of experiences. Furthermore, a high level of interest in this study was expressed by massage therapists and thematic saturation within this participant group was achieved. This responsiveness also underscores the importance and significance of this study to the profession of massage therapy**.**

As outlined in chapter 3, several strategies were used during data collection and analysis in both phases of the study to enhance the rigor of this study and trustworthiness of the findings. For example, in the quantitative phase, the questionnaire was pre-tested and administered using a structured interview approach. In the qualitative phase, member checking and peer debriefing were two of the strategies employed to confirm findings. Lastly, a reflexive stance was taken by the researcher throughout the course of the study.

7.5.2 Limitations of the Study

Several limitations associated with both phases of the study were identified and strategies used to address these limitations are outlined below.

Although efforts were made to identify the most suitable individual at each of the 16 study sites to complete the questionnaire, it became apparent during questionnaire administration that not all respondents had the information to respond to all of the questionnaire items. For example, some indicated uncertainty about information specific to the hospital descriptors (e.g. the number of patient beds), or about massage services (e.g. how long massage therapy services were provided at the hospital). However, administration of the questionnaire as a structured

interview allowed the researcher to identify when a respondent was uncertain of the response and flag items that required verification. Triangulation with interview data and hospital documents, when available, enabled confirmation of several questionnaire items.

The small sample size of hospitals (n=16) precluded a statistically-based analysis to further assess the relationship between role themes and contextual variables. However the contextualization of role themes to study sites and team member status provides useful information as a starting point for consideration of how context may influence roles and role related experiences.

Interview findings with other HCPs were inconclusive. Despite significant recruitment efforts, the sample of other HCPs generated was quite small, had limited involvement of key HCPs in the hospital setting (e.g. medical doctors and nurses), and thematic saturation was not established during the analysis. In addition, the sample of other HCPs consisted of participants who were directly approached or recruited by the massage therapists. As such, a positive or accepting predisposition towards massage therapy should be assumed of this participant group. However, while limited, the sample did include a range of HCPs and provided a useful perspective on massage therapists' professional roles.

7.6 Implications of the Findings

Practice and education implications of this research are presented in this section.

7.6.1 Practice Implications

An important practice-related implication of this study is the direct engagement of the profession. Participation in the study resulted in exposure to the fact that a number of massage therapists are engaged in hospital based practice and were grappling with a range of issues; many of which are similar and some which appeared to be context specific. In response, three participants from three different sites are taking the initiative to use this research as a platform to create a Canadian hospital based massage therapy network.

Working in a hospital setting requires adaptation of massage practice from the standard approach used in the private health care setting. In addition to practical issues related to treatment location and potential restriction or expansion of scope of work, hospitals pose unique

challenges which the massage therapists need to be prepared for. For instance, hospitals are settings dominated by power hierarchies and multiple boundaries between and within professions (Powell & Davies, 2012). As such, massage therapists will likely find themselves in situations where they will need to negotiate their professional boundaries. This will require a balanced approach between advocating for their position and clearly delineating their abilities, skills, and areas of expertise, and adjusting their scope of practice in order to effectively work in a shared space (e.g. treatment space, similar knowledge) with other HCPs.

A third practice implication relates to the scope of massage therapy practice. The findings put to question whether massage therapy is a solely physical or body based modality, as suggested by current definitions, scope of practice of massage therapy (CMTO), and the NCCAM classification of massage therapy. In their role as health care providers, massage therapists reported applying manual techniques and other modalities such as hydrotherapy and ultrasound to provide a physically based treatment; meaning, they applied a variety of manual techniques to physical tissues such as muscles, fascia, scars and skin. Yet, in addition to the physical effects (e.g. reduced soft tissue restrictions, decreased trigger points, increased range of motion of affected joints), a number of psychological benefits were also recognized and described by both the massage therapists and other HCPs. Furthermore, massage therapists identified provision of psychological support as part of their role. As such, the classification of massage therapy as only a body-based intervention may be too limiting. Conceptualization of massage therapy as physical and psychological/mind-body intervention may be more appropriate to better reflect and fully encompass the actual scope of massage therapy practice.

7.6.2 Education Implications

The uncertainty or lack of ability of some participants in this study to clearly articulate their role suggests that an important element is currently missing in massage therapy training programs to adequately prepare massage therapists for practice. As the findings of this study indicate, the incorporation of massage therapists' role in a hospital setting is more than just a clinical issue. Massage therapists also function as educators and promotors of their profession. As such, competency development in these areas is equally important. As massage therapy services are provided in a variety of health care settings, it is critical for massage therapists to

graduate with the ability to adapt their practice to the different demands of these settings. Competencies which reflect an understanding of the "culture, language, protocols and operations of institutional settings" (Goldblatt et al., 2013), such as hospitals, are of particular importance for practitioners who are not educated in conventional academic settings or exposed to conventional health care environments (Goldblatt et al., 2013).

These findings also carry implications relevant to the education of other HCPs. Specific to CAM, to date, the focus of educational initiatives has been on providing HCPs with knowledge to appropriately advise their patient's use of CAMs (Nowack & Birck, 2012; Winslow & Shapiro, 2002). This needs to extend beyond monitoring, managing, or advising patients on CAM use, and include educational opportunities which support effective collaboration with CAM practitioners.

7.7 Research Recommendations

The results of this exploratory and descriptive examination of hospital based massage therapy led to a number of research questions. Those considered to be most pertinent are presented and discussed below.

Through the mixed analysis, three massage therapy service delivery approaches emerged: Stand-Alone, Open Incorporated, and Closed Incorporated. This was an unexpected yet important finding. It provides practical information on the ways massage therapy services can be organized and incorporated into a hospital setting. However, given the exploratory nature of these findings, prior to uptake or implementation, these emergent approaches warrant further investigation. Future research could focus on further defining and describing the key components of each approach. A case study approach may be useful for providing a more in-depth analysis and examination of these approaches. In addition, their usefulness will not only be based on suitability or fit within existing hospital structures and processes but also on patient outcomes. Research exploring or assessing outcomes of each approach and in comparison to each other would provide important insights to guide their usefulness and applicability to different hospital settings, patient populations, and massage therapists.

The mixed analysis contextualizing the qualitative findings indicated that not all components of the massage therapists' professional role identified were assumed at all of the

study sites. This suggests that factors related to the practice setting may influence the establishment and enactment of massage therapists' professional role. This issue was recognized and initially considered for inclusion in this study. However, to ensure feasibility it was not included as a study objective. Future research could involve a secondary analysis of the qualitative dataset to explore and describe factors identified by participants perceived to positively or negatively impact the massage therapists' role.

Lastly, this study provides the first examination of massage therapy incorporation into Canadian hospitals. It may serve as a useful baseline or reference point for monitoring and evaluating ongoing developments in this area. In addition, the Hospital-Based Massage Therapy Questionnaire (HBMTQ) may be a useful tool facilitating direct comparisons across settings and over time.

7.8 Conclusions

This is the first investigation of the incorporation of a popular CAM therapy, massage therapy, into Canadian urban hospitals. Although primarily exploratory, it provides a useful descriptive and contextually situated account of the massage therapy professional role in such a setting. A number of themes were identified, through which the multi-faceted nature of the massage therapists' professional role emerged. Thematic findings also brought to attention various issues related to the massage therapists' role which had direct and indirect impact on massage therapists' work and enactment of their role. Massage therapy is not an established profession in Canadian hospital settings. It appears that it is an evolving profession which is yet to reach its full potential. However, study findings suggest that there is significant potential for the inclusion of massage therapy services as a valued aspect of patient care in Canadian hospital settings. This study enables massage therapists in hospital settings to better articulate their role and identify the different ways in which this innovative service can be incorporated into hospital structures and processes.

References

Adams, J. (2006). An exploratory study of complementary and alternative medicine in hospital midwifery: Models of care and professional struggle. *Complementary Therapies in Clinical Practice, 12*(1), 40-47.

Adams, R., White, B., Beckett, C. (2010). The effects of massage therapy on pain management in the acute care setting. *International Journal of Therapeutic Massage and Bodywork, 3*(1). 4-11

Agnes, M. (Ed.). (2000). *Webster's new world college dictionary* (4th Ed.). Foster City, CA: IDG Books Worldwide.

Airosa, F., Falkenberg, T., Ohlen G., Arman M. (2013).Tactile massage or healing touch: Caring touch for patients in emergency care – a qualitative study. *European Journal of Integrative Medicine, 5*(4), 374-381.

Alves, S. (2005). A study of occupational stress, scope of practice, and collaboration in nurse anesthetists practicing in anesthesia care team settings. *Journal of the American Association of Nurse Anesthetists, 73*(6), 443-52.

Al-Windi, A. (2004). Determinants of complementary and alternative medicine (CAM) use. *Complementary Therapies in Medicine, 12*(2-3), 99-111.

Anderson, P., & Cutshall, S. (2007). Massage therapy: a comfort intervention for cardiac surgery patients. *Clinical Nurse Specialist, 21*(3), 161–165

Atwal, A. (2002). Nurses' perceptions of discharge planning in acute health care: a case study in one British teaching hospital. *Journal of Advanced Nursing, 39*(5), 450-458.

Averill, J. (2002). Matrix analysis as a complementary analytic strategy in qualitative inquiry. *Qualitative Health Research, 12*(6), 855-866.

Ayres, L., Kavanaugh, K., Knafl, K. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research, 13*(6), 871-883.

Barrett, J., Curran, V., Glynn, L., Godwin, M. (2007). *CHSRF synthesis. Interprofessional collaboration and quality primary healthcare.* Ottawa, ON: Canadian Health Services Research Foundation. Retrieved from: www.chsrf.ca/research_themes/documents/SynthesisReport_E_FINAL.pdf

Barrett, B. (2003). Alternative, complementary, and conventional medicine: is integration upon us? *Journal of Alternative and Complementary Medicine; 9*(3), 417-427.

Baskwill, A., & Gowan Moody, D. (2006). *Report on policy issues concerning the regulation of massage therapy.* The Federation of Massage Therapy Regulatory Authority of Canada (FOMTRAC). Toronto, ON. Retrieved from http://www.cmto.com/downloads/fomtrac-report/%E2%80%8E.

Bekkering, G., Engers, A., Wensing, M., Hendriks, H., Tulder, M., Oostendorp, R., Bouter, L. (2003). Development of an implementation strategy for physiotherapy guidelines on low back pain. *Australian Journal of Physiotherapy, 49*(3), 208-214.

Berger, L., Tavares, M., Berger, B. (2013). A Canadian experience of integrating complementary therapy in a hospital palliative care unit. *Journal of Palliative Medicine, 16*(10): 1294-8.

Biddle, B. (1986). Recent development in Role Theory. *Annual Review of Sociology, 12*, 67-92.

Billhult ,A., Bergbom, I., Stener-Victorin, E. (2007). Massage relieves nausea women with breast cancer who are undergoing chemotherapy. *Journal of Complementary Medicine, 13*(1), 53–7.

Boon, H., & Kachan, N. (2008). Integrative medicine: a tale of two clinics. *BMC Complementary and Alternative Medicine, 18*(8):32.

Booth J., & Hewison A. (2002). Role overlap between occupational therapy and physiotherapy during in-patient stroke rehabilitation: an exploratory study. *Journal of Interprofessional Care, 16*(1), 31-40.

Borkan, J. (2012). Complementary and alternative health care in Israel and the western world. *Israel Journal of Health Policy and Research, 1*:8.

Bostrom, E., Honsten, A., Lundman, B., Stenlund, H., Isaksson, U. (2013). Role clarity and role conflict among Swedish diabetes specialist nurses. *Primary Care Diabetes, 7*(3), 207-212.

Brazier, A., Cooke, K., Moravan, V. (2008). Using mixed methods for evaluating an integrative approach to cancer care: A case study. *Cancer Therapies, 7*(1), 5-17.

Brookes, K., Daly, J., Davidson, P., Halcomb, E. (2007). Role theory: a framework to investigate the community nurse role in contemporary health care systems. *Contemporary Nurse, 25*(1-2), 146-155.

Brown B., Crawford P., Darongkamas J. (2000). Blurred roles and permeable boundaries: the experience of multi-disciplinary working in community mental health. *Health and Social Care in the Community, 8*(6), 425-435.

Bryant-Lukosius, D., & DiCenso, A. (2004). A framework for the introduction and evaluation of advanced nursing roles. *Nursing and Health Care Management and Policy, 48*(5), 530-540.

Bryman, A. (2012). *Social Research Methods* (4th Ed). New York, NY: Oxford University Press

Byrne A, & Pettigrew, CM. (2010). Knowledge and attitudes of allied health professional students regarding the stroke rehabilitation team and role of the SLP. *International Journal of Language and Communication Disorders, 45*(4), 510-521.

Calvert, R. (2002). *The history of massage: An illustrated survey from around the world*. Rochester, VT: Healing Arts Press.

Canadian Association of Midwives. (2010). Midwifery regulation in Canada. Retrieved from www.canadianmidwives.org.

Canadian Institute for Health Information (CIHI). (2012). *Canadian hospital report project technical notes – clinical indicators*. Ottawa, ON. Retrieved from www.cihi.ca/CIHI-ext-portal/pdf/internet/CHRP_TNCI_PDF_EN.

Canadian Interprofessional Health Collaborative. (2010). *A National Interprofessional Competency Framework.* Retrieved from http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf
Caspi, O., Sechrest, L., Pitluk, H., Marshall, C., Bell, I. (2003). On the definitions of complementary, alternative and integrative medicine: societal mega-stereotypes vs. the patient's perspective. *Alternative Therapies in Health and Medicine, 9*(6), 58-62.

Chaboyer, W., Foster, M., Foster M., Kendall E. (2004). The intensive care unit liaison nurse: towards a clear role description. *Intensive and Critical Care Nursing, 20*(2), 77-86.

Chang, M., Chen, C., Huang, K. (2006). A comparison of massage effects on labor pain using the McGill Pain Questionnaire. *Journal of Nursing Research, 14*(3), 190-7.

Chase, T., Jha, A., Brooks, C., Allshouse, A. (2013). A pilot feasibility study of massage to reduce pain in people with spinal cord injury during acute rehabilitation. *Spinal Cord, 51*, 847-851.

Cherkin D., Sherman, K., Deyo R., Shekelle P. (2003). Review of evidence for the effectiveness, safety and cost of acupuncture, massage therapy, and spinal manipulation for back pain. *Annals of internal medicine, 138*(11), 898-906.

Chu, F., & Wallis, M. (2007). Taiwanese nurses' attitudes towards and use of complementary and alternative medicine in nursing practice: a cross-sectional survey. *International Journal of Nursing Studies, 44*(8), 1371-8.

College of Health Disciplines. (2008). *The British Columbia Competency Framework for Interprofessional Collaboration.* Vancouver, BC. Retrieved September 2, 2013 from http://www.chd.ubc.ca/teaching-learning/competency/bc-framework-interprofessional

College of Massage Therapists of Ontario. (n.d) *The standards of practice and code of ethics*. Toronto, ON. Retrieved from http://www.cmto.com/for-the-public/about-the-profession/policies-publications/standards-of-practice/

Conway, M. (1988). Theoretical approaches to the study of roles. In M. Hardy & M. Conway (Eds.), *Role Theory – Perspectives for health professionals* (p.63). San Mateo, CA: Appleton 7 Lange.

Corbin, L. (2013). Safety and Efficacy of Massage Therapy for Patients with Cancer. *Cancer Control, 12*(3):158-164.

Cornish, F., & Gillespie, A. (2009). A pragmatist approach to the problem of knowledge in health psychology. *Journal of Health Psychology, 14*(6), 800-809.

Coulter, I., Hilton, L., Ryan, G., Ellison, M., Rhodes, H. (2008). Trials and tribulations on the road to implementing integrative medicine in a hospital setting. *Health Sociology Review, 17*(4), 368-383.

Coulter, I. (1991). Sociological studies of the role of the chiropractor: an exercise in ideological hegemony? *Journal of Manipulative and Physiological Therapies, 14*(1), 51-58.

Coyle, J., & Williams, B. (2009). An exploration of the epistemological intricacies of using qualitative data to develop a quantitative measure of user views of health care. *Journal of Advanced Nursing, 31*(5), 1235-1243.

Creswell, J., & Plano-Clark, V. (2011). *Designing and conducting mixed methods research*. Washington, DC: SAGE Publications.

Currin, J., & Meister, E. (2008). A hospital-based intervention using massage to reduce distress among oncology patients. *Cancer Nursing, 31*(3), 214-21.

Curry, L., Nembhard, I., Bradley, E. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation, 119*, 1442-1452.

Dalley, J., & Sim, J. (2001). Nurses' perceptions of physiotherapists as rehabilitation team members. *Clinical Rehabilitation, 15*(4), 380-389.

Dion, L., Rodgers, N., Cutshall, S., Cordes, M., Bauer B., Cassivi S., Cha, S. (2011). Effect of massage on pain management for thoracic surgery patients. *International Journal of Therapeutic Massage and Bodywork, 4*(2), 2-6.

Djukic M., Kovner, C. (2010). Overlap of registered nurses and physician practice: Implications for US Health Care Reform. *Policy, Politics and Nursing Practice, 11*(1), 13-22.

Donabedian, A. (1978). The quality of medical care. *Science, 200*(4344), 856-864.

Donald, F., Bryant-Lukosius, D., Martin-Misener, R., Kaasalainen, S., Kilpatrick, K., Carter, N., Harbman, P., Bourgeault, I., DiCenso, A. (2010). Clinical nurse specialists and nurse practitioners: title confusion and lack of role clarity. *Nursing Leadership, 23* (Special issue), 189-210.

Donnelly, C., Brenchley, C., Crawford, C., Letts, L. (2013). The integration of occupational therapy into primary care: a multiple case study design. *BMC Family Practice, 14*:60.

Duimel-Peeters, I., Hulsenboom, M., Berger, M., Snoeckx, L., Halfens, R. (2006). Massage to prevent pressure ulcers: knowledge, beliefs and practice. A cross sectional study among nurses in the Netherlands in 1991 and 2003. *Journal of Clinical Nursing, 15*(4), 428-435.

Eisenberg, D., Kessler, R. C., Foster, C., Norlock, F. E., Calkins, D. R., Delbanco, T. L. (1993). Unconventional medicine in the United States – prevalence, costs, and patterns use. *The New England Journal of Medicine, 328*(4), 246-252.

Epstein, I., Kazanjian, A., MacAulay, D. (1999). Health professions council massage therapist's scope of practice preliminary report. Retrieved from http://www.health.gov.bc.ca/professional-regulation/hpc/review/part-i/scope-massage.html#IIIA4

Ernst, E. (2000). Prevalence of use of complementary/alternative medicine: a systematic review. *Bulletin of World Health Organization, 78*(2); 258-266.

Esmail, N. (2007). Complementary and Alternative Medicine in Canada: Trends in use and public attitudes, 1997-2006. *Public Policy Sources, 87,* 3-53.

Fournier, C., & Reeves, S. (2012). Professional status and interprofessional collaboration: A view of massage therapy. *Journal of Interprofessional Care, 26*(1), 71-72.

Furaker, C. (2008). Registered nurses' views on their professional role. *Journal of Nursing Management, 16*(8), 933-41.

Gaboury, I., Toupin-April, K., Verhoef, M. (2012). A qualitative study of the term CAM: is there a need to reinvent the wheel? *BMC Complementary and Alternative Medicine, 12*:131.

Galloway, S., & Watt, J. 2004. Massage provision by physiotherapists at major athletics events between 1987 and 1998. *British Journal of Sports Medicine, 38*(2), 235–237.

Gavin, J., & Boon, H. (2005). CAM in Canada: places, practices, research. *Complementary Therapies in Clinical Practice, 11*(1), 21-7.

Goldblatt E., Wiles M., Schwartz J., Weeks J. (2013). Competencies for optimal practice in integrated environment: Examining attributes of a consensus interprofessional practice document from the licensed integrative health disciplines. *Explore, 9*(5), 285-291.

Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*, 105-112.

Greene, J., Caracelli, V., Graham, W. (1989). Toward a conceptual framework for mixed methods evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

Gupta, S., Paterson, M., Lysaght, R., vonZweck, C. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy, 79*(2), 86-95.

Hall, H., Griffiths, D., McKenna, L. (2012). Complementary and alternative medicine in midwifery practice: managing the conflicts. *Complementary Therapies in Clinical Practice, 18*(3), 246-251.

Hamilton, F. & McDowell, J. (2004). Identifying the palliative care role of the nurse working in community hospitals: an exploratory study. *International Journal of Palliative Nursing, 10*(9), 426-434.

Hardy, M., & Conway, M. (1988). *Role Theory – Perspectives for health professionals* (2nd ed.). San Mateo, CA: Appleton 7 Lange.

Hardy, M., & Hardy, W. (1988). In M. Hardy & M. Conway (Eds.), *Role Theory – Perspectives for health professionals* (p.159-239). San Mateo, CA: Appleton 7 Lange.

Healey D. (2012, March 12). *Achieving Success in integrated care settings*. Retrieved from: http://www.amtamassage.org/articles/7/SchoolAdvantage/detail/2560.

Health Council of Canada. (2005). *A review of scopes of practice of health professions in Canada: a balancing act*. (Publication No. H174-8-2005E). Toronto, ON: Patricia Baranek.

Hollenberg, D., Lytle, M., Walji, R., Cooley, K. (2013). Addressing provider shortage in underserviced areas: the role of traditional complementary and alternative medicine (TCAM) providers in Canadian rural healthcare. *European Journal of Integrative Medicine, 5*(3), 15-26.

Hollenberg, D. Tsasis, P., Kelley, N. (2011). CAM in Canadian hospitals: the new frontier? *Journal of Complementary and Integrative Medicine, 8*(1), article 20.

Hollenberg, D. (2006). Uncharted ground: patterns of professional interaction among complementary/alternative and biomedical practitioners in integrative health care settings. *Social Science & Medicine, 62*(3), 731-744.

Homer, C., Passant, L., Brodie, P., Kildea, S., Leap, N., Pincome, J., Thorogood, C. (2009). The role of the midwife in Australia: views of women and midwives. *Midwifery, 25*(6), 673-681.

Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Hughes, D., Ladas, E., Rooney, D., Kelly, K. (2008). Massage therapy as a supportive care intervention for children with cancer. *Oncology Nursing Forum, 35*(3), 431-42.

Hughes, J. (2001). Occupational therapy in community mental health teams: a continuing dilemma? Role theory offers an explanation. *British Journal of Occupational Therapy, 64*(1), 34-40.

Industry Canada. (2007). *Canadian Industry statistics – Definition of hospitals* (NAICS 622). Retrieved from http://www.ic.gc.ca/cis-sic/cis-sic.nsf/IDE/cis-sic622defe.html.

Institute of Medicine (US) Committee on the Use of Complementary and Alternative Medicine by the American Public. (2005). *Complementary and Alternative Medicine in the United States*. Washington, DC: National Academies Press. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK83799/

Interprofessional Education Collaborative Expert Panel. (2011). *Core competencies for interprofessional collaborative practice: report of an expert panel.* Retrieved from: www.aacn.nche.edu/education-resources/IPECReport.pdf.

Janssen, P., Shroff, F., Jaspar, P. (2012). Massage therapy and labor outcomes: a randomized controlled trial. *International Journal of Therapeutic Massage Bodywork, 5*(4), 15-20.

Johnson, R., Onwuegbuzie, A., Turner, L. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133.

Johnston V, Nielsen M, Corbiere M, Franche R. (2012). Experiences and perspectives of physical therapists managing patients covered by workers' compensation in Queensland, Australia. *Physical Therapy, 92*(10), 1306-15.

Jones, M. (2005). Role development and effective practice in specialist and advanced practice roles in acute hospital settings: systematic review and meta-synthesis. *Journal of Advanced Nursing, 49*(2), 191-209.

Kath, L., Stichler, J., Ehrhart, M., Sievers, A. (2013). Predictors of nurse manager stress: a dominance analysis of potential work environment stressors. *International Journal of Nursing Studies, 50*(11), 1474-80.

Kilpatrick, K., Lavoie-Tremblay, M., Lamothe, L., Ritchie, J., Doran, D. (2012). Conceptual framework of acute care nurse practitioner role enactment, boundary work, and perceptions of team effectiveness. *Journal of Advanced Nursing, 69*(1), 205-17.

Kinn, L., & Aas, R., (2009). Occupational therapits' perceptions of their practice: A phenomenological study. *Australian Occupational Therapy Journal, 56*(2), 112-121.

Längler, A., Boeker, R., Kameda, G., Seifert, G., Edelhäuser, F., Ostermann T. (2013). Attitudes and beliefs of paediatric oncologists regarding complementary and alternative therapies. *Complementary Therapies in Medicine, 21*(suppl 1), S10-9.

Li, A., Gomez, M., Fish, J. (2010). Effectiveness of pain management following electrical injury. *Journal of Burn Care Research, 31*(1), 73-82.

Lopopolo, R., Schafer, D., Nosse, L. (2004). Leadership, administration, management, and professionalism (LAMP) in physical therapy: a Delphi study. *Physical Therapy, 84*(2), 137-150.

Lopopolo, R. (2002). The relationship of role-related variables to job satisfaction and commitment to the organization in a restructured hospital environment. *Physical Therapy, 82*(10), 984-999.

MacDonald M, Bally J, Ferguson L, Murray B, Fowler-Kerry S, Anonson J. (2010). Knowledge of the professional role of others: A key interprofessional competency. *Nurse Education and Practice, 10*(4), 238-242.

McCallin, A., & Frankson, C. (2010). The role of the charge nurse manager: a descriptive exploratory study. *Journal of Nursing Management, 18*(3), 319-25.

McCarthy, A., Hegney, D., Pearson, A. (2000). The perceptions of rural nurses towards role change within the context of organisational change. *Australian Journal of Advanced Nursing, 17*(4), 21-8.

Mead N., & Bower, P. (2000). Patient –centeredness: a conceptual framework and review of the empirical literature. *Social Science & Medicine, 51*(7), 1087-1110.

Merriam-Webster Dictionary. (n.d). Retrieve from http://www.merriam-webster.com/dictionary/contextualize

Micevski, V., Korkola, L., Sarkissian, S., Mulcahy, V., Shobbrook, C., BelforD, L., Keels, L. (2004). UHN framework for advanced nursing practice: development of a comprehensive conceptual framework describing the multidimensional contributions of advanced practice nurses. *Canadian Journal of Nursing Leadership, 17*(3), 52-64.

Micozzi, M. (2001). *Fundamentals of Complementary and Alternative Medicine* (2nd Ed). New York, NY: Churchill Livingstone.

Miles, M., & Huberman, M. (1994). *An Expanded Sourcebook: Qualitative Data Analysis* (2nd ed.).Thousand Oaks, CA: SAGE Publications.

Mind Tools (n.d.). *Decision trees. Choosing by projecting "expected outcomes"*. Retrieved from http://www.mindtools.com/pages/article/newTED_04.htm

Mitchinson, A., Kim, H., Rosenberg, M., Geisser, M., Kirsh, M., Cikrit, D. (2007). Acute postoperative pain management using massage as an adjuvant therapy: a randomized trial. *Archives of Surgery; 142*(12), 1158–1167.

Moran-Ellis, J., Alexander, V., Cronin, A., Dickinson, M., Fielding. J., Sleney, J, Thomas, H. (2006). Triangulation and integration: processes, claims and implications. *Qualitative Research, 6*(1), 45-61.

Morgan, D. (2007). Paradigms lost and pragmatism regained: methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76.

Morse, J., Barrett, M., Mayan, M., Olson, K., Spiers, J. (2008). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods, 1*(2), 13-22.

Morse, J. (2003). Principles of mixed methods and multimethod research design. In C. Tashakkori and A. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 189-208). Thousand Oaks, CA: SAGE Publications.

Moustakas, C. (1994). In: C. Teddlie & A. Tashakkori, A (Eds.). *Foundations of Mixed Methods. Integrating quantitative and qualitative approaches in social and behavioural sciences*. (p. 254). Thousand Oaks, CA: SAGE Publications.

Moyer, C.; Rounds, J., Hannum, J. (2004). A meta-analysis of massage therapy research. *Psychological Bulletin, 130*(1), 3-18.

Muller-Juge, V., Cullati, S. Blondon, KS, Hudelson, P, Maitre F., Vu, NV, Savoldeli, GL, Nendaz MR. (2013). Interporfessional collaboration on an internal medicine ward: role perceptions and expectations among nurses and residents. *PLOSOne, 8*(2), e57570.

Myklebust, M., & Iler, J. (2007). Policy for therapeutic massage in an academic health center: a model for standard policy development. *Journal of Alternative and Complementary Medicine,* 13(4), 471-5.

Nancarrow, S., Mackey, H., (2005). The introduction and evaluation of an occupation therapy assistant practitioner. *Australian Occupational Therapy Journal, 52*(4), 293-301.

Nancarrow, S. (2004). Dynamic role boundaries in intermediate care services. *Journal of Interprofessional Care, 18*(2), 141-151.

National Center for Complementary and Alternative Medicine (NCCAM). (2009, October 26). *What is CAM*? Retrieved from http://nccam.nih.gov/health/whatiscam/overview.htm.

Nichols, L., & O'Malley, A. (2006). Hospital payment systems: will payers like the future better than the past. *Health Affairs, 25*, 81-93.

Nowack, R., & Birck, R. (2012). Complementary and alternative medicine is popular among chronic renal failure patients – renal teams must increase their competence to advise patients with respect to efficacy and safety. *Evidence Based Nursing, 15*(1), 29-30.

O'Brien-Pallas, L., Murphy, G., Shamian, J., Li, X., Hayes, L. (2010). Impact and determinants of nurse turnover: a pan-Canadian study. *Journal of Nursing Management, 18*(8), 1073-86.

Office of Behavioral and Social Science Research. (2010). *Best practices for mixed methods research in the health sciences.* National Institute of Health: Creswell, J., Klassen, A., Plano-Clark, V., Clegg-Smith, K. Retrieved from http://obssr.od.nih.gov/mixed_methods_research/pdf/Best_Practices_for_Mixed_Methods_Research.pdf

Oneschuk, D., Balneaves, L., Verhoef, M., Boon, H., Demmer, C., Chiu, L. (2007). The status of complementary therapy services in Canadian palliative care settings. *Supportive Care Cancer, 15*(8), 939-47.

Onwuegbuzie, A., & Dickinson, W. (2008). Mixed methods analysis and information visualization: graphical display for effective communication of research results. *The Qualitative Report, 13*(2), 204-225.

Onwuegbuzie, A., Slate, J., Leech, N., Collins, K. (2007). Conducting mixed analyses: A general typology. *International Journal of Multiple Research Approaches, 1*(1), 4-17.

Onwuegbuzie, A. & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie & (Eds.), *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: SAGE Publications.

O'Rourke, M., & White, A. (2011). Professional role clarity and competency in health care staffing – the missing pieces. *Nursing Economics*, *29*(4),183-188.

Oxtoby, K. (2009). Professional roles are blurring. British Medical Journal - Careers. Retrieved from http://careers.bmj.com/careers/advice/view-article.html?id=3181

Parkman, C. (2005). Regulatory issues in CAM. *Case Manager*, *16*(1), 17-18.

Parlak Gürol, A., Polat, S., Akçay, M. (2010). Itching, pain, and anxiety levels are reduced with massage therapy in burned adolescents. *Journal of Burn Care Research, 31*(3), 429-32

Pellat, G. (2005). Perceptions of interprofessional roles within the spinal cord injury rehabilitation team. *International Journal of Therapy and Rehabilitation, 12*(4), 143-150.

Phillips, J. Andrews, L., Hickman, L. (2013). Role ambiguity, role conflict, or burnout: are these areas of concern for Australian palliative care volunteers? Pilot study results. *American Journal of Hospice and Palliative Medicine,* Oct 3 (Epub ahead of print).Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24092764

Pierre, B. (2001). Occupational therapy as documented in patients' records. Part III. Valued but not documented. Underground practice in the context of professional written communication. *Scandinavian Journal of Occupational Therapy, 8*(4), 174-183.

Polit, D., & Beck C. (2010) *Essentials nursing research: appraising evidence for nursing practice* (7th ed.). Philadelphia, PA: Lippincott Williams and Wilkins.

Pope, C., Ziebland, S., Mays, N. (2000). Analysing qualitative data. *The British Medical Journal, 320*(7227), 114-116.

Posadzki, P., & Ernst E. (2013). The safety of massage therapy: an update of a systematic review. *Focus on Alternative and Complementary Therapies, 18*(1), 27-32.

Powell, A., & Davies, H. (2012). The struggle to improve patient care in the face of professional boundaries. *Social Science & Medicine, 75*(5), 807-814.

Preece, J. (2002). Introducing abdominal massage in palliative care for the relief of constipation. Complementary Therapies in Nursing and Midwifery, 8(2), 101-105.

Ratner, C. (2002). Subjectivity and objectivity in qualitative methodology. *Forum: Qualitative Social Research, 3*(3), article 16.

Robarts , S., Kennedy, D., MacLeoad, A., Findlay, H., Gollish, J. (2008). A framework for the development and implementation of an advanced practice in role for physiotherapists that improves access and quality of care for patients. *Healthcare Quarterly, 11*(2), 67-75.

Ryan, C. (2013). National regulation. *Massage Therapy Canada*, Winter issue.

Saldana, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: SAGE Publications.

Sale, J., Lohfeld, L., Brazil, K. (2002). Revisiting the quantitative-qualitative debate: implications for mixed-methods research. *Quality & Quantity, 36*, 43-53.

Salhani , D., & Coulter, I. (2009). The politics of interprofessional working and the struggle for professional autonomy in nursing. *Social Science & Medicine, 68*(7), 1221-1228.

Samueli Institute. (2011). *2010 Complementary and alternative medicine survey of hospitals – Summary of results*. Alexandria, VI: Sita Ananth.

Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? *Research in Nursing and Health, 23,* 334-340.

Santos, S., Carroll, C., Cox, K., Teasley, S., Simon, S., Bainbridge, L., Cunningham, M., Ott, L. (2003). Baby boomer nurses bearing the burden of care: a four-site study of stress, strain, and coping for inpatient registered nurses. *Journal of Nursing Administration, 33*(4), 243-50.

Scarrott, C. (2013). *Tree Diagram*. In N. J Salkind & K. Rasmussen (Eds.), Encyclopedia of Measurement and Statistics. Retrieved from http://srmo.sagepub.com/view/encyclopedia-of-measurement-and-statistics/n462.xml

Seers, K., Crichton, N., Martin, J., Coulson, K., Barroll, D. (2008). A randomised controlled trial to assess the effectiveness of a single session of nurse administered massage for short term relief of chronic non-malignant pain. *BMC Nursing, 7,* 10.

Service Ontario. *Massage Therapy Act 1991*. Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_91m27_e.htm.

Shroff, F., & Sahota, I. (2013).The perspectives of educators, regulators and funders of massage therapy on the state of the profession in British Columbia, Canada. *Chiropractic & Manual Therapies, 21*(1):2.

Shorofi, S. (2011). Complementary and alternative medicine (CAM) among hospitalised patients: Reported use of CAM and reasons for use, CAM preferred during hospitalisation, and the socio-demographic determinants of CAM users. *Complementary Therapies in Clinical Practice, 17*(4), 199-205.

Shorofi, S., & Arbon, P. (2010). Nurses' knowledge, attitudes, and professional use of complementary and alternative medicine (CAM): a survey at five metropolitan hospitals in Adelaide. *Complementary Therapies in Clinical Practice, 16*(4), 229-34.

Sidani, S & Irvine, D. (1999). A conceptual framework for evaluating the nurse practitioner role in acute care settings. *Journal of Advanced Nursing, 30*(1), 58-66.

Smith, A., & Larew, C. (2013). Strengthening role clarity in acute care nurse case managers. Application of the synergy model in staff development. *Professional Case Management, 18*(4), 190-198.

Smith, A. (2011). Role ambiguity and role conflict in nurse case managers. *Professional Case Management, 16*(4), 182-196.

Smith, E., & Mackenzie, L. (2011). How occupational therapists are perceived within inpatient mental health settings: the perceptions of seven Australian nurses. *Australian Occupation Therapy Journal, 58*(4), 251-260.

Smith M., Kemp J., Hemphill L., Vjir C. (2004). Outcomes of therapeutic massage for hospitalized cancer patients. *Journal of Nursing Scholarship, 34*(3), 257–262

Smith, S., & Roberts, P. (2005). An investigation of occupational therapy and physiotherapy roles in a community setting. *International Journal of Therapy and Rehabilitation, 12*(1), 21-29

Snelgrove, S. & Hughes, D. (2000). Interprofessional relations between doctors and nurses: perspectives from South Wales. *Journal of Advanced Nursing, 31*(3), 661-667.

Soklaridis S., Kelner M., Love, R., Cassidy, J. (2009). The organizational support necessary for integrative health care (IHC): a clinic for artists in a hospital setting. *Journal of Complementary and Integrative Medicine, 6*(1): article 3.

Spooner-Lane, R., & Patton, W. (2007). Determinants of burnout among public hospital nurses. *Australian Journal of Advanced Nursing, 25*(1), 8–16.

Stamp, G., Kruzins, G., Crowther, C. (2001). Perineal massage in labour and prevention of perineal trauma: randomised controlled trial. *British Medical Journal, 322*(7297), 1277-1280.

Stange, K., Crabtree, B., & Miller, W. (2006). Publishing multi-method research. *Annals of Family Medicine, 4*(4), 292-294.

Statistics Canada (2012). *Census metropolitan area (CMA) and census agglomeration (CA).* Statistics Canada Online Catalogue no. 98-301-XWE. Ottawa. Version updated, December 11, 2012. Retrieved from www12.statcan.gc.ca/census-recensement/2011/ref/dict/geo009-eng.cfm

Statistics Canada. (2011). *Population of census metropolitan areas*. Statistics Canada table no. 051-0046. Ottawa. Version updated February 6, 2013. Retrieved from: http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo05a-eng.htm

Stedman, J. (2005). *Medical dictionary for the health professions and nursing* (5th ed.). Baltimore, MD: Lippincott Williams and Wilkins.

Stillerman, E. (2009-2010). C-section scar massage. *Midwifery Today, 92*, 64-65.

Sturgeon, M., Wetta-Hall, R., Hart, T., Good, M., Dakhil, S. (2009). Effects of therapeutic massage on the quality of life among patients with breast cancer treatment. *Journal of Alternative and Complementary Medicine; 15*(4), 373–80.

Tashakkori, A., & Teddlie, C. (2010). Putting the human back in 'Human research methodologies': The researcher in mixed methods research. *Journal of Mixed Methods Research, 4*(4), 271–277.

Tashakkori, A., & Teddlie, C (Eds.). (2003). *Handbook of mixed methods in social and behavioral research.* Thousand Oaks, CA: SAGE Publications

Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Methods. Integrating quantitative and qualitative approaches in social and behavioural sciences.* Thousand Oaks, CA: SAGE Publications.

The Free Dictionary. Retrieved from http://www.thefreedictionary.com/hospital+ward

The Medical Dictionary for Health Professions and Nursing. (2012). Retrieved from http://medical-dictionary.thefreedictionary.com/Massage+Therapy.

Vanderzalm, J., Hall, M., McFarlane, L., Rutherford, L., Patterson, S. (2013). Fostering interprofessional learning in a rehabilitation setting: development of an interprofessional clinical learning unit. *Rehabilitation Nursing, 38*(4), 178-85.

Vohra, S., Feldman, K., Johnston, B., Waters, K., Boon, H. (2005). Integrating complementary and alternative medicine into academic medical centers: experience and perceptions of nine leading centers in North America. *BMC Health Service Research, 5*:78–84.

Walker S., Read S., Priest H. (2013). Use of reflexivity in a mixed methods study. *Nurse Researchers, 20*(3): 38-43.

Wall, S. (2006). Living with grey: role understanding between clinical nurse educators and advanced practice nurses. *Nursing Leadership, 19*(4), 57-71.

Wardell, W. (1952). A marginal professional role: The chiropractor. *Social Forces, 30*: 339-48

Watson, J., Turnbull, B., Mills, A. (2002). Evaluation of the extended role of the midwife: the voices of midwives. International Journal of Nursing Practice, 8, 257-264.

Way, D., Jones, L., Busing, N. (2000, May 18). *Implementation strategies: Collaboration in primary care – family doctors and nurse practitioners delivering shared care.* Retrieved from: www.eicp.ca/en/toolkit/hhr/ocfp-paper-handout.pdf

Webster, F., Bremner, S., Jackson, M., Bansal, V., Sale, J. (2012). The impact of a hospitalist on role boundaries in an orthopedic environment. *Journal of Multidisciplinary Healthcare, 2012*(5), 249-256.

White, D., Oelke N., Besner J., Doran D., McGillis L., Giovannetti, P. (2008). Nursing scope of practice: description and challenges. *Nursing Leadership, 21*(1), 44-57.

Wieland, L., Manheimer, E., Berman, B. (2011). Development and classification of an operational definition of complementary and alternative medicine for Cochrane Collaboration. *Alternative Therapies in Health and Medicine, 17*(2), 50-59.

Wiese, M., Oster, C., Pincombe, J., (2010). *Understanding the emerging relationship between complementary medicine and mainstream health care: a review of the literature*. Health (London), 14(3), 326-42

Willis, G.B. (2005). *Cognitive Interviewing: A Tool for Improving Questionnaire Design*. Thousand Oaks, CA: SAGE Publications.

Winslow, L., & Shapiro, H. (2002). Physicians want education about complementary and alternative medicine to enhance communication with their patients. *Archives of Internal Medicine, 162*(10), 1176-1181.

Wisdom, J., Cavaleri, M., Onwuegbuzie A., Green, C. (2012). Methodological reporting in qualitative, quantitative, and mixed methods health services research articles. *Health Services Research, 47*(2), 721-745.

World Health Organization. (2010). *Framework for Action on Interprofessional Collaboration and Practice*. Geneva, SW. Retrieved from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf

APPENDIX A: CENSUS METROPOLITAN AREAS (CMAS) IN CANADA

CITY (CMA)	PROVINCE
Abbotsford	BC
Barrie	ON
Brantford	ON
Calgary	AB
Edmonton	AB
Sudbury	ON
Guelph	ON
Halifax	NS
Hamilton	ON
Kelowna	BC
Kingston	ON
Kitchener	ON
London	ON
Moncton	NB
Montreal	QC
Oshawa	ON
Ottawa	ON
Peterborough	ON
Quebec City	QC
Regina	MN
Saguanay	QC
St Johns	NB
Saskatoon	Saskatchewan
Sherbrooke	QC
St. Catherine – Niagara Falls	ON
St John	NFLD
Thunder Bay	ON
Toronto	ON
Trois Riviere	QC
Vancouver	BC
Victoria	BC
Windsor	ON
Winnipeg	MN

*Based on data from Statistics Canada (http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo05a-eng.htm)

APPENDIX B: RESEARCH NOTICE– FOR CIRCULATION BY MASSAGE THERAPY ASSOCIATIONS AND REGULATORY COLLEGES

On behalf of the researchers at the University of Calgary who are conducting a research project on massage therapy in Canadian hospitals, we are circulating the following research notice:

ARE YOU A MASSAGE THERAPIST WORKING IN A HOSPITAL SETTING?

The Research Project:
Ania Kania is a massage therapist who is currently completing her PhD at the University of Calgary. Her research is on massage therapy in hospital settings. More specifically, it is about how massage therapy is being integrated into hospitals and the role of massage therapists on hospital health care teams.

One phase of this study involves identifying hospitals across Canada that deliver (or have delivered) massage therapy services.

Your participation:
If you are massage therapist who currently works or has previously worked in a hospital in Canada, Ania Kania is requesting the following information:

1. The name of the hospital
2. The hospital department or unit where you provide(d) massage therapy
3. The name of a hospital coordinator, manager, and/or director that you report(ed) to.

Your ***voluntary participation*** would involve taking a few minutes to send this information to Ania Kania at:

akania@ucalgary.ca OR 403-210-9608

If you know a massage therapist who works in a hospital setting – please forward this email to them!

Thank you for your time!

This study has been approved by the Conjoint Health Research Ethics Board (Ethics ID: 24230).

APPENDIX C: RECRUITMENT EMAIL - PHASE 1 (SURVEY)

Dear (name of potential participant) -

I am writing to about a research study I am leading on massage therapy provision in Canadian hospitals. We identified (hospital name) as one of the hospitals in Canada that provides massage therapy. As such, I would greatly appreciate the opportunity to speak with you and request your participation in this study (as described below).

Your participation in this study would provide important insights as to how massage therapy is being incorporated into hospital settings in the Canadian context.

PARTICIPATION:

Your participation would involve completing the Hospital-Based Massage Therapy Questionnaire (attached).
-It would be completed by telephone with me.
-It would take approximately 20-30 minutes of your time.
-You do not have to prepare for this in anyway.

If you are able to complete this questionnaire, please let me know if any of the following dates and times are suitable:

- Fri. April 27 at: 10:30am or 12:30pm
- Mon. April 30 at: 10:30am, 2:30pm, 4:00pm or 4:30pm
- Tue. May 1 at: 10:30am, 2:30pm, 4:00pm or 4:30pm

If another date or time is more suitable, please let me know and I can certainly accommodate it.

Thank you for your time and I look forward to hearing from you.

Sincerely -
Ania Kania

--
Ania Kania BSc, RMT, PhD (candidate)
IN-CAM Research Network Manager
www.incamresearch.ca

University of Calgary, Faculty of Medicine, Department of Community Health Sciences
3280 Hospital Drive NW, TRW Building, 3rd Floor
Calgary, AB T2N 4Z6
Office: 780.542.4277 OR 403.210.9608

APPENDIX D: HOSPITAL BASED MASSAGE THERAPY QUESTIONNAIRE - ENGLISH

Completed by: _____

Position:_____ Date: _____

SECTION 1: DELIVERY OF MASSAGE THERAPY SERVICES

Question 1-1: What areas of the hospital are massage therapy services incorporated in? Check all that apply:

- ☐ Department or unit, name:_____
- ☐ Clinic, name: _____
- ☐ Institute, name:_____
- ☐ Program, name:_____
- ☐ Wellness or CAM center, name: _____
- ☐ Stand alone massage therapy clinic: _____
- ☐ Other, please specify: _____

Question 1-2: In addition to massage therapists, what health care professionals provide patient care in this/these areas? Check all that apply:

	Area 1	**Area 2**	**Area 3**	**Area 4**
Doctor				
Nurse				
Physiotherapist				
Occupational Therapist				
Social worker				
Psychologist				
Nutritionist/dietician				
Speech Language Pathologist				
Pharmacist				
Spiritual care provider				
Respiratory therapist				
Recreational therapist				
Midwife				
Other, please specify:				

Question 1-3: **How long has massage therapy been provided at your hospital?**

- _____ (years)
- _____ (other)
- Do not know
- Other:

Question 1-4*:* **Who has access to the massage therapy services in your hospital? Check all that apply:**

- In-patients
- Out-patients – individuals attending a specific hospital program
- Community clients
- Hospital employees
- Other, please specify: _____
- Do not know

Question 1-4b – Of the massage therapy client groups indicated in question 1.4, indicate the percentage each makes up out of all massage therapy clients:

- In-patients - % of all MT clients: _____
- Out-patients - % of all MT clients: _____
- Community clients - % of all MT clients:_____
- Hospital employees % of all MT clients:_____
- Other, please specify - % of all MT clients: _____
- Do not know

Question: 1-5: Approximately what percentage of all patients (in-patients and out-patients) receives massage therapy?

- _____

Question 1-6: What are the reason(s) for providing massage therapy at your hospital? Check all that apply:

- Holistic philosophy of care of the institution
- Revenue generation
- Patient satisfaction
- Patient demand
- Evidence on the effectiveness of MT
- Employee request
- Physician request
- Other health care providers' request
- Other, please specify: _____

Question: 1-7: How are patients informed about massage therapy at your hospital? Check all that apply:

- ☐ At admission – admission materials regarding hospital programs and services
- ☐ Advertising – internal (brochures, screen ads, hospital newsletter)
- ☐ Health care providers
- ☐ Other, please specify: _____

Question 1-8: Where are massage therapy services/treatments provided in your hospital? Check all that apply:

- ☐ Patient room
- ☐ Therapy room
- ☐ Designated massage therapy space (room, clinic)
- ☐ Wellness/CAM center
- ☐ Other, please specify:_____

Question 1-9: When are massage therapy services provided at your hospital? Check all that apply:

- ☐ Monday to Friday- day (9-5pm)
- ☐ Monday to Friday – evenings (after 5pm)
- ☐ weekend
- ☐ Statutory holidays
- ☐ Other: please specify:_____

Question 1-10: How many massage therapists are currently working at your hospital?

- ☐ _____

Question 1- 11: What is the employment status of the massage therapist(s) at your hospital? Check all that apply:

- ☐ hospital employee
  - o full time
  - o part time
  - o casual
- ☐ independent contractor
- ☐ other: _____

Question 1-12: How many hours of treatment does each massage therapist provide per week (on average) at your hospital?

- ☐ less than 5
- ☐ 6-10
- ☐ 11-15
- ☐ 16-20
- ☐ 21-25
- ☐ more than 25
- ☐ exact number:_____
- ☐ don't know

Question 1-13: What is the fee schedule for massage therapy services at your hospital? Indicate all that apply:

- 15 mins _$_____
- 30 mins - _$_____
- 45 mins - $_____
- 60 mins - _$_____
- 90 mins -_$_____
- No charge
- other:_____

Question 1-14: How are massage therapy services funded (financed) at your hospital? Check all that apply:

- By the patient - out of pocket
- 3rd party (private insurance) – extended health care (e.g. employer; blue cross)
- 3rd party (Private insurance) -car insurance (motor vehicle accident insurance),
- 3rd party (private insurance) – workers' compensation
- Global hospital budget
- Charity/charitable fund – external
- Hospital foundation – internal
- Specific project or grant
- No charge - provided on a volunteer basis
- Other:_____

Question 1-15: How are massage therapists reimbursed for the services they provide at your hospital? Check all that apply:

- By the hospital
- Directly by the patient
- By patient and the hospital
- Directly by 3rd party insurance
- Invoice the hospital
- Other, please specify: _____

Question 1-16: How and what amount are massage therapists paid at your hospital?

- per hour: _$_____
- per treatment: _$_____
- per treatment: split of MT fee: _____
- other:_____

Question 1-17: What qualifications do massage therapists need to have in order to provide massage therapy services at your hospital? Check all that apply:

- License to practice
- Practice and liability insurance
- 2200-hour training completed
- Other, please specify: _____

Question 1-18: Who is responsible for verifying the credentials of massage therapists at your hospital? Check all that apply:

- ☐ Human resource personnel
- ☐ Program/unit manager or director
- ☐ Professional practice leader (PPL)
- ☐ Other, please specify: _____

Question 1-19: In addition to massage therapists, who else provides massage therapy services at your hospital? Check all that apply:

- ☐ Massage therapy students
- ☐ Nurses
- ☐ Physiotherapists
- ☐ Other, please specify:_____
- ☐ None (only licensed massage therapists)

Question 1-20: Who can refer to massage therapy at your hospital? Check all that apply:

- ☐ Patient - self-referral
- ☐ Internal referral - physician
- ☐ Internal referral - nurse
- ☐ Internal referral – allied health professionals
- ☐ External referral - physician
- ☐ External referral - nurse
- ☐ External referral – allied health professional
- ☐ Other, please specify:_____

Question 1-21: Is a doctor's order required for a patient to receive massage therapy at your hospital?

- ☐ Yes
- ☐ No

Question: 1-22: Do massage therapists have access to patient charts at your hospital?

- ☐ Yes
- ☐ No

Question: 1-23: On which chart(s) do massage therapists document regarding the patient care they provide at your hospital? Check all that apply:

- ☐ Multi-disciplinary/team charts
- ☐ Independent massage therapy charts
- ☐ Other: _____

Question 1-24: Do massage therapists contribute to patient reports at your hospital?

- ☐ Yes
- ☐ No

Question 1-25: Do massage therapists participate in meetings related to patient care at your hospital?

- ☐ Yes
- ☐ No

Question 1-26: Are massage therapists members of patient care teams at your hospital? Check one:

- ☐ Yes – go to question 1-27
- ☐ No - go to question 1-28

Additional comments:

Question 1-27: What healthcare providers are on the patient care teams where massage therapists are included? Check all that apply:

- ☐ Doctor
- ☐ Nurse
- ☐ Physiotherapist
- ☐ Occupational Therapist
- ☐ Social worker
- ☐ Psychologist
- ☐ Nutritionist/dietician
- ☐ Speech Language Pathologist
- ☐ Pharmacist
- ☐ Spiritual care provider
- ☐ Respiratory therapist
- ☐ Recreational therapist
- ☐ Midwife
- ☐ Other, please specify:_____

Question 1-28: Do you have any other thoughts or comments about massage therapy at your hospital? Please write them in the space provided below:

SECTION 2 – HOSPITAL DESCRIPTORS

Question 2-1: What type of hospital do you operate? Check all that apply:

- ☐ Teaching hospital
- ☐ Small community hospital
- ☐ Medium community hospital
- ☐ Large community hospital
- ☐ Other, please specify:_____
- ☐ Do not know

Question 2-2: Does your hospital have an area (or areas) of specialization? Check all that apply:

- ☐ Chronic care
- ☐ Psychiatric/mental health
- ☐ Alcohol and drug addiction
- ☐ Rehabilitation
- ☐ Women's health
- ☐ Children's/pediatrics
- ☐ Military
- ☐ Convalescent
- ☐ Other, please specify:_____
- ☐ Do not know

Question 2-3: Is the hospital affiliated with a university?

- ☐ No
- ☐ Yes, please provide university name: _____
- ☐ Do not know

Question 2-4: What is the business model of your hospital? Check one:

- ☐ Not-for-profit
- ☐ For profit
- ☐ Other, please specify: _____
- ☐ Do not know

Question 2-5: What is the annual budget of your hospital? Check one:

- ☐ Under $10 million
- ☐ Over $10 million to $100 million
- ☐ Over $100 million to $500 million
- ☐ Over $500 million to 1 billion
- ☐ Over $1 billion
- ☐ Other: _____
- ☐ Do not know

Question 2-6: What is the total number of designated patient beds in your hospital? Check one:

- Less than 100
- 101-400
- 401-800
- Over 800
- Other:_____
- Do not know

Question 2-7: What is the number of clinical staff at your hospital?

- _____
- Do not know

Thank you for your time in completing the

Hospital-Based Massage Therapy Questionnaire

APPENDIX E: HOSPITAL BASED MASSAGE THERAPY QUESTIONNAIRE – FRENCH

QUESTIONNAIRE SUR LA MASSOTHÉRAPIE DANS LES HÔPITAUX
Complété par: _____ _____
Position:_____
Date (DD/MM/YY): _____

SECTION 1: SERVICES DE MASSOTHERAPIE
Question 1-1: Quels sont les services de massothérapie fournis dans votre hôpital? Veuillez cocher toutes les cases possibles :

- □ Département, nom: _____
- □ Clinique, nom: _____
- □ Institut, nom:_____ _____
- □ Programme, nom:_____
- □ Projet (recherche), titre:_____
- □ Clinique d'étudiants, nom de l'école:_____
- □ Clinique de massothérapie, nom: _____
- □ Espace loué aux massothérapeutes dans l'hôpital:_____
- □ Autre, s'il vous plait précisez: _____

Question 1-2: En plus des massothérapeutes, quels autres professionnels de soins de santé fournissent des soins aux patients pour chacun des services nommés à la question 1-1? Veuillez cocher toutes les cases possibles :

	Service 1	Service 2	Service 3	Service 4
Médecin				
Personnel infirmier				
Physiothérapeute				
Ergothérapeute				
Travailleur social				
Psychologue				
Nutritionniste-diététiste				
Orthophoniste				
Pharmacien				
Aumônier				
Inhalothérapeute				
Psychoéducateur/récréologue				
Sage-femme				
Autre, s'il vous plait précisez				

Question 1-3: Depuis combien de temps les services de massothérapie indiqués à la question 1-1 sont-ils disponibles ?

- □ _____ (années)
- □ _____ (autre)
- □ Ne sais pas

Question 1-4*:* Qui a accès aux services de massothérapie dans votre hôpital? Veuillez cocher toutes les cases possibles :

- □ Patients hospitalisés
- □ Patients en clinique externe
- □ Clients de la communauté
- □ Employés de l'hôpital
- □ Autre, s'il vous plait précisez: _____
- □ Ne sais pas

Question 1-4b – Pour chaque groupe de clients nommés à la question 1-4, indiquez la proportion en pourcentage représentée par ce groupe comparativement à toute la clientèle en massothérapie (MT) de l'hôpital:

- □ Patients hospitalisés -% de toute la clientèle MT: _____
- □ Patients en clinique externe % de toute la clientèle MT: _____
- □ Clients de la communauté--% de toute la clientèle MT:_____
- □ Employés de l'hôpital -% de toute la clientèle MT:_____
- □ Autre, s'il vous plait précisez --% de toute la clientèle MT: _____
- □ Ne sais pas

Question: 1-5: Environ quel pourcentage de tous les patients (patients hospitalisés et patients en clinique externe) de l'hôpital reçoivent des services de massothérapie?

Question 1-6: Quelle est la ou les raison(s) pour laquelle(lesquelles) la massothérapie est offerte dans votre hôpital? Veuillez cocher toutes les cases possibles :

- □ La philosophie holistique des soins de l'établissement
- □ Générer des revenus
- □ La satisfaction des patients
- □ À la demande des patients
- □ Preuves sur l'efficacité de la massothérapie
- □ À la demande des médecins
- □ À la demande d'autres prestataires de soins de santé
- □ Autre, s'il vous plait précisez: _____

Question: 1-7: Comment les patients sont-ils informés des services de massothérapie disponibles? Veuillez cocher toutes les cases possibles :

- □ À l'admission – documents d'admission sur les programmes et les services offerts par l'hôpital
- □ Publicité – brochures, annonces à l'écran dans les salles d'attente, bulletin d'information de l'hôpital
- □ Par les prestataires de soins de santé
- □ Autre, s'il vous plait précisez: _____

Question 1-8: À quel endroit dans l'hôpital les services de massothérapie sont-ils fournis? Veuillez cocher toutes les cases possibles:

- □ Chambre du patient
- □ Tout local de thérapie
- □ Local de réadaptation
- □ Espace désigné à la massothérapie (chambre, clinique)
- □ Centre de bien-être
- □ Autre, s'il vous plait précisez:_____

Question 1-9: Quel est l'horaire des services de massothérapie? Veuillez cocher toutes les cases possibles:

- □ Lundi au vendredi –journée (9-17h)
- □ Lundi au vendredi - soir (après 17h)
- □ Samedi et dimanche
- □ Jours fériés
- □ Autre, s'il vous plait précisez:_____

Question 1-10:Combien de massothérapeutes travaillent à votre hôpital?

- □ _____

Question 11: Quel est le statut des massothérapeutes à votre hôpital? Veuillez cocher toutes les cases possibles:

Employé de l'hôpital

- □ à temps plein
- □ à temps partiel
- □ contractuel

Question 12: Combien de traitements par semaine (en moyenne) sont fournis par l'ensemble des massothérapeutes travaillant à votre hôpital?

- □ < 5
- □ 5-10
- □ 11-15
- □ 16-20
- □ 21-25
- □ >25
- □ Nombre exact:_____

Question 1-13: Quel est le prix par session des traitements de massothérapie?

- □ 15 min - _$_____
- □ 30 min - _$_____
- □ 45 min - _$_____
- □ 60 min - _$_____
- □ 90 min - _$_____
- □ Autre:_____

Question 1-14: Par qui sont remboursées les séances de massothérapie offertes à votre hôpital? Veuillez cocher toutes les cases possibles:

- □ Par le patient
- □ Par une tierce partie
- □ Soins de santé complémentaires (p.ex., employeur; assurance privée)
- □ Tierce partie – Société de l'assurance automobile (SAAQ)
- □ Tierce partie – programme d'indemnisation des travailleurs (p.ex., CSST)
- □ Budget de fonctionnement de l'hôpital
- □ Œuvre de charité/fonds de bienfaisance
- □ Projet ou subvention
- □ Bénévolat ?
- □ Autre, s'il vous plait précisez:_____

Question 1-15: De quelle(s) façon(s) les massothérapeutes sont-ils rémunérés pour les services fournis à votre hôpital? Veuillez cocher toutes les cases possibles:

- □ Par l'hôpital
- □ Directement par le patient
- □ Par le patient et l'hôpital (les deux)
- □ Directement par un régime d'assurance privée (p.ex., Croix Bleue)
- □ Autre, s'il vous plait précisez: _____

Question 1-16: Comment et combien les massothérapeutes sont-ils rémunérés?

- □ Par heure: _$_____
- □ Par traitement: _$_____ ou combinaison: _____

Question 1-17: Quelles qualifications les massothérapeutes doivent-ils détenir afin de pouvoir fournir des services de massothérapie à votre hôpital? Veuillez cocher toutes les cases possibles:

- □ Permis de pratique
- □ Assurance de responsabilité professionnelle
- □ 2200 heures de formation complétées
- □ Autre, s'il vous plait précisez: _____

Question 1-18: Qui est responsable de vérifier les permis de pratique des massothérapeutes à votre hôpital? Veuillez cocher toutes les cases possibles:

- □ Personnel des ressources humaines
- □ Administrateur du programme
- □ Chef de pratique professionnelle
- □ Autre, s'il vous plait précisez: _____

Question 1-19: En plus des massothérapeutes, qui d'autre fournit les services de massothérapie à votre hôpital ? Veuillez cocher toutes les cases possibles:

- □ Étudiants en massothérapie
- □ Personnel infirmier
- □ Physiothérapeutes
- □ Autre, s'il vous plait précisez:_____
- □ Aucune (seulement les massothérapeutes règlementés)

Question 1-20: Qui peut référer un patient pour des services de massothérapie à votre hôpital? Veuillez cocher toutes les cases possibles:

- □ Patient – auto référence
- □ Médecin à l'interne
- □ Personnel infirmier à l'interne
- □ Professionnel des soins de santé à l'interne
- □ Médecin externe
- □ Personnel infirmier externe
- □ Professionnel des soins de santé externe
- □ Autre, s'il vous plait précisez:_____

Question 1-21: Est-ce que la référence d'un médecin est nécessaire pour qu'un patient reçoive de la massothérapie à votre hôpital?

- □ Oui
- □ Non

Question: 1-22: Est-ce que les massothérapeutes ont accès aux dossiers des patients de votre hôpital ?

- Oui
- Non

Question: 1-23: Dans quel(s) type(s) dossier(s) les massothérapeutes notent-ils l'information concernant les services qu'ils fournissent aux patients ? Veuillez cocher toutes les cases possibles:

- Multidisciplinaire/dossiers d'équipe
- Dossier indépendant de massothérapie
- Autre: _____

Question 1-24: Les massothérapeutes contribuent-ils aux rapports sur les patients ?

- Oui
- Non

Question 1-25: Les massothérapeutes participent-ils aux réunions multidisciplinaires concernant les soins des patients à votre hôpital ?

- Oui
- Non

Question 1-26: Les massothérapeutes sont-ils des membres d'une ou de plusieurs équipes de soins de votre hôpital ? Cocher une seule case

- Oui – passez à la question 1-27
- Non - passez à la question 1-28
- Commentaires additionnels:

Question 1-27: Quels professionnels de soins de santé font également partie de ces équipes de soins? Veuillez cocher toutes les cases possibles:

- Médecin
- Personnel infirmier
- Physiothérapeute
- Ergothérapeute
- Travailleur social
- Psychologue
- Nutritionniste/diététiste
- Orthophoniste
- Pharmacien
- Aumônier
- Inhalothérapeute
- Psychoéducateur/récréologue
- Sage-femme
- Autre, s'il vous plait précisez

Question 1-28: Avez-vous d'autres idées ou commentaires à propos des services de massothérapie offerts à votre hôpital? Veuillez les écrire dans l'espace ci-dessous:

SECTION 2 – Description de l'hôpital

Question 2-1: Quel type d'hôpital opérez-vous? Veuillez cocher toutes les cases possibles:

- □ hôpital universitaire
- □ petit hôpital communautaire
- □ hôpital communautaire à moyen
- □ grand hôpital communautaire

Question 2-2: Est-ce que votre hôpital ont une superficie (ou zones) de spécialisation ? Veuillez cocher toutes les cases possibles:

- □ Soins des maladies chroniques
- □ Psychiatrique/santé mentale
- □ Toxicomanie
- □ Réadaptation
- □ Santé des femmes
- □ Pédiatrique
- □ Militaire
- □ Convalescence
- □ Autre, s'il vous plait précisez:_____

Question 2-3: Vous définissez-vous comme un hôpital universitaire? (Résidence et stage clinique)

- □ Non
- □ Oui– passez à la question 2-3a

Question 2-3a: Indiquez les types de programmes pour lesquels l'hôpital offre des stages de résidence ou d'enseignement. Veuillez cocher toutes les cases possibles:

- □ Étudiants en médicine et résidents
- □ Étudiants en soins infirmiers
- □ Professionnels des soins de santé (p.ex., réadaptation, inhalothérapie, etc.)
- □ Thérapeutes des approches complémentaires (p.ex., acupuncteurs, massothérapeutes, homéopathes, naturopathes, etc.)
- □ Sage-femme
- □ Formation médicale continue pour les professionnels des soins de santé
- □ Autre, s'il vous plait précisez: _____

Question 2-4: Quelle est la philosophie d'entreprise de votre hôpital? Cochez une seule case

- □ À but non lucratif
- □ À but lucratif
- □ Autre, s'il vous plait précisez _____

Question 2-5: Quel est le budget annuel de votre hôpital? Cochez une seule case

- □ <$10 millions
- □ $10 millions à $100 millions
- □ $100 millions à $500 millions
- □ $500 millions à 1 milliard
- □ $1 milliard
- □ Autre: _____

Question 2-6: Combien y a-t-il de lits désignés aux patients dans votre hôpital? Cochez une seule case

- □ < 100
- □ 101-400
- □ 401-800
  - o 800
- □ Autre:_____

Question 2-7: Combien de médecins du personnel travaillent à votre hôpital?

- □ _____
- □ Ne sais pas

APPENDIX F: STUDY OVERVIEW - INFORMATION FOR PARTICIPANTS

RESEARCH STUDY OVERVIEW

Although massage therapy are increasingly used by patients and incorporate into various health care settings, currently there is no research on massage therapy in hospitals or on how massage therapists collaborate with other providers in Canada. It is anticipated that this research will fill this gap and provide practical information to assist practitioners and hospital administrators who are including massage therapy in a health service delivery approach in an optimal way.

The aim of this research is to investigate massage therapy in Canadian hospital settings. The objectives of this research are to:
Objective 1— Identify how many hospitals across Canada provide massage therapy services.
Objective 2— Describe the massage therapy delivery approach in Canadian hospital settings.
Objective 3— Describe the perceived role of massage therapists on hospital based patient care teams.

To address these objectives, the study is being conducted in three phases of data collection:
Phase 1— Conduct a scan to identify all hospitals in Canadian metropolitan centers that offer massage therapy.
Phase 2— Conduct a questionnaire to collect descriptive information on these hospitals and the massage therapy delivery approaches/models.
Phase 3— Explore and describe the role of massage therapy on hospital patient-care teams.

For more information about this research, please contact Ania Kania at::
e: akania@ucalgary.ca
t: 780-542-4277

PhD (candidate): Ania Kania BSc, RMT, PhD (candidate)

SUPERVISOR: Marja Verhoef, PhD

SUPERVISORY COMMITTEE: Esther Suter PhD,
Barbara Findlay-Reece RN, MA

This study has been approved by the Conjoint Health Research Ethics Board (Ethics ID: 24230

APPENDIX G: INTERVIEW GUIDE –IN-DEPTH SEMI-STRUCTURED INTERVIEWS

For massage therapists

1. Can you describe for me the where you work in the hospital?
2. How long have you worked there?
3. Have you ever worked in a hospital setting before?
4. Do you work with any other health care professionals?
    - Who makes up the team (who are the other team members)?
    - How does the team work together? What is the process of providing care to a patient?
5. Based on your experience, what do you think your role as a MT is in patient care?
    - What do you do?
    - What tasks are you expected to carry out?
    - What are the expectations of you as a MT?
    - What are the responsibilities as a MT?
    - What types of skills do MTs have that are applied in this setting?
    - What do you contribute as a MT to patient care?
6. Does your role or what you do, overlap with any of the other HCPs?
    - If yes, how?
    - How is overlap dealt with?
    - How is it determined who does what and when? Who makes these decisions?
7. How are your roles determined?
    - Who determines what MTs will do?
8. Have you encountered any challenges to your role as an MT?
    - Difficult moments
    - disagreements
    - Uncomfortable situations
    - conflicts
9. Are there any factors at the hospital that impact your role?
10. Do you have any other comments of thoughts regarding the role of MT on the team?

For other health care professionals

1. Can you describe for me the team (patient care) that you work on?
    - Who makes up the team (who are the other team members)?
    - How does the team work together? What is the process of providing care to a patient
    - What is your role on this team?
2. How long have you worked on/been a part of this team?
3. How long have you worked with a massage therapist? Have you ever worked with an MT before?

4. Do you think that MTs are considered to be part of this (patient care) team?
    a. Why or why not?
    b. Is MT a core team member or used a consultation team member?
    c. Why do you think massage therapists are included on this team?

5. Based on your experience, what do you think the role of the MT is on the team?
    a. What do MTs do?
        i. What unique skills/skill set do MTs have/contribute to patient care?
    b. What tasks are MTs expected to carry out?
        i. What are your expectations of MTs?
    c. What are the responsibilities of MTs?
    d. What types of skills do MTs have?
    e. What knowledge do MTs bring to the team/patient care?
    f. How do MTs contribute to patient care? The team approach (in the delivery of patient care delivery?)

6. Does the work of the MTs overlap with yours? What skill sets (if any) do MTs share with other healthcare professionals on the team?
    a. Probes:
        i. If yes, how are areas of overlap addressed? Prevented? How is it determined who does what and when? Who makes these decisions?
7. How are MT roles (or what MTs do) determined?
    a. Who determines what MTs will do?
8. Do you have any other comments of thoughts regarding the role of MT on the team?

APPENDIX H: CONSENT FORM – SEMI-STRUCTURED INTERVIEWS

TITLE: The Role of Massage Therapy in Patient Care in Canadian Urban Hospitals

SPONSOR: Massage Therapy Research Fund

INVESTIGATORS: Ania Kania, BSc, RMT, PhD (c), Marja Verhoef, PhD (supervisor)

This consent form is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about anything mentioned in the text below, or information not included here, please ask. Take the time to read this carefully and to understand any accompanying information. You will receive a copy of this form.

BACKGROUND

With the on-going demand for and use of complementary and alternative medicine (CAM) by patients and the growing acceptance of CAM by conventional healthcare professionals, select CAM practices are being incorporated into conventional health care provision. Massage therapy (MT) is one of the most commonly used CAM therapies in Canada. Given its safety profile, a growing body of evidence regarding its effectiveness, and regulation in three Canadian provinces, it is becoming an established healthcare profession. Although massage therapists are working in various health care settings such as hospitals, what and how massage therapists contribute to comprehensive patient care, particularly in the hospital setting, remains unclear.

WHAT IS THE PURPOSE OF THE STUDY?

The overall purpose of this study is to conduct a comprehensive exploration of massage therapy in Canadian urban hospitals. The objectives are to describe massage therapy service delivery and explore the massage therapists' professional role in the hospital setting.

WHAT WOULD I HAVE TO DO?

You will be asked to participate in one telephone interview. Telephone interviews will be arranged at a time that is most convenient for you. It is anticipated that interviews will last approximately 30 minutes. The interviews will also be digitally recorded to facilitate the analysis of interview transcripts.

During this recorded interview, we will ask you about your thoughts on the roles of massage therapists on your team, what these roles are, and how you collaborate with massage therapists and other team members.

We may also invite you to review a summary of the preliminary research finding and provide feedback. This step is optional.

WHAT ARE THE RISKS?
There are no risks to you for participating in this study.

WILL I BENEFIT IF I TAKE PART?
If you agree to participate in this study, there will be no direct benefit to you for participating in this research.

We hope that the information gathered will be useful in developing an understanding of how massage therapists collaborate with other health care professionals, how their role in teams is perceived and hence inform the integration of massage therapy into such health care delivery contexts.

DO I HAVE TO PARTICIPATE?
Your participation in this study is voluntary. You may withdraw from the study at any time:

- prior to the interview, by contacting Ania Kania at akania@ucalgary.ca or 403-210-9608
- during the interview, by informing the interviewer, who will immediately stop the interview. Based on your choice, any content in the interview may or may not be included in the final analysis.

WILL I BE PAID FOR PARTICIPATING, OR DO I HAVE TO PAY FOR ANYTHING?
Your participation in this does will not require you to pay for any expenses related to completing the interview. The researcher will call you at a phone number that you provide.

As this is a research study and you are volunteering your participation in this research, you will not be paid for the interview time.

WILL MY RECORDS BE KEPT PRIVATE?
The only information collected on your person will be: your name, your position/title at the hospital, the hospital where you work, and how long you have worked on the team. Your personal information (name) will only be available to the researcher who conducts the interview. The interview transcript documents will be identified and filed by generic code names. All interview records will be kept in password protected computer. Any paper files will be stored in a locked filing cabinet in the researcher's office.

Individuals who will have access to the interview transcripts will be: the researcher and researcher's supervisory committee (for analysis purposes). No information that discloses your identity will be released or published without your specific consent.

Research records identifying you may be inspected by representatives of the University of Calgary Conjoint Health Research Ethics Board for the purpose of monitoring the research activity at the University of Calgary. However, no records, which identify you by name or contact information, will be allowed to leave the researcher's office.

SIGNATURES

Your signature on this form and/or verbal consent by telephone indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to be a participant. In no way does this waive your legal rights nor release the researchers, or involved institutions, from their legal and professional responsibilities. You are free to withdraw from the study at any time.

If you have further questions related to this research project, please contact:

Ania Kania (403) 210-9608

If you have any questions concerning your rights as a possible participant in this research, please contact The Director, Office of Medical Bioethics, University of Calgary, at 403-220-7990.

The University of Calgary Conjoint Health Research Ethics Board has approved this research study.

A signed copy of this consent form has been given to you to keep for your records and reference.

APPENDIX I: RECRUITMENT EMAIL - PHASE 2 (SEMI-STRUCTURED INTERVIEWS)

Dear (name) -

I received your name and email from (name of contact), who indicated you are one of the massage therapist providing massage at (hospital name). Given your position, I am contacting you to request your participation in a research study I am conducting on massage therapy in Canadian hospitals (see attached study overview for further information).

More specifically, I am emailing you to request your participation in an interview to explore the ROLE OF MASSAGE THERAPISTS IN PATIENT CARE, based on your experience at (hospital name).

Your participation would involve:
1. completing one interview with me by telephone
2. the interview will be scheduled at a date and time that is most convenient for you.
3. I will call you at a phone number that you provide
4. you do not need to prepare for this in any way.

If you are able and willing to participate and provide your insights regarding the role of massage therapy on patient care teams, please let me know if any of the following dates and times are suitable for you:

- Wed. May 23 at 12pm to 6pm ET
- Thurs May 23 at 12pm to 6pm ET
- Fri. May 24 at10am to 3pm ET

Thank you again for your time and interest in this research. Your insights are very important in developing an understanding of and defining the role of massage on patient care teams.

If you would like any additional information regarding this study, I would be more than happy to provide this.

I look forward to hearing from you.

Ania Kania

--
Ania Kania BSc, RMT, PhD (candidate)

IN-CAM Research Network Manager - www.incamresearch.ca
University of Calgary, Faculty of Medicine, Department of Community Health Sciences
3280 Hospital Drive NW, TRW Building, 3rd Floor
Calgary, AB T2N 4Z6
Office: 780.542.4277 OR 403.210.9608

APPENDIX J: SUPPORTIVE QUOTES – INTERVIEWS WITH MASSAGE THERAPISTS

Quote Ref.	Participant ID & Study Site ID	Supportive Quote
1	P1 – site 1	*…the only thing I want to make note of is that here…like working with HIV is really really unique… this is a completely different scenario than you'll ever find in another hospital I think. Like we have a lot of drug addiction issues. And a lot of poverty issues… So for someone with poverty issues, they are struggling with how are they going to get here. So if they live downtown, they may not have money for a TTC token. SO then we'll provide tokens. But then sometimes that privilege will be abused. SO then I have to evaluate, is this someone that can physically walk those 2 blocks? Or is it someone that needs a taxi chit. Or is it someone that has PMO and they are going to fall down and then I'm liable. Or is it someone that is just trying to get that taxi chit because they want it and always got it, but they'll walk to their medical marijuana place… those are some of the challenges.*
2	P1 – site 1	*And sometimes I have to assess is this person in self-destruct right now. So if they walk out the door, did they seem high? Do I need to call social work to let them know? DO I call the community nurse so she'll check in to make sure they are ok? SO those are the kinds of things that we deal with day to day.*
3	P24, site 16	*I'm not dealing with psychological; I'm dealing at the physical level to help them deal with perhaps, to make their psychological aspects more available to them…That can quite often help to facilitate or open up their awareness to psychological dilemma that may need to or it would help them to deal with.*
4	P6, site 4	*I'll give you an example of a patient that I just recently had. Post burn, to the shoulder and neck, couldn't get anywhere... Shoulder's not moving neck is not moving. We cannot understand what is going on. I see the client and after a few treatment, he proceeds to tell me that his wife is having a really hard time with him being burned and blaming him for this accident happening and if he wasn't so careless this would have never happened. And he has a total break down on my table. Whereas when he saw the psychologist, this was*

		never discussed. When he sees his physio and occupational therapist, these issues were never discussed. However, he was over-exerting himself and there was so much emotional tension at home and he was holding onto it all.
5	P8, site 5	*For instance physios from other clinics that work with patients who've had a breast cancer breast reconstruction, will send me more patients to help deal with pain those patients are having or muscle tensions or even sometimes to have the "good touch" in their lives. Of course they have been through a pretty traumatic situation and everything has been about poking and prodding to find out if something is happening. Whereas massage can be the nice gentle this is a good thing. It's not necessarily a touch that is going to be diagnosing something or telling that you have another tumor… So it's like a psychological help to them as well.*
6	P19, site 10	*Because a lot of people in hospitals have anxieties. Because they are here because of unfortunate situations that are not of their control and I guess when we come in we are not only the open ear or the neutral person who just comes in and you know makes them feel better. Um…without somebody poking and prodding.*
7	P17, site 8	*And it goes down the whole chain because if I'm stretching their ankle joint because they had broken their ankles in a car accident, by the impact of having stiff ankle and they are limping and it just goes up the chain and their low back is sore because they are walking with crutches and so on. And after I'm done the treatment, they have range of motion which is not hindering their gait or the way they walk so it's an overall well-being really, from head to toe.*
8	P1, site 1	*I struggle with that one all the time because I'm a very scientific person. I do know that there is a holistic side to it and some people really believe the spiritual side of massage more so than the scientific side. But I really strongly feel that it's not really a holistic thing. It's a physiological transformation that you are able to make in a body that is hypertonic or people that have mobility issues. So it really is much more than just therapeutic touch… I think I am of a physical mind and I don't think that all massage therapists have that interest. But I do and that's probably why I landed here in the first place.*

9	P22, site 12	*Sometimes if they (palliative patients) are going downhill or they are declining in some ways, I will let the nurses know. And often it is the massage therapists that notice a change first. Because of the type of contact that we have.*
10	P8, site 5	*I am not part of every team, health care team. They may not feel that massage is appropriate for their patient population and that could be for a number of different reasons. Financial reasons, patient doesn't have coverage and cannot afford massage. It may that the physician wants to try another treatment first and if it doesn't work than they may refer onto a massage. Sometimes it's just a simple case of this person does need some sort of exercise with their issue or something like that. SO for each patient I am not a part of their health care team, but for some I am.*
11	P8, site 5	*There again, if we have communicated, if it's prior to the first session, then myself and the other therapists have communicated about the patient and why they are coming in…and I can see what she (the physiotherapist) has given, so sometimes it's just a matter of a consult with her…But again it's not necessarily here's what you need to do, but rather this is what I found and this is what I'm doing. So it's like ok, we'll complement it through massage.*
12	P24, site 16	*One fold is that I treat them and I am very well equipped to give them lengthening and strengthening exercises. Anything from postural exercises to severe injuries. That being said, that's necessarily where my expertise lies. Although I am very competent in it, if I feel that this person really needs a lot of remedial focused exercise, I will definitely refer them to the PT.*
13	P1, site 1	*Sometimes we struggle because we (the physiotherapists and MT) might not be working on the same thing at the same time. But what we do try. I should stress that the physio, OT and myself we do try to the best of our abilities to if we have common clients, to know what we are doing with those clients so that we can do treatment plans that are complementary to one another. It doesn't always work due to timing and due to scheduling difficulties. But we do strive for that.*

14	P3, site 2	*When I first started there, he (the doctor) said you must be happy to have your profession recognized. And I said what do you mean? And she said, well, oh, it being an alternative profession. And I said to him, oh, well you may not be aware but we are part of the regulated health act in Ontario, the same as a nurse, pt, doctor. So that was interesting. I think that was his perspective. SO I think there was definitely a shift over time about what we do.*
15	P15, site 7	*…there could be more conversation on treating the individual patient and what are our ranges and scope for treatment. That we do not have information on …that leaves you a little bit in no man's land. (P15, site 7)*
16	P19, site 10, P20, site 12 P25, site 16	*That's a good question…I don't really think there is any. Except doing the best that we can. But yeah, it's um…wow…I didn't expect that question…yeah, you've actually got me completely stumped. (P19, site 10)* *I don't know…I just don't know. Whom am I comparing it to? Other employees in that position? I don't know. All of the other professions…they have their own thing they would be responsible for. But for mt, I don't know (P20, site 12)* *Well basically it's to be a good massage therapist. And um, we don't have a written code of conduct… (P25, site 16)*
17	P15, site 7 P21, site 12	*Truly, I don't think they have an understanding of what massage therapy can do. (P15, site 7)* *But I think people look at us just like if you are not administering medication, don't know what it is. But I think people just go, oh that's just massage but they don't see the benefit of it. (P21, site 12)*
18	P10, site 6	*…but especially the hospital, there is still a very big misunderstanding of what massage therapy can do. They're like, oh they are pregnant and tired so just give them a relaxation massage. Yeah, maybe, but maybe they have sciatica, they might have this, they might have that. You know, they don't realize that we can actually help. Like affect their bodies and make change and make them feel better. And so that's a little bit frustrating in the way that depending on those clients and even other people in the hospital…*

19	P9, site 6	*Yeah, we just had a session with the person in the marketing department telling them the types of things that we should do to promote us without feeling like everything should be discounted. Because we are not like groupon material. You have to, like our colleges don't let us do discounts, so you can't do like get 9 massages and get the 10th one for free kind of thing. It doesn't work that way. So we have to educate people that we are not a spa and to get out of that mindset. …Because they think that if you discount everything, you'll get more people. And we are like, no. It devalues our services.*
20	P24, site 16	*That is why, if I know they are seeing a PT whether it's in the clinic or not, I will ask what they PT has given them because I don't want to overload the client with too much information or conflicting information. So I would ask what the other provider has provided to them as far as exercises or education is concerned. And the way we deal with it is I'll speak directly to the PT and say I saw this person, I understand that they are seeing you, and I gave them this extra exercise. How do you feel about that?*
21	P6, site 4	*Um, we generally like, we try not to, most of our population has multiple problems and there's' multiple things to work on. SO instead of us all doing the exact same thing, on the same day in terms of treatment. If I know that, because we converse regularly, if OT said hey I did a lot of rib springing and I've done a lot of joint play the spine is moving well today I would be more likely to treat a secondary problem that I may not have focused on a lot in the past. And vice versa. Like if I've done a lot of work in a certain area, and they are left feeling all sore and agitated, then we'll communicate about that and focus on a secondary issue so that there isn't constant overlap in treatment.*
22	P7, site 4	*I am supposed to be wonder woman (laughs). I'm supposed to, within the hour, have the client come in, have documentation done, have workload done (the hospital documentation)…and everything within that time frame.*
23	P4, site 3	*… for more than 2 years now I've been asking for a second massage room. And it's because there's politics there's restrictions, there's building code that I'm unfamiliar with. … People (patients) would like an hour and they can't get an hour. Some people would like 2 half hours they can't get the second one. Because there are so many people who would like*

		to have an apt but there is only one massage room and one massage therapist per day. We do work 7 days a week. But there is only so many hours in a day and we sometimes do 10 or 11 patients in one day that are all like half hour to 45 minute.
24	P4, site 3	*…we get people with whiplash, we get people with shoulder issues, with sciatica. So when I had time I totally addressed all of this stuff. I used to deal with a lot of this stuff. Degenerative disc low back pain. But now, because there are so many patients who want the treatment around the incision, and technically that's why I went there, so I can't give one person a one hour treatment dealing with shoulder problems and then do the work around the incision meanwhile there's another patient who would like to get treatment around the incision but they get ignored or they can't get in. So that's one of the issues there at this time.*
25	P6, site 4	*I have encountered one conflict that of other therapists (aka Physiotherapist) being unaware of my role as a massage therapist. They believe the service we offer is that of a spa verses medical based massage therapy.*
26	P19, site 10	*For instance, if we find an issue that is a CI for us. For instance, let's say it's potentially a clot or something that is not a muscle…because we feel things every day or a tear in the muscle in the shoulder. You can generally feel that after years of working on people. You can feel the difference between healthy tissue and unhealthy tissue or a tear or all these different anomalies. And when you do find one of these anomalies and you stop the session and you tell the client calmly you need to go see the doctor because I can't continue because this is what I feel because this is what potentially it could be, um, then to have one of the doctors turn around and come back to you and yell at you for diagnosing… So I would say that's the biggest thing – when you do find an anomaly and you do need to get it checked out because from my scope of practice I can't go any further and I don't want to jeopardize a person's health just in case. And then get it back thrown in your face that you are diagnosing, well…and it seems like sometimes that's where the conflict happens – from their end you are stepping into their territory or it's …and in my case, it's I'm sending them to you to do your job.*

27	P4, site 3	*Another patient said that the surgeon had told them something to the effect of don't let the massage therapist pull on the incision it'll cause it to open up. And he's acting like I've done this before. I've treated over 3000 treatments around the incision and never had, not even one iota, of a complaint from a patient that I did something wrong, that there was discomfort or that I opened up an incision or whatever. So he doesn't have a reason to caution, there is nothing to be cautioned about. And other one's have said "Oh well if I were I wouldn't have a massage and I don't even believe in this stuff".*

APPENDIX K: SUPPORTIVE QUOTES – INTERVIEWS WITH OTHER HCPS

Quote Ref.	Participant ID & Study Site ID	Supportive Quote
1	OP2, site 1	*I think specifically for the client's mental health and physical well being. Equally for both. Whether that would be from a relaxation point of view or a specific physical ailment that she is treating. And that' s her niche because there is no other person who can address that…in terms of physical touch. You know.*
2	OP2, site 1	*So she was great in providing education and information to um the whole staff about the role of MT. I think it was really helpful. And I think in addition, she meets with new staff and students in orientation and provides that education. And she may do external education sessions with external staff, but I'm not sure about that. But she definitely provides internal education about the role of MT.*
3	OP5, site 2	*They are also instrumental in providing us with education on compression bandaging or more recently, mmm…I'm losing the wording around this specific name of bandaging…and it's different then the kineso taping.*
4	OP1, site 1	*I know that she's trying to set up a total wellness program now where she's not only looking at um, a physical contact where she is doing the massage, but rather a total wellness approach. So if you have someone who can't manage their finances very well. And that impact on how physically well they are, than no matter how many massages you given them, they are not going to feel better. So she is actually looking at a more holistic approach. And in conjunction with our Rec therapist, they are developing a total wellness program…so she looks at wellness along a huge continuum, so not just being really sick or being really healthy, but everything in-between.*
5	OP4, site 1	*And there is a little of overlap with PT. And we have to collaborate that we approach things from the same angel and that we've approached things in a consistent manner.*

6	OP6, site 2	*Um, they are a little bit outside of it and I'm not sure why. I'm fairly new to this program. The MTs tend to see people for teaching of the self lymphatic drainage, um, some do bandaging and some other things. But for example, in their own clinics, I know the therapists like when they are in private practice, they would do lymphedema measurements, but they don't do the lymphedema measurements in the clinic for whatever reason. .. I don't think there is a reason why they couldn't be doing the measurements and be kind of interchangeable with any of us. I mean, they both are trained in MLD, or CVTs. I mean they have the training and I don't see a reason why they couldn't work in the same manner as we do.*