Understanding Rural Rehabilitation Practice:
Perspectives of Occupational Therapists and Physical Therapists
in British Columbia

by

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Abstract

Background:
Providing rehabilitation services to meet the needs of rural residents and address poor health outcomes requires overcoming the challenges of geography, limited referral options and a shortage of occupational therapists (OTs) and physical therapists (PTs). However, little is known about how rehabilitation professionals in rural areas enact their practice to meet and overcome these challenges. To address this gap and contribute to enhancing health for rural residents, this research constructed an understanding of rural rehabilitation practice from the perspectives of OTs and PTs in rural British Columbia (BC).

Methods:
This qualitative study employed a purposive sample of OTs and PTs in rural communities (population < 15,000) in northern BC. Potential participants were recruited through a study information mail-out to workplaces and were selected according to inclusion criteria to ensure a variety of work experiences, roles and practice settings. In semi-structured interviews, participants were asked to describe the skills and knowledge they perceived as unique to rural and strategies used to overcome challenges. Guided by interpretive description, transcripts were analysed inductively using broad-level coding and findings collapsed into interpretive categories. Interpretations and implications for education, practice and policy were reviewed with participants to ensure relevancy for rural practice.

Results:
From interviews with 6 OTs and 13 PTs, serving a total of 15 rural communities, rehabilitation practice and participants’ definition of health was understood to be substantially shaped by rurality, or the contextual features of geography, determinants of health and access to services. Participants considered general practice ‘a specialty’ requiring advanced skills in assessment. They described ‘stretching their role’ and ‘participating and partnerships’ as means to overcome resource shortages. Reflective practice, networking and collaboration were deemed essential to maintaining competency. Rural clinical placements, mentoring and improving access to continuing education were regarded as central to recruitment and retention.
Conclusion:

This research illuminates the influence of rurality on the practice of OTs and PTs in rural BC. The findings asserted the importance of incorporating rural content in professional training programs and providing accessible professional development resources to addressing health human resource shortages and meeting the rehabilitation needs of rural residents.
Preface

Robin Roots, under the supervision of Dr. Linda Li, designed this research study, collected the data, and analysed and interpreted the results. Guidance was received from Drs. Lesley Bainbridge and Helen Brown during the analysis process.

This research study obtained Approval from The University of British Columbia Behavioural Research Ethics Board (UBC BREB # H09-02742) and from the Northern Health Authority Research Review Committee (RRC-2009-0038) prior to commencement.

To date, the only publication that has arisen out of this research is an abstract:


The abstract of this research has been accepted and will be presented at:

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Finally, I am ever grateful to my mother and father for instilling the curiosity and the persistence to reach the peak just to see what lies beyond.
Dedication

I dedicate this thesis to all the patients I have received the gift of learning from and to all the health care professionals who have shared their wisdom and experiences with me. I hope my research and my work as a physiotherapist can in some small way give something back and enhance the health and wellness of rural and northern communities.
Chapter 1 The Lay of the Land: Background to Researching Rural Rehabilitation Practice

Before embarking on a journey, especially into a rural and remote area, it is wise to know the lay of the land and to determine the direction in which one will proceed by taking into account what already exists and what the possibilities are. This preparation facilitates informed decision making along the route, enriches the journey by placing the views in perspective and makes the destination that much more meaningful. The journey described in this thesis is that of a research study, the purpose of which was to construct an understanding of rehabilitation practice in rural and remote regions.

Overview

This thesis is divided into five chapters, each describing parts of the research journey. Chapter 1 provides an overview of the land— the current knowledge on rural health care, rehabilitation practice in rural areas, education of health professionals and primary health care. The research objectives are situated among the literature on educating rehabilitation professionals for rural practice and rural health care policy and planning, while outlining the relevancy of this research and quest for understanding rural rehabilitation practice. Chapter 2 contains a detailed description of the research methodology and the qualitative analytical approach of interpretive description. This chapter also provides an account of my reflective process along this research journey. Chapter 3 presents the results of this research study. Chapter 4 discusses my emerging understanding of rural rehabilitation practice from this research and locates the research findings within the context of the existing literature. Finally, Chapter 5 outlines the limitation of this research, provides recommendations for education, policy and practice and offers directions for future research.

Why Focus on Rehabilitation Practice in Rural Communities?

The recently released World Health Organization report entitled, Increasing Access to Health Workers in Remote and Rural Areas through Improved Retention: A Global Policy Recommendation,(1) concludes that access to “well prepared health professionals in sufficient numbers at the right time and right place” is critical to improving health outcomes in rural areas. In addition, the Report on the Future of Health Care in Canada(2) highlights the health disparities amongst rural and urban Canadians and cited geography as a determinant of health. In British Columbia (BC), where this research takes place, these disparities include
poor health outcomes for rural residents, who generally have higher rates of obesity, traumatic injuries and self reported disability as compared to their urban counterparts.(3)

While geography is only one of many factors that contribute to health disparities, decreased access to health care services has been cited as being disproportionately greater for rural residents,(1) and has been shown to negatively impact the health status of residents in rural communities around the world.(4-6) In Canada, residents of rural communities in British Columbia have identified access and the consistency and availability of health care services as critical issues related to their health.(7) There are many definitions of access to health care(8) including physical presence and proximity to service. The justification of my research is based on both the unique challenges to achieve health equality in rural contexts and optimizing access through ensuring “well prepared health professionals in sufficient numbers”(1) to provide health care services; in particular, occupational therapists (OTs) and physical therapists (PTs) to provide rehabilitation services.

Rehabilitation services are designed to enable people with impairments from injury, chronic disease or disability to reach and maintain their optimal physical, mental, psychological, social and functional independence.(9) While rehabilitation services may be delivered by a number of professionals including physiatrists, nurses, speech language pathologists and rehabilitation assistants, this research focuses on the practice of OTs and PTs. OTs are trained to enable people to achieve their highest level of independence and to participate in everyday occupations that have meaning and purpose to people’s lives.(10) PTs are trained to assess and treat a wide variety of physical impairments with the purpose of optimizing functional movement, relieving pain and preventing or limiting physical disability.(11) In addition, both professions work with people across the lifespan, with an enormous variety of impairments, disabilities and functional deficits by educating and advocating for health promotion and illness prevention. They provide services such as assessment, treatment, intervention and education in a wide variety of settings including hospitals, clinics, homes, health service agencies as well as work sites.

The Physician’s Working Group on Rehabilitation Services for the BC Conversation on Health emphasizes the importance of rehabilitation services for people with a wide range of physical, psychological and cognitive impairments with associated disabilities.(12) However, as is the case with many other health professions, there is a significant shortage of OTs and PTs,(13, 14) in particular, in rural areas of BC(15).
As noted earlier, improving access to services requires more than just increasing the number of health care workers. (1) Addressing workforce issues and health care provision in rural areas also requires a good understanding of rurality, rural health and the complexity of delivering services in rural areas. (16) Medicine and nursing have long recognized the distinctiveness of providing health care in rural areas. (17-19) This recognition has assisted these professions to examine health service delivery models and develop training programs appropriate to preparing physicians and nurses for rural practice. Little is known, however, about the practice of OTs and PTs in rural areas. Literature in this area is emerging from Australia, and while there are some similarities to Canada with respect to the geographical size, low population density and health care challenges, (20) these countries differ with regards to the political and health care system (21). In particular, Canada has recently embraced primary health care (PHC) and health care professions such as occupational therapy and physical therapy are attempting to define their positions in this system (11, 22) and consider how this will translate to rural areas. (23) 

Understanding the influence of rurality on rehabilitation practice in Canada has the potential to inform professional training programs of the key features of rural rehabilitation practice and assist in the preparation of OTs and PTs for rural practice. Knowing more about the practice of OTs and PTs in rural areas in British Columbia and their role in PHC may also contribute to improving access to rehabilitation services in rural areas and ultimately has the potential to redress health disparities and improve health outcomes for rural residents. Together these areas of potential underpin the objectives of this research study.

**Research Objective and Questions**

The overall objective of this research was to construct an understanding of rural rehabilitation practice in the broader context of the current health care system. Specifically, the following questions guided my enquiry to understand rural practice:

1. How do OTs and PTs understand their professional practice in a rural context?
2. What knowledge and skills do OTs and PTs recognize as being unique to their practice in the rural setting?
3. What do OTs and PTs understand of primary health care and how do they perceive their roles in primary health care teams?
4. What challenges do OTs and PTs encounter in their rural practice and what strategies do they use to address the challenges faced in rural practice?
5. How does the professional training and education prepare and support OTs and PTs for their practice in a rural community?

True to the complexity of rural health and rehabilitation practice in a rural context, I chose to situate the justification for the research within literature from rural health care practice, primary care and interprofessional practice, and health professional education. Before embarking on the research journey, to return to the metaphor that opened this chapter, I reviewed the existing literature landscape and synthesized the research findings to inform my research questions and methodology.

As noted by Bourke et al., addressing health care in rural areas requires an understanding of rurality and rural health.(16) I begin this literature review by providing a definition of rural and then outline the common features of rural health care and rural rehabilitation practice. This provides a starting point for considering some of the features and characteristics of rehabilitation practice in rural areas. As I wished to examine rehabilitation practice within the context of the current health care system, I have chosen to examine OTs’ and PTs’ understanding of PHC and their perceptions of their roles within PHC. For this reason, I will review the literature regarding rehabilitation services in PHC and one key element of PHC, interprofessional practice. Finally, recognizing the importance of appropriate content in professional training programs in preparing professionals for practice and believing that change in professional practice begins with education, I will draw on the literature regarding the role of education in preparing health professional students to pursue rural practice. It was on the bedrock of this research that this study to construct an emerging understanding of rural rehabilitation practice was based.

**Defining Rural and Rural Health Care**

The heterogeneity of places and plethora of contributing factors makes defining rural a subject of much debate in the literature internationally, each country using a variety of different indices and measures.(24) Definitions however, are crucial for research purposes and have significant implications when attempts are made to draw comparisons across regions for the purposes of planning and equitable allocation of resources.(25) The definition of rural most widely used in Canada originates from Statistics Canada which defines ‘rural and small town Canada’ as areas with a population of less than 10,000, where less than 50 percent of the labour force commutes to an urban centre.(26) This definition of rural recognizes both the distribution of people and by making reference to labour force commuting, the importance of access to and availability of services as elements of rural.
Similarly, a single definition does not hold for rurality as it is a combination of the physical characteristics exhibited by places and the social, economic and cultural characteristics of communities and individuals along with the resulting interactions. (27) Consequently, rural health depends upon perspective, context and characteristics associated with a rural community and the individuals in that community. (28) Wakerman et al. describe rural health as:

“not just health in a rural setting but health in a complex web of social relations, cultural history and socio-political networks”. (29) (p. 184). It is this complex web of rurality that defines health behaviours, contributes to the health status of rural residents and shapes the way in which health care service are provided. (27, 30) Rural health care is characterized by the diversity of patients, variety of service models, limited resources, poor access to professional development opportunities, high prevalence of chronic diseases and traumatic injuries, and a high proportion of Aboriginal peoples as compared with urban areas. (30-32) While these features have been known for some time by rural practitioners, rural health care has been slowly gaining recognition within the research arena as a distinct domain with unique challenges. There is a growing body of literature describing rural health and rural health care as distinct from urban; (33) however, it remains unclear what this means for professional practice and services. (16, 27, 30) Specifically, the effect of rurality on the practice of health professionals, such as OTs and PTs, is not well understood.

Medicine and nursing have long recognized rural health and health care practice in rural settings as being distinct from urban and have dedicated resources to research, developing training programs and preparing health professionals to practice in this unique environment. (19, 28, 34) The scope, skills, knowledge and dimensions of nursing practice in rural, remote and northern communities have been well established (35, 36) and have resulted in education programs that offer and support these roles. (28) On the other hand, the practice of allied health professionals, including that of rehabilitation professionals, in rural and remote communities has not been well resourced. (37-39) A better understanding of the influence of rurality and the unique features of a rural context on rehabilitation practice would assist in identifying the educational content of occupational therapy and physical therapy training programs essential to rural practice and illuminate the practice supports for OTs and PTs in rural areas.
Characteristics of Rehabilitation Professionals in Rural Areas

Some of the characteristics and challenges of rural practice may be similar across professions; however rehabilitation professionals in rural areas are more likely to work in sole charge positions or in settings such as the community where there is an absence of other health care professionals. (39, 40) This is in contrast to rural nurses and physicians who may be isolated, however characteristically work alongside each other or within a team. (19)

The literature on occupational therapy and physical therapy practice in rural communities originates mainly from Australia where OTs and PTs working in rural areas have been found typically to have a high level of autonomy, (41) have the flexibility to develop and change positions and programs as needed (39) and have a high percentage of Aboriginal patients in their caseload. (39) Large caseloads, long waiting lists, and extensive travel time have also been identified in the rehabilitation literature from the United States (42) and Canada. (43, 44)

While a number of studies have looked at the features of rural practice, there is little research into the influence of rurality on the professional practice of OTs and/or PTs. Wielandt and Taylor surveyed OTs working in rural Alberta and Saskatchewan to identify the rewards and challenges of rural practice. (44) The OTs that completed the questionnaire identified autonomy, diversity, flexible schedules, and job satisfaction and experiences as rewards of rural practice. The challenges noted by participants included staff shortages, the generalist nature of rural OT practice, time spent travelling and the lack of professional support. Wielandt and Taylor acknowledge the challenge of defining rural but gave no indication of the definition used for eligibility. They did note that many of the questionnaires were returned unanswered because the participants did not feel that they worked in a rural setting, (44) however there was no indication of how the participants who did complete the survey defined rural. This research study looks at the professional practice of both OTs and PTs in rural British Columbia and provides an understanding of the influence of rurality on the practices of OTs and PTs.

Sheppard found that the diversity of clinical skills needed to work in rural areas appeared to be dependent on the demands and needs of the rural community and the availability of other services and health professionals. (40) Thomas and Clark identified a number of personal attributes common to allied health professionals in rural areas. (45) Being organized, flexible, co-operative and culturally aware were seen as necessary to working in rural areas. (45) Skills in management and organization, (41, 45, 46) effective
communication, (45) and reflective practice (45) were also identified as essential to the practice of OTs and/or PTs in rural areas. More research on the work practices of rural OTs and PTs is needed (47) in order to determine the universality of these skills and the educational needs of rural rehabilitation professionals.

The relatively small number of health care professionals in rural communities results in large caseloads containing a broad spectrum of health conditions. (30, 48) As such, health care professionals tend to practice as generalists, routinely working in a number of areas that in an urban area would be relegated to specialists in areas such as orthopaedics, neurology or cardiac rehabilitation. (40) The variety of demands placed upon OTs and PTs in rural areas reduces their opportunity for specialization. (37, 40, 49) Being a generalist in a rural practice requires enhanced skills in problem solving, (50, 51) improvisation and networking, (51) communication, and management (52) as well as a fundamental level of competence across the full scope of practice (53).

The essential knowledge and professional and clinical skills required to practice as a generalist can be viewed as an area of specialization. The terms specialist generalists and expert generalist are frequently used by researchers and practitioners when referring to the specialist expertise combined with a generalist breadth of knowledge that rural practitioners from all professions require to practice in rural areas. (32, 40) Peterson et al. referred to OTs in rural areas of Nebraska as jack(s) of all trades as they saw patients from a broad spectrum of diagnoses and in a variety of settings. (42) The current research study also sought to investigate the strategies used by OTs and PTs in rural British Columbia to meet the challenges of specialized generalists and consider the role of education in preparing OTs and PTs for practicing in rural communities.

The range of cases and complexity of patients’ needs coupled with limited resources in rural communities requires OTs and PTs to practice proficiently to the full extent of their scope of practice. Scope of practice refers to the range of roles, functions and responsibilities, and decision-making capabilities of a practitioner. According to the Services for Australian Rural and Remote Allied Health (SARRAH), scope of practice is based on the practitioner’s 1.) education, training and development, 2.) authorization, regulation and/or licensing, and 3.) competence. (53) Currently there is limited research on the barriers and facilitators associated with achieving and maintaining this broad scope of practice. (49) Through understanding the practice of OTs and PTs in rural areas, this current research
project addresses this need and identifies the strategies that contribute to and challenges of OTs and PTs achieving this broad scope of practice in British Columbia.

In summary, the literature is limited on the practice of OTs and PTs in rural areas in Canada. Furthermore, little is known about the challenges they have experienced while practicing as a generalists and the training needed to prepare them for rural practice. These topics are the focus of the current research study.

Education for Rural Practice

Academic preparation of health care professionals to work in rural areas has been the subject of much research. Bourke et al. consider a strong understanding of how the determinants of health impact health status of rural residents as essential for all health care providers in rural areas.(30) More recently, the development of a framework for learning about rural practice has been suggested as a means of improving the delivery of rural health services.(16) Such a framework may assist health care professional students to comprehend the complexity of rural practice, taking into account contextual factors such as the distinct demographic and geographical characteristics.(16) Baum echoed this observation noting that health care professionals need better knowledge of the determinants of health and should be equipped with the skills to understand and influence them.(54) This is in line with the literature that suggests a greater understanding of determinants of health, health status and geographic barriers to health care is essential to addressing population health concerns.(55, 56) Devine noted that occupational therapy graduates practicing in rural Australia required a broad understanding of rural health issues in addition to their fundamental occupational therapy skills.(41)

Occupational therapy and physical therapy programs historically have placed little emphasis on learning about determinants of health (57) and the context in which health care is provided. The development of an education framework for OTs and PTs embarking on practice in a rural area would be assisted by a better understanding of the ways in which the rural context influences the practice of rehabilitation professionals and the delivery of service in rural areas.

Exposure to rural practice during education and training has been shown to increase the interest of health professionals in rural practice (58-61) and to have a positive influence on recruitment and retention.(16, 49, 58) Woloschuk noted that students with undergraduate or postgraduate training in rural areas are more likely to return to rural practice than those
without rural exposure during training. Devine recommended the inclusion of rural content in academic health programs in Australia as a means of improving recruitment and retention. In a report on recruitment and retention strategies for PTs in rural Victoria, Australia, Williams and McMeeken recommended rural training experiences (academic curriculum and/or practice education) and interprofessional education as a means of building rural capacity and addressing rural workforce shortages.

The demand for rehabilitation services in British Columbia is expected to increase due to an aging population, the prevalence of chronic diseases, an escalating number of medical interventions performed that require rehabilitation to maximize outcome, such as joint arthroplasties, and higher consumer expectation regarding function. Considering that many rural areas are currently struggling with health human resource shortages, increasing the recruitment and retention of OTs and PTs has become a priority for rural communities in British Columbia. This has been one of the motivating factors behind the proposal to develop a physical therapy training program at the University of Northern British Columbia. Health care education and training programs have been encouraged to reflect the current directions of the health care system, and furthermore, have a social responsibility to address issues of inequity and accessibility to health care. This potential new program provides an excellent opportunity to design a program and adapt a curriculum for a rural context. Through constructing an understanding of rural rehabilitation practice, the current research study has the potential to contribute to the development of a rural educational framework. This may assist with recruitment and retention of rehabilitation professionals through positively influencing students’ perceptions of rural practice and developing a better understanding of a rural resident’s context regardless of where graduates of the program deliver rehabilitation services.

As noted earlier, an educational framework for rural practice centres on learning about the rural context. Constructing an understanding of rural rehabilitation practice and the influence of rurality on the practice of OTs and PTs working in rural British Columbia could provide education programs with guidance in introducing rural curricular content. Examining professional practice to inform education and in turn influence practice is one mechanism for mitigating the disparities in health status between urban and rural residents and for attending to a social responsibility to provide health care equitably. My research study was designed to accept this call to action and examined rehabilitation practice in rural communities in an effort to understand how the complexity of the rural context affects the delivery of rehabilitation services.
services, to inform the education of future health care professionals, and ultimately to improve and mitigate the health disparities that exist between rural and urban residents.

**Primary Health Care as Context to Rural Practice**

Another feature of the context of rural health care is the larger social, political and economic milieu in which health care takes place. In recent years, the health care system in Canada has placed greater emphasis on primary health care. For this reason, another focus of my research study concerns the health care context in which OTs and PTs practice in rural communities. Specifically, I wished to examine OTs and PTs understanding of primary health care and their perceived role in primary health care in rural communities. A review of the literature on rehabilitation practice and services within primary health care (PHC) and PHC in rural areas situates this research and reveals the rationale to bridge these objectives.

Primary health care (PHC) is defined by Health Canada as an approach that recognizes and addresses the broader determinants of health including population health, sickness prevention and health promotion with services provided by physicians, and other providers in group practice and multidisciplinary teams. This differs from primary care which refers to the diagnosis and treatment of illness and injury and the first contact an individual will have with the health care system.

There is growing evidence that the expertise of rehabilitation professionals in the areas of chronic disease management, health promotion and illness prevention makes them essential members of the primary health care team. Humphreys advocated for health care professionals such as OTs and PTs to play a greater role in the delivery of primary health care in rural areas as a means of improving the allocation of scarce resources.

The British Columbia Primary Health Care Charter has identified four priority areas: chronic disease management and prevention, health promotion, community development and improved access to primary care. Given the challenges rural residents face regarding access to services and disparities of health, the broad scope of practice of OTs and PTs makes them well equipped to address each of these priority areas within the primary health care approach to health care delivery. The emphasis on working within primary health care may result in the evolution of new roles. However, little research has been conducted to explore these roles as they exist or their potential. The research study described in this thesis provides insight into this area by asking OTs and PTs about their understanding of, and role in, PHC.
McNair suggested that a better understanding of therapists’ perceptions of primary health care and their perceived role could provide valuable information in the preparation of OTs and PTs for working in primary health care teams and developing skills necessary for effective collaboration. (59) Exploration of OTs and PTs understanding of and perceived role in PHC in rural communities would provide novel information for educators preparing OTs and PTs for practice within PHC.

Primary health care in rural areas remains relatively unexamined and yet rural communities offer enormous potential for the implementation of primary health care initiatives. (5, 68, 71, 72) The focus of primary health care on population health issues, addressing the determinants of health through health promotion and prevention and delivering services through a team approach may be easier to facilitate in a smaller community where collaboration and relationships tend to occur more frequently due to proximity or necessity. (71)

Primary health care has been shown to be a cost effective model of service delivery by reducing the number of referrals to specialists and improving the continuity of care in people with chronic conditions when compared with hospital based services. (73-75) In addition, there is mounting evidence of the efficacy and efficiency of rehabilitation services in primary health care. (65, 76) McColl et al. examined models for integrating rehabilitation within primary health care. (77) The six most common models were service provided through a stand-alone clinic, outreach services, promotion of self-management, community-based rehabilitation, shared care with other providers, and case management. In addition, McColl et al. identified a number of themes across models that acted as either supports or, in their absence, impediments to the integration of rehabilitation services into primary care settings: team approach, interprofessional trust, leadership, communication, compensation, accountability, referrals, and population-based approach. (77)

In summary, there is a paucity of research that addresses rehabilitation practice within rural PHC. By examining the practice of OTs and PTs in rural BC within the PHC context, this research study provides insight into the current understanding and involvement of rehabilitation professionals in this evolving approach to health care delivery. Furthermore, my research study will provide a meaningful perspective from which evidence informed health care policy and planning decisions regarding the integration of rehabilitation services into primary health care in British Columbia can be considered.
Interprofessional Practice as Context for Rural Health Care

Another important element of primary health care is a team-based approach to health care delivery. The term *team* can signify a variety of different models and terms such as multi-disciplinary, interdisciplinary, interprofessional and collaborative; all of which are widely used, frequently interchanged and have different meanings. This thesis focuses on the concept of *interprofessional collaboration* as a much larger approach that can include teams of professionals and has been cited (55, 56) as an important and defining feature of health care provision in rural areas. Interprofessional refers to circumstances when members of two or more professions work or learn together with a common purpose, commitment and respect. (78) Collaboration is an interprofessional process for communicating and decision making that assembles the knowledge and skills of care providers, patients and their families in the delivery of patient-centred care. (79) Wielandt and Taylor found that OTs in rural practice in Alberta and Saskatchewan noted team work was one of the rewards of rural occupational therapy practice (44) and collaboration has been used as a strategy for overcoming resource shortages in rural areas. (37, 80)

Interprofessional practice has been shown to have positive outcomes for both patients and providers as well as for the health care system. (81) From the patient perspective, these include increased compliance with treatments, improved health-related quality of life, and increased self-management of chronic conditions. (81, 82) Providers have noted increased job satisfaction, enhanced communication and increased understanding of roles and scope of practice. Health system outcomes include a trend towards decreased hospital admissions and emergency room visits, more timely referrals among professionals and decreased medical errors. (81, 82) Specifically related to populations frequently seen by OTs and PTs, interprofessional collaboration has also been recognized as critical in the management of many chronic musculoskeletal conditions such as heart disease and arthritis. (83-85) Morgan notes that the gap between best practice and achievable practice is widening due to the complexity and increasing numbers of patients with complex chronic diseases and that sharing the delivery of health care services among a team of health professionals is crucial to preventing this gap from widening. (86)

Increasingly health professionals are required to work more collaboratively and outside their traditional professional roles, yet still within their scope of practice in order to adapt to changing service delivery models. In rural communities, this is often a necessary
means of meeting the diversity of needs with limited resources in isolated conditions.(25, 30, 31)

As noted earlier, the education and training of health care professionals should reflect the health care environment into which health care professionals practice. Interprofessional education is recognized as crucial in the education and training of all health care professionals in preparation for a health care environment that is transitioning away from health care professionals practicing in silos towards collaborative and shared care.(2) Interprofessional education refers to

"occasions when two or more professionals learn with, from and about each other to improve collaboration and the quality of care" (78)(p17)

and is an approach to fostering the skills and attributes required of health professionals to work collaboratively.(63, 87)

Through examining the professional practices of OTs and PTs in rural British Columbia, this research study contributes to the understanding of interprofessional practice and primary health care initiatives in rural BC. Furthermore, this study has the potential to inform the education and training of rehabilitation professionals in areas such as the key features for rural practice.(16, 56, 59) Influencing education is the first step in changing practice (88) and the care that is delivered,(89) and thereby this research has the potential to redress the important health disparities of rural residents.

Summary

This introductory chapter has situated the research study into the context of the literature relating to rehabilitation practice in rural areas. It has examined the research landscape on the rural context of health care and rehabilitation practice and its connection to primary health care. This provided the basis of the research objective and research questions and established the foundation upon which the research project was built. The following chapter provides a detailed description of the research methodology, methods for data collection and analysis and concludes with personal reflections on the process of conducting and documenting the research journey.
Chapter 2 The Map: Methodology for Researching Rural Rehabilitation Practice

Overview

This chapter provides an introduction to interpretive description,(89) the methodological approach chosen as most appropriate for this research and details the research design, methods and analysis of this study. The latter half of this chapter conveys the reflective processes that helped to shape my understanding and interpretation of the data. This chapter concludes by outlining the rigour of the study; specifically, how trustworthiness was established and how my professional experiences and context shaped interpretive processes.

Methodology

All research methodologies rest on particular claims about what knowledge is and how knowledge is developed. The epistemological perspective underlying my research is based on a social constructionist view of knowledge, meaning that knowledge is constructed from a multitude of perspectives and experiences. Viewing knowledge(s) as a socially constructed entity justifies my decision to employ a qualitative approach to this exploratory research study. In support of qualitative approaches to research and believing that occupational therapists (OTs) and physical therapists (PTs) in rural practice are best able to articulate the influence of rurality and the contextual features of rural on their practice, I invited these practitioners to engage in qualitative methods to elicit their perspectives and experiences.

As described in Chapter 1, the complexities of rural health and the challenges of delivering health services in rural areas make rehabilitation practice in rural areas a unique clinical phenomenon. Understanding clinical phenomena for the purpose of informing practice is not easily achieved through traditional qualitative research methods.(90) Interpretive description, developed by Thorne et al.,(89) provides a methodological approach to examine clinical phenomena and to construct understandings which can be more easily translated into practice knowledge than the more traditional qualitative traditions. Using this approach, the perceptions of individuals can be examined in greater depth by identifying the shared realities of individual experiences and integrating these with the collective knowledge
of a given health care discipline. By integrating these concepts, interpretive description helps the researcher to construct the contextual nature of the clinical phenomena. Thus, choosing interpretive description as the methodological approach for this research study aligns with the objective of constructing an emerging understanding of the clinical phenomena of rehabilitation practice. Furthermore it considers the experiences of OTs and PTs within the context of their discipline and rural contexts.

Similar to many disciplines, OTs and PTs each employ a variety of skills, knowledge and theory in their everyday practice that are derived from the professional body of knowledge and from individual experiences. Incorporating the disciplinary knowledge into the research process is one way in which interpretive description moves beyond description of a clinical phenomena to interpretation and to determining the implications of findings for clinical practice. Therefore interpretive description is particularly well suited as a methodology to address my research questions in ways that can enhance practice.

Interpretive description was developed in the field of nursing and has not been used widely in the rehabilitation fields. However, parallels can be found in the nursing literature where interpretive description has been used to examine tacit knowledge and to explore research issues such as how nurses know their patients or how intuition develops in expert practice. Inquiring into how OTs and PTs understand their practice and their perceptions of the contextual features of rural demands a methodology that respects both practical experience and disciplinary theory and knowledge. As such, interpretive description is well suited to this research study.

One feature of interpretive description is the use of a theoretical forestructure as a scaffold for the data collection and analysis. This forestructure provides a means of acknowledging the influences on the research by locating: 1.) the theoretical position of the study, 2.) the knowledge and practice of the discipline, and 3.) the position of the researcher. As detailed in Chapter 1, the theoretical framework for this study was derived from the literature of rural health care, characteristics of rehabilitation practice in rural areas, and the influence of education on preparation for rural practice and primary health care in Canada. Examining the complexity of rurality and its influence on rehabilitation practice situates this study amongst the literature on professional practice, education and health care policy. Located in the field of rehabilitation sciences, this research study drew upon the knowledge and practice of the disciplines of occupational therapy and physical therapy. As the outcome of this research inquiry focused on bringing about change in practice where appropriate, the
theoretical forestructure was developed with a direct orientation to the practice of both disciplines. Through the interpretive process, the potential to identify and delineate concepts distinct to each discipline, as well as the principles of rehabilitation common to both disciplines exists. Finally my disciplinary orientation (physical therapy) and experiences as a clinician are considered important lenses through which to read and interpret the data. My awareness and acknowledgement of how such experiences shaped the analysis is imperative to a critical reflexive process.

**Participant Eligibility**

In accordance with interpretive description, a purposeful sampling strategy was chosen as the most appropriate sampling method. I recruited OT and PT participants who practiced in rural communities in Northern British Columbia. To diversify the study sample, participants were selected from a variety of distinct practices, privately and publicly funded and with a range of experiences to gain a broad perspective. Initially, this resulted in a decision to generate a sample size of between 18 and 20 participants, however after consultation with my supervisory committee it was decided that a sample of eight to 12 interviewees would capture an appropriate sample size to obtain reasonable variation in order to identify similar as well as contrasting themes. The exact number of interviews was determined as the data unfolded and was dependent on ensuring the sample size and range addressed the theoretical variations as they evolved from the interviews. Sale and Hawker noted that sample size should be reflective of the data rather than a set number of participants. (92) This sampling approach allowed me to invite additional participants as the study progressed who could provide alternative perspectives to those I was hearing, thereby maximizing the variation while also refining the data collection to the research question.

OTs and PTs were eligible to participate in the study if they lived and worked in a rural and remote community of British Columbia. For the purposes of this study, rural was defined as communities with a population of less than 15,000. This was an adaptation of Statistics Canada’s definition of ‘rural and small town’ which constitutes a population of less than 10,000. (26) Increasing the upper limit of the population in my criteria of rural, permitted me to include OTs and PTs from communities that provide outreach health services to more remote regions, as well as those who work in the private and industrial sectors.

The geographical and political region of Northern BC was chosen as a research site for a number of reasons. The Northern Health Authority (NHA) encompasses two-thirds of the province, or 620,000 kms², but has a population of only 300,000, or less than one-tenth
of the provincial population. (93) The largest metropolitan centre is Prince George with a population of 70,000, followed by four centres with populations between 10,000 and 18,000 persons. (93) Thus a large percentage of the region can be classified as rural. For the purposes of this research study, the NHA provided a large and appropriately rural geographical region from which to recruit participants. In addition, my familiarity with the geography and health care environment facilitated the logistics of the participant recruitment and planning for data collection.

Ethical approval was obtained from the University of British Columbia Behavioural Research Ethics Board and from the Northern Health Authority Research and Evaluation Committee. Approval from the NHA required obtaining a letter of endorsement from a research sponsor. As an employee of the health authority, the sponsor acts as a liaison between the project, the health authority and employees involved in the research. I was fortunate that the Professional Practice Strategy Lead for Rehabilitation Services agreed to be the sponsor of this research study.

**Recruitment Strategy**

Potential participants were recruited through a letter of invitation mailed to the workplace of OTs and PTs in rural communities in the NHA. Addresses of work sites were obtained through publically accessible health provider directories and listings, both in print and on the internet. A letter describing the research project and a copy of a consent form were included in the mailing. (Appendices A and B) Potential participants were asked to contact me by telephone or email if they were interested in participating. Based on their practice characteristics, including their years of experience in rural practice, their practice setting and type, the funding source of their practice and the patients served, participants were enrolled in the research study on a first come first served basis. While supplementary interviews will always bring forth additional perspectives and experiences, (94) potential participants were kindly turned away when category groupings were populated and a broad range of theoretical variation had been reached. Writing field notes and reviewing audio files while in the field resulted in preliminary recognition of a number of themes and assisted with decisions related to further sampling and reaching saturation.

**Interview Question Development**

Consistent with interpretive description, in-depth interviews provided OTs and PTs the opportunity to identify and describe their experiences and understandings of rural
rehabilitation practice. Each interview was conducted to draw upon the wisdom of therapists and to learn from their perspectives and experiences. My experience in rural areas has taught me that face to face connections and meeting on the other person’s land are signs of respect and highly valued. Therefore, the research interviews took place in person in the participant’s community allowing me to honour the participation of the OTs and PTs involved in the research. In-person interviews also facilitated a locality based understanding. As such, the development of an understanding of rural practice was literally and physically based in the context in which the inquiry took place.

A semi structured interview guide (Appendix C) was created and interview questions developed using the forestructure detailed earlier, the research objective (constructing an understanding of rural rehabilitation practice) and the guiding questions outlined in Chapter 1. In keeping with exploratory research approaches which examine experiences, situations and meanings, interview questions were designed to be broad, open-ended and to allow therapists to share the elements of their practice they considered to be relevant to the focus of the research study.

The interview questions stemmed from the five specific research questions and focused on: 1.) perceptions and understanding of rural practice, 2.) skills and knowledge perceived as unique to rural practice, 3.) understanding of primary health care, 4.) perceived roles in primary health care, and 5.) barriers and facilitators to rural practice and strategies to meet and overcome the challenges. Greater detail for each of these five sections follows.

To understand the context in which practice takes place, I explored the demographic and practice background of OTs and PTs working in rural areas, and enquired how they defined rural and how being in a rural area shaped their practice. Therapists were then asked what skills and knowledge they perceived as being unique to rural practice, how their professional training prepared them for rural practice, what educational support would assist their practice, and what advice they had for new graduates embarking on a rural career. Therapists were asked what they knew of primary health care and whether they were engaged in primary health care or any aspect of it, such as a team-based care or interprofessional practice. To learn about the barriers therapists faced in their practice, I solicited the challenges participants faced in rural practice and what strategies they employed to meet and overcome these challenges.

To conclude the interview, therapists were asked three final questions. I asked if there was anything that was not covered in the interview that they felt was important to
understanding rural practice, and then two questions relating to the research project: what they felt I should learn from the research; and who they thought should hear the results of this research. Throughout the interview, through prompts and sub-questions participants were encouraged to give examples and expand ideas to gain greater depth.

A pilot interview was conducted in order to test the question design and sequencing as well as the procedures for recording the responses. This provided an opportunity to review the validity of the questions in light of the responses received and feedback from the interview participant. Lessons from this pilot informed the design of the interview guide and subsequent interviews by increasing the clarity of the questions. Modifications to the interview guide following the pilot also included the addition of demographic data and a question related to the participant’s definition of rural.

Data Collection

In accordance with the Tri-council policy and to ensure informed voluntary participation, participants signed the consent form prior to the interview providing permission for the researcher to audio-tape the interviews and were given a copy of the signed consent form for their records. Due to the small community of health care professionals in northern BC, extreme care was taken to ensure the confidentiality of participants and anonymity of the data. Participants were asked to choose a pseudonym which was used solely for identification of the transcript. All digital audio recordings were uploaded from the field to a secure server at the Arthritis Research Centre in Vancouver for protection. Recordings were hand delivered to one of two research assistants for transcription and were stored on the secure server. A confidentiality statement was signed by each of the research assistants as part of their contract agreement.

In addition to the audio-recordings, sources of data also included field notes collected from the interviews and memos written through the research process. Field notes consisted of my initial observations of the interview, including the process. I also documented topics or issues that were raised by participants during the interview that I wished to follow up on.

Research memos were another form of data collection. These consisted of notes taken during the preliminary reading of the transcripts that captured insights from quotes, hunches I needed to explore further and connections I was seeing in the data. They also captured the frustrations I had when I was unable to capture anything new in the data. However, as Charmaz noted, memos challenge researchers to look at their data and coding
differently which often sparks new insight. (95) Memos were kept in a separate file and were labelled with the date and a reference to the transcript from which the ideas emanated. The interview recordings, field notes and memos constitute the audit trail of this research project.

Data Analysis

Before initiating the analysis, I read through all transcripts thoroughly to remove all identifying references, which included names of all rural towns, names of health care professionals, and geographical features that would give clues as to the location of the participant. Quotes used to illustrate research results in this thesis are identified by the professional designation of the participant (OT or PT) and the first initial of the pseudonym. In presentations and publications, quotes will be identified by the professional designation of the participant only.

Analysis of the data was initiated with reflections on my assumptions and philosophical beliefs relating to research in the big picture, this research study, to rehabilitation practice and to the rural context. This helped ensure that I undertook the analysis without preconceived expectations of the findings, and freed me up to pay full attention to where the findings were leading. When I encountered a part in the transcript that I considered meaningful, I reflected on the pre-scripted questions and asked: why do I consider this section of the transcript to be meaningful?, what is interesting about what this participant is saying?, what is the issue behind what they are saying?, and what lens am I looking through when I consider it to be interesting? This allowed me to reflect on what I was coding and why.

Initially, the analysis of the transcripts was initiated by hand, using a colour coding process with a highlighter and sticky paper. The decision to follow this process was based on feedback from my proposal presentation. However, while conducting analysis of the second transcript, I recognized that I was no longer being consistent in either the manner in which I reviewed the material or flagged specific text for analysis. This insight raised a question about how to maintain consistency when reading both within and across transcripts, and prompted me to reconsider the choice of hand analysis over a qualitative data software program. New researchers are often cautioned that the use of software programs limits the ability of the researcher to rise above the data to see the whole. (94-96) However, the complexity of the phenomena made it challenging to read for both the “whole” and the discrete insights emerging from the data and mindfully control the many tangents the analysis prompted. I made the decision to use qualitative software as an adjunct to my hand
coding in an effort to ensure a comprehensive analytic approach. Once I learned the software, the process was indeed more consistent, transparent and allowed me to document the choices I made as I progressed through the analysis.

To consolidate the focus of my analysis, I created a trail map based on my reading and understanding of interpretive description analysis. (Figure 2.1) This synthesized the analysis process into three stages.

Figure 2.1 Analysis Trail Map- created August 2010, revised February 2011

The first step of the analysis involved reading the transcript in its entirety and reflecting on it as a whole. I located sections of the transcripts that I identified as having potential meaning and I coded these sections using N-Vivo.(97) As suggested by Thorne,(90) I maintained large segments of text to retain the context and meaning, and used broad terms as codes that described the nature of the data. Some examples of these codes include: access, definition of rural, education, First Nations, health human resources, relationships, rural versus urban, system changes. The codes were not laid onto the data; rather they were used to name emerging meanings interpreted from the interview text. Field notes were read but not coded during this phase of the analysis to assist in placing data in context and offering further critical review. While endeavouring to be inductive in my analysis, a number of sensitizing ideas,(98) as well as the theoretical forestructure shaped the way in which I
coded the data. These sensitizing ideas included the rural therapist’s role as specialist/generalist, characteristics of rural practice, rural-urban differences and primary health care.

The second step consisted of making sense of the groupings in which I had placed the data. This was done through identifying the patterns and seeing the relationships between individual cases and the larger data set to develop explanations. I compared the data within each code and across codes to identify common linkages. I revisited the audit trail frequently during this analysis phase to consider the commonalities and differences further. Exceptions to the commonalities, such as contrasting perspectives, were noted in the memos and challenged me to delve further into the analysis and the interpretive process. Memos were an important intermediary step in the process between coding and writing a draft of the analysis. It was on these pages that ideas from the data evolved into interpretive categories and revelations in analysis occurred. After spending time within each code and recording the development of ideas in memos, I was able to collapse these groupings into a small number of interpretive categories. I chose the label interpretive categories as these groupings extended beyond description of the data as I had engaged in interpretation and the content contained a mixture of themes as well as conceptual ideas. A model was created to outline the relationships between interpretive categories. (Figure 3.1) This was useful in moving on to the third step of analysis, interpretation.

In the final step in the analysis, I further interpreted the content of each interpretive category to consider the practical meaning and implications of the findings. I also returned to the theoretical forestructure and research questions at this time to guide the interpretation and considered: how do OTs / PTs understand their professional practice in a rural context?, what skills and knowledge do they recognize as being unique to their practice setting?, what challenges do they encounter in rural practice, what strategies do they use to address these challenges? and how did their professional training prepare and support them for rural practice? While working through the interpretation within each interpretive category, I gained insight into the complexity of rural practice and began to conceptualize and construct an understanding of rural rehabilitation practice. My emerging understanding was roughed out into a conceptual model, (Figure 4.1) presented and described in Chapter 4.

This trail map provided a summary of the analysis process and where I was heading. Guided by the trail map, my analysis not only reached a viewpoint but also a trailhead where a series of new paths awaited. Next, I presented an overview of this process and the
preliminary analysis to my thesis committee and invited them into the analysis. Opening up the analysis process and sharing the analysis journey helped me to decide how to proceed and shape the interpretive phase of the research. Following the lead of the data meant that particular themes, ideas or concepts became more or less relevant in relation to the participants’ experiences. I placed emphasis on those that were relevant in my analysis, knowing that the analytical process would eventually lead me back to my initial forestructure through the construction of findings.

Analysis of this data ceased when my analysis categories, derived from the codes, were considered saturated and I had reflected the interpretation of each to the best of my ability. When revisiting my overall research aim, I determined that I had constructed the complexity I had sought to capture, while generating findings related to my research questions.

It was at this point that I returned to my participants with my interpretations. Given the logistical challenges of delivering the results in person, I created a web-based audio and visual presentation of my findings and my interpretations specifically for the OTs and PTs I interviewed. (Appendix D) There were three objectives for this presentation. The first was to honour and respect the contribution that the participants made to the research by allowing them to hear the results of the research directly from me. The second objective was to provide an opportunity for the participants to give me critical feedback. The third objective was knowledge exchange. By returning the research findings to the participants, it enabled them to utilize the research findings in ways they considered applicable. At the end of the presentation, and in an accompanying email, I asked them to provide feedback on my findings and to consider the implications for practice, policy and education that I had offered. As noted by Thorne, responses to this presentation and my analysis were not used to inform my analysis and so are not presented as part of the results. However, I consciously created space for participant feedback in the final stages of the research process. Their feedback provided direction as I wrote the implications for practice section of the thesis and offered recommendations for future research. Feedback from participants also guided the presentations I have made to stakeholders and will inform future knowledge exchange activities.

In summary, the analysis of the data from this study was conducted using an integrated approach, combining the inductive analysis and guided by the theoretical forestructure. It employed a complex inductive process involving first coding and then
collapsing the data into interpretive categories. Using the organizing framework of the theoretical forestructure and research questions, findings were then further interpreted to consider implications and practical application. This explicit description of the analysis adds clarity of the process and serves to enhance the transparency and contributes to the overall rigour of this research study.

**Attention to Rigour and Trustworthiness**

Rigour in qualitative research is achieved through attention to a number of features of the research design, including the congruence of methodology, methods and analysis. Triangulation, or the use of multiple methods, sources, analysts and theory or perspectives, assists the credibility of the research.(99) While this research study relied on interviews as the single method of data collection, observational data and reflexive field notes were also considered data sources that allowed for cross checking with interview transcripts. The choice to include both OTs and PTs in this research study because of the collaborations and overlap of disciplines strengthened the findings, however the particulars of each discipline meant that internal comparison of the data was not always appropriate. The credibility of the findings was also aided by the use of the “thoughtful clinician test”.(90)(p 85) When studying a particular phenomenon, Thorne suggests triangulating the wealth of experiences a thoughtful clinician may have with the data as a whole as a way to substantiate the findings. For example, I frequently conducted comparative analysis of the perspectives of OTs or PTs with extensive rural experience with those of a new graduate and this provided additional verification of the findings.

It is proposed that rigour in qualitative research analysis can be enhanced by multiple reading and analysis by more than one person.(99) While I was solely responsible for the coding and analysis, a number of validity checks were accomplished in other ways to mitigate the potential for unchecked influence on the research. First, I invited my thesis committee into the analysis process and suggested they review two transcripts (one in common and one individually chosen). I asked committee members to analyse the transcripts, if they wished, in a manner that they were accustomed, as I was not seeking congruence with my analysis. The purpose of this was to open up the analysis process and be fully transparent while providing an opportunity for alternate perspectives to challenge my representation of the data. This served to strengthen my clarity of my analysis and interpretation.
Secondly, despite being the sole researcher in the analysis, I believe that I was able to conduct the analysis from more than a single perspective. Using my field notes to reflect on my position in the research, I looked at the data not just as a researcher but also as a PT familiar with the practice and geographical area and as a colleague. I attempted to document in field notes and memos decisions and dilemmas, to reflect on and critically analyse the process, and challenge my logic and any biases that I thought were present. I have attempted to be as explicit as possible in identifying any lens that may have obscured or enhanced my view, if it allowed me to gain deeper insight into the data. (99)

I conducted this research as a PT and did not have an OT to balance the line of inquiry throughout the study. Fully cognizant of this, I approached the analysis with as broad a rehabilitation lens as I could.

While we have many mechanisms by which we try to understand our disciplinary orientation, our particular biases and curiosities often take the form of our mythical “trickster ravens”. (90)(p. 143)

When reading the transcripts, I looked through the binocular lens of the disciplines of rehabilitation science, not just my own discipline of physical therapy. I read the transcripts without paying attention to which discipline the participant was from, periodically forgetting this altogether until it came up in the analysis and I searched for discrepancies. While I do not pretend to have the knowledge nor the collective wisdom of another profession, I believe I have a good understanding of both professions because of my professional experiences.

The rigour and trustworthiness of the analysis was also addressed by returning my findings to the research participants, and sharing my interpretations and recommendations. From the inception of this research project, I have felt a responsibility to share the results with those I interviewed and whoever else they felt should hear it. In my research proposal, I referred to the design of this research as having been informed by Reason and Bradbury’s philosophy of action research. (100) I attempted to uphold this principle of generating a new form of understanding that results in a practical outcome through the involvement of stakeholders while remaining true to the methodology of interpretive description.

According to Thorne, the process of returning findings to the participants in interpretive description differs from member checking (a common feature of many forms of qualitative research) in that participants are not asked to validate findings or to confirm that the findings are consistent with what they have shared. (90) The feedback received from participants is not meant to redirect the analysis or entice the researcher to revisit the
findings, but rather to assist in taking interpretations to the next level by using the feedback to consider the clinical relevance and inform the practical application of the findings. I asked the participants to challenge the findings relative to the realities of their practice and consider assumptions that were not grounded in the reality of rural practice. I further asked them to consider the aspect of translating the research findings into practice, what changes they wished to see, who should hear it and to articulate the issues they deemed most important. These feedback questions were similar to the final questions of the participant interview: ‘what do you hope that I learn from what you have told me?’ and ‘who should hear this message?’ While I have a responsibility to the academic community in conducting this research, I have also been guided by the principle of social accountability and will work to see that this research reaches those in a position to make changes.

The process of opening up the research to participants has made me acutely aware of positionality and importance of researcher-participant reciprocity, meaning the position of the researcher in the research and the expectations placed on a researcher by participants and by stakeholders. My position in the research played an important role in shaping the analysis and I have described it in detail here. My reflection on reciprocity is described in Chapter 3 as this concept emerged through the findings.

**Reflexive Processes**

My position in this research project has been that of a novice researcher. However, the place from which I speak through this research has been dynamic and I have tried to remain conscious of shifts and the reasons for them. My perspective during this research has been greatly affected by my roots as a physical therapist, and, my position as a colleague and locum physical therapist. In the midst of the project, I noticed how research mirrors much of my way of being and inquiring as a practitioner. I intentionally drew upon my skills as a practitioner to enhance my research practices. Interestingly, it is stated that researchers who study their ‘own’ may lack the distance that facilitates a balanced and objective perspective. I found that being an ‘insider’ was both beneficial and requiring of scrutiny. I worked to recognize when my personal experience shaped the process and my understanding, and when I revealed or concealed my position and perspectives. I also worked diligently to acknowledge my assumptions and asked my participants specifically if I had made any assumptions when I returned the results to them. Despite efforts to be true to the researcher role, it is unlikely that I was able to fully “discard [my] larger social mandate as
a health care professional engaging in the research of [my] profession”,(90)(p111) however I believe that my reflexivity enhanced the credibility of the research.(101)

For example, my experiences provided additional insight to the research at certain times and at other times challenged my place in the research process. Juggling these multiple positions and perspectives, I was reminded of my experience as a rural practitioner who delicately negotiates the roles of health care professional and community member, honoured to know the players and the relationships in the context of each role, combined with the privilege of professional knowledge. Transparency of position and perspectives is essential to the research process as it ensures the credibility of the results in much the same way as the sensitivity by the rural practitioner to roles and perspectives can result in achieving better patient outcomes. Learning to navigate these roles, positions and perspectives has been an extremely valuable learning process for me.

_We shall not cease from exploration  
And the end of all our exploring  
Will be to arrive where we started  
And knowing it for the first time_  

_T.S. Elliot_

**Summary**

In summary, this chapter provides an overview of the methodological approach of interpretive description, employed in this study and provides a detailed description of the methods of data collection and analysis. It describes the research journey and my efforts to create a rigorous and trustworthy interpretive and reflexive process. The following chapter presents the results of the data collection and the findings from the analysis of the research.
Chapter 3 The Perspectives of OTs and PTs on Rural Rehabilitation Practice

Overview

This chapter presents the findings of the analysis of the data collected through interviews with occupational therapists (OTs) and physical therapists (PTs) working in rural British Columbia. This chapter presents my interpretations of what I heard, what I reflected on and what I came to understand from interviews with 19 participants. As outlined in the previous chapter, the data was analysed using interpretative description. Through the process of analysis and interpretation of the data, I grouped these findings into interpretive categories. This chapter begins with a detailed description of the participants who shared their perspectives and experiences in this research study and then delves into their understanding of a rural context. This provides a backdrop for exploring each interpretive category which illuminates how rurality shapes the way in which participants enact their practice within the context of primary health care. These interpretations serve as a scaffold for constructing an emerging understanding of rural rehabilitation practice.

Participant Sample

Twenty-three letters of invitation to participate in research (Appendix A) were sent to hospitals, clinics and community agencies within the geographical region of the Northern Health Authority. This mailing had the potential to reach 42 eligible participants (16 OTs and 36 PTs). From this study population, 22 therapists contacted me expressing an interest in participating in this research project. Two additional therapists indicated interest in participating following the conclusion of the project and so were not included in the sample. As per the inclusion criteria and the purposeful sampling strategy outlined in Chapter 2, participants were chosen to maximize sample variability, working within a variety of different service delivery models, areas of practice and years of experience in rural areas. Out of the 22 therapists who contacted me, 19 were selected to participate in the study. This represents 6 out of 16 OTs (37 percent) and 13 out of 36 PTs (36 percent) eligible and invited to participate. The three therapists not chosen to be a part of the study had profiles that were similar to others that had already been interviewed and it was felt that a reasonable variation of perspectives had been obtained. The participant that was chosen for the pilot interview had extensive experience working in public and private sectors in rural areas and was well
respected regarding her involvement with professional practice issues. The profile of participants is illustrated in Table 3.1.

Seventeen face to face interviews were conducted in the participants' community and two were conducted by telephone due to the logistical constraints of reaching that particular community in the depths of winter. All interviews were conducted outside of work hours at a time and place that was convenient for the participant. The duration of the interview ranged from 36 to 94 minutes; the median length was 62 minutes.

Table 3.1 Work Profile and Demographic Characteristics of 19 Research Participants

<table>
<thead>
<tr>
<th>Professional Designation</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT</td>
<td>6</td>
</tr>
<tr>
<td>PT</td>
<td>13 *</td>
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</table>

<table>
<thead>
<tr>
<th>Type of Practice</th>
<th>Number of participants</th>
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</thead>
<tbody>
<tr>
<td>Hospital based (inpatient / outpatient)</td>
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<tr>
<td>Sole charge (public or private)</td>
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</tr>
<tr>
<td>Home and community care</td>
<td>5</td>
</tr>
<tr>
<td>Long term care</td>
<td>5</td>
</tr>
<tr>
<td>Private practice</td>
<td>6</td>
</tr>
<tr>
<td>Child Development Centre</td>
<td>4</td>
</tr>
<tr>
<td>Outreach services to remote community</td>
<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Professional Training</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained outside of Canada</td>
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<tr>
<td>Graduated within the last 2 years</td>
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</table>

<table>
<thead>
<tr>
<th>Participant Background / Characteristics</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grew up in a rural area</td>
<td>9</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant Work Experience</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time in professional practice</td>
<td>6 months - 42 years (median 15.75 years)</td>
</tr>
<tr>
<td>Time in rural practice</td>
<td>6 months - 34 years (median 14 years)</td>
</tr>
</tbody>
</table>

* includes 3 combined trained working as PT
Results of the Analysis of Rehabilitation Practice in Rural Areas

The objective of this research study was to construct an understanding of rural rehabilitation practice. The results of the inductive analysis revealed a series of interpretive categories that represent the experiences and perceptions of OTs and PTs and the issues that study participants conveyed to me as most relevant to their understanding of rural practice. Thorne suggests that within the methodological approach of interpretive description, patterns within the data should be ordered to “make sense of the most important ideas to be conveyed and access their meaning in a new manner”. (94)(p15) While retaining the structure of my research questions through the analysis may have resulted in a simpler process and an outcome more closely aligned with the theoretical forestructure, I chose to follow the lead of the data and captured the issues and perceptions that were most important to my participants. As a result the findings of this study are presented according to the interpretive categories informed through the analysis and interpretation.

The Rural Context- A Complex Web of Geography and Access Make for a ‘Bigger’

Definition of Health and Practice

In order to analyze the ways in which rurality influenced rural practice, I needed to first understand how participants defined rural and understood their practice in a rural context. Participants were asked to describe their professional practice and the skills and knowledge they felt were unique to rural practice. Participants grounded their descriptions, as well as their practice, in what rural meant to them. Rather than providing a single definition of rural, many participants referred to an intangible sense of knowing what rural meant, often derived from their own experiences. The sense of knowing appeared to be both a uniquely personal attribute and a collective one, as illustrated in these quotes respectively:

Certainly if I went to anyplace I would be able to say this is rural. Like, if you asked me ‘What do you think of that town?’ I would be able to say ‘Rural versus urban’. To me it means not a big city, it means population. To me I just think small town. Small town meaning not big highways, not large populations, not a big mall, not all the big box stores and things like that. (PT-MJ)

I would also [characterize rural as] people that consider themselves country folks. I think even the people that live in town consider themselves country people. (OT-A)

Participants described how the meaning of the term rural changed as they shifted geographically from one place to another within the province or country. Knowing what was rural was also relative to knowing what rural was not. Some participants made direct
comparisons to urban areas; others who had never lived or practiced anywhere other than a rural location had difficulty describing what was unique to rural practice because they did not have an urban experience as a reference. Regardless of the variability of participants’ experiences, there were a number of common characteristics of rural. In particular, these included a smaller population, some distance from an urban centre, fewer resources and decreased access to resources and services.

_I think rural is, like, lower population, less access to stuff, resources, people, things like that._(OT-C)

_I think of it [rural] as certainly being outside of a city, being outside of a sizeable town, relatively remote, not easy access to a place that is of significant size and probably, with chance, a small rehab staff, could be working solo._(PT-H)

Participants recognized many of these features as descriptive of the rural context, and more than just the place where OTs and PTs lived and practiced. The features of restricted access to services and resources and the geographical context shaped the health of the population and in turn, shaped rehabilitation practice.

Geography and access, in the broadest sense of both words, appeared to intersect frequently in the description of the rural context and influenced the health of residents and the practice of rehabilitation professionals. This next quote illustrates how the features of geography, such as seasonal employment as a resource dependent activity (i.e., the product of geography) and the isolated remote location of this area, contributed to the decrease in the patient’s ability to access rehabilitation services and limited service availability. The intersection of geography and access to services in this case resulted in this participant, a single rehabilitation service provider for a very large, isolated area and with a very large caseload, providing more extensive rehabilitation services in a compressed period of time. Access to services was restricted by geography and the types of services provided were restricted due to limited resources. Hence access and availability were inextricably linked.

_I think in the rural setting you’ve got a lot more people that are living closer to the poverty line where they haven’t got the luxury of a benefit package. They can’t stay home sick: if the clams are there, they’ve got to dig them; if the wood’s there, they’ve got to go cut it. If the work’s there, they have to take it because they don’t know how many weeks they’re going to be able to work this year and they don’t know when the next opportunity is going to show up. …they haven’t got the time to come in on a regular basis… you may or may not get too many kicks at the can; you’ve got to, sort of, cover as much ground as you can in as short amount of time as possible._(PT-M)
Knowing the rural context and learning about its influence on health appeared to be an important element of rural practice. While this may be important for all health care professionals regardless of location of practice, participants noted that knowing the rural context was particularly significant because resources were scarce and health and health care had a much larger definition that included community. There was a need for participants to account for the context of their practice as part of delivering effective services.

_I think it [rural practice] is about learning about a place, learning about the history to it and each person’s story. That’s a huge thing about rural._ (OT-P)

_Especially when you’re coming into a community that has a very different culture than maybe you grew up in. I didn’t realize how much geography and area of the same country really gives you a different cultural experience. And then coming into a place with a really strong history and foundation and culture and First Nations culture, how that’s just really important to be open to learning about the greater scheme of about what makes a place tick and people’s connection to land and what’s important to people._ (PT-MJ)

One of the ways in which a rural context influenced rehabilitation practice was in broadening the definition of health and what constituted practice, as depicted in this quote:

_The context becomes really huge and that sometimes somebody is just struggling with the other things that you don’t feel like maybe that’s much of what you learned at school to deal with...it opens your practice up to a bigger definition of health and about social determinants and about wellness._ (OT-P)

The broader definition of health appeared to refer to not just the health of an individual but also the community, with greater emphasis on a more holistic approach to wellness that extending into the cultural aspects of health and community. Participants made numerous references to a greater awareness of the effect that the determinants of health had on their patients. In particular, participants cited poor housing, lack of transportation, and low socio-economic status as significantly impacting their patients and in turn, the services that they provided.

_Yea, I think it is about a bigger definition. I do like to think about it as it is not about absence of disease, it is about being well. And all the things that that involves. So, healthy social structures, it feel like it becomes bigger, you got to talk to the housing, the social department and maybe that is also because of the structure in a First Nations’ community at the band council level. That they are huge life bloods of a community and community life bloods._ (OT-P)
So when we mean patient centred, we’re really talking about the social determinants on a really broad level. And so my job might entail with my team finding my client appropriate housing, right? So it really does come down to us all doing our share to make that happen. Sometimes it falls almost completely on me to do that. (PT-L)

This larger perspective of health required participants to reach outside their previous conceptualization of practice or what their professional training had prepared them for. In particular, the bigger definition of health and the broader context of delivering services.

Doing a lot of things that you maybe not necessarily thought you were going to do. I do think that it’s about supporting a community towards health and social determinants of health and supporting people to garden and do all that thing. But to go to elder’s lunches and just sit and have lunch with people and be there socially. (OT-P)

All participants noted that a large part of their practice was adapting their service provision to the context. This included treatment protocols, clinical practice guidelines, other evidence based approaches or health service delivery models. Participants appeared to be adept at noting how the rural context affected their practice.

The one thing that does ring true for rural is you can’t take a delivery, a health delivery model, for example, ortho patients that are only in four days and out they go. You cannot take that same model in an urban city, who has home support, has vendors, has flat roads, has good sidewalks, has transit, has Handidart, has all these services. (OT-M)

Given that many of the communities where participants practiced had a large First Nation’s population, participants noted the importance of understanding the cultural issues of the community as they related to providing health services. They acknowledged that this cultural awareness was important in urban areas as well as rural however as many rural communities continue to address issues related to residential schools there is need for a greater sensitivity of how to provide services appropriately. Participants recited many ways in which they saw this as part of understanding the context; learning the language, participating in local traditions and sensitivity to differences.

Certainly our community here is about 50% First Nations and many of the people my vintage have residential school experience. They have had a lot of trauma in terms of the whole family socialization, personal responsibility for health, personal responsibility for follow-up. I think being sensitive to the cultural difference. I’m embarrassed to say how long that took me to catch up with that. For me in my practice, the idea that many of the First Nations folks won’t say if something hurts. So I so overtreated so many people. But growing up in Vancouver, I mean I grew up right next to a First Nations reserve. But I didn’t go to high school with one of them. So that the
blended nature within a rural setting, it's, you just need to, you cannot, I think, practice effectively if you don't get a sense of what the social climate is for a large group of people that you're working with. (PT-R)

Participants in this study described disparities in health between rural and urban residents and made reference to the impact of decreased access and rural geography on health, health care and rehabilitation practice. They showed awareness of the difficulty their patients encountered in accessing services because they lived in a rural area and the resulting inequities.

It's just like, we're a rural area so that's just what happens. And that's kind of what you end up telling people is that, like, 'Well, because we're in a northern community and in a rural area, we have to wait longer for services', which is really hard especially for people with higher level issues because you feel like you're almost saying 'Well because you choose to live here, you have to wait longer than someone who lives in Vancouver or a bigger centre,' you know. So that's what I find, so far anyways, one of the most challenging things- the waiting and the lack of resources. (OT-J)

Thus, participant's understanding of rural was characterized by features of geography, restricted access to health care services and determinants of health. This complex web of features of the rural context shaped a broader definition of health and practice. This web of rurality forms the basis for the way in which the participants described the nature of their rehabilitation practice in rural areas. As illustrated in Figure 3.1, this rurality forms an overarching interpretive category that influences the way in which rural rehabilitation practice is enacted and the health care context that practice occurs in. The following three interpretive categories that evolved from the data analysis are presented in this schematic as overlapping concepts that together illustrate the ways in which participants enacted their practice. Rurality results in participants specializing in general practice, in stretching their role to meet the need of patients and participation and partnership as ways of providing service. The ways in which participants enact their practice are embedded within the larger context of primary health care.
A number of challenges were described by participants and appeared to be embedded and inherent throughout each interpretive category and the larger primary health care context. Education was most commonly identified as a significant challenge to practice and is depicted as a shaded category in the background of this diagram illustrating how the needs and challenges of education are spread throughout practice. Educational needs and challenges will be described in detail following the primary health care section. I will now describe the findings from each of the interpretive categories.

**General Practice as a Specialty**

All participants agreed that their practice was very general in nature. Their caseloads were extremely varied and covered all areas of practice. The practice context required participants to deliver services in multiple settings and to have a broad range of skills for rural practice.

*I think the biggest thing about rural practice, is that the day is likely to have a very broad mix of... clients, one minute you may be focusing on a something that is orthopaedic and the next ... cardio respiratory and the next... paediatric so there is no consistency in the particular clients that are going to come through your door so you have to be very adaptable ... you may also find that perhaps more so than in city practice, you are... working in different environments, ... you may well find yourself doing*
something in a hospital, ... in a school, ... in a sports facility, ... a work environment, ... in ergonomics, so all over the place physically and certainly I would say all over the place in terms of the specific skills that you require for different clients. (PT-H)

Many participants had previously worked in an urban area and were able to contrast rural practice with this experience to illustrate the breadth of their practice, noting that urban practitioners could choose a more focused area of practice.

I think in an urban setting my practice would be more focused on one area. Like I think I would be probably working in maybe like a stroke-rehab unit and I would just do stroke-rehab or I would do splinting. Like I think I would be more, yeah, streamlined in what I was doing. Whereas in rural I think in general you are just doing. You just come/take whatever comes at you and you have a little bit of all of those areas and I don’t think in urban settings you would get that variety of experience, and needing to know what to do in all these different situations. (OT-C)

Features of general practice included the complexity of the cases seen in rural areas, the limited access to other practitioners and the imperative of taking all the cases that needed services as they did not have the ability to refer patients to other practitioners as might be the practice in urban areas.

It’s general; we encounter many people with multi-[system] and mixed pathologies. And maybe even more so than in big cities and I am thinking especially in the First Nations communities. In an urban area, perhaps you have somebody else to refer to. (PT-S)

Maintaining a general practice was considered by many of the participants as a necessity to ensure the provision of equitable services. They felt that focusing in one area and narrowing their practice would be denying service to others in the community in need. This sense of responsibility for equitable provision of services was shared by many participants.

It would be very difficult to maintain a specialty in a rural practice because of the number of demands. Like you would be excluding somebody by doing that. I don’t get that luxury of choosing because my conscience pulls me in the direction of ‘Look, if you don’t see this person, they are not going to see anybody.’ (OT-M)

The need to be a complete generalist to meet the needs of the population was one of the features of rural practice that participants felt needed to be recognized by others (rehabilitation colleagues as well as other health care practitioners). Many participants made reference to defending their practice on a regular basis or providing explanations of their practice. The combination of general practice and working in a small community or a rural
area appeared to be less understood and often seen as inferior to those with a specialty or specific focus to their practice working in an urban area.

*I believe there is still quite a prejudice that if you work for a long time in a rural setting it’s because you couldn’t work anywhere else. Where I would like to believe that if you work well in a rural setting, it’s because you’re sharp not because you’re dull.* (PT-R)

Some participants remarked that areas of specialization often receive greater respect than general practice. A few participants noted the similarities between the nature of general practice of physicians and rehabilitation professionals and yet felt that rural medical practice was considered to be a specialty. Participants felt that the distinct nature and unique features of their practice required them to *specialize* and this needed greater recognition and that sometimes the label ‘specialty’ offered that.

*Having a specialty is also recognizing someone is specialized in that. Being a generalist is also a specialty.* (PT-S)

Participants did not label themselves as specialists. However they referred to the specialized nature of the skills, knowledge and behaviours that made up their practice. They wished for greater recognition from the public, rehabilitation professionals and other health care professionals working in both rural and urban settings of the unique features of rural practice that resulted in their practice being a specialty. Recognizing the importance of understanding the rural context is illustrated by this participant:

*I think that sometimes the lack of understanding of the fact that the person in the rural community may actually have a lot of experience, and will certainly know their client and will know the environment very well. And so I think there needs to be that mutual respect that the person [in the urban area] may have more specific knowledge in a specific area, but the person in the rural community will have better general understanding, may have better general understanding.* (PT-H)

Features that participants described as making general practice a specialty including understanding the rural context and adapting to that and the need to be a generalist to meet the needs of the populations given the limited resources and access to services in rural communities. Their caseloads were very large and very diverse, and they were responsible for providing services for a large geographical area. Participants noted that, to meet the demands of the rural context, practicing as a generalist required a broad range of skills and knowledge from all areas of practice and across the lifespan.
You get everything that comes through the door that’s referred for physiotherapy. And that can be everything from soup to nuts. From orthopedics to neuro, from complex orthopedics to simple neuro, to complex neuro to complex cardio-resp, to multi-level care issues, and everything in between. Pediatric to the aging population. (PT-J)

So it’s not that a single rural clinician has every area covered but that you’re probably more like the decathlete more than the sprinter. Like you have to have some skill sets in multiple disciplines. (PT-R)

Participants described needing particularly strong skills in the areas of physical assessment, clinical decision making and problem solving. Participants recognized that many of these skills that they felt were imperative to rural practice were also necessary in urban areas. However participants were frequently practicing in areas where there was limited access to health care and were treating patients who might not be seen by other practitioners on a regular basis. The limitation of health care services, availability of community resources, and number of health care practitioners made it critical that all primary care professionals had the skills necessary to identify serious pathology and detect red flags of medical conditions requiring referral to specialists. Participants perceived themselves as responsible for recognizing health concerns that might otherwise go undetected. Therefore, despite being a generalist, they felt they needed advanced skills in areas such as assessments and differential diagnosing.

I think we have to be better at front line diagnosing and assessing for instance. We certainly come across those things that had to be sent straight to hospital that couldn’t wait to go see the family physician, that were life threatening. I mean I guess it could just as easily happen in Vancouver as it could here or sometimes I think we’re a bit more out on our own here. I guess if you are working in the [remote community] and nobody is there, there’s no doctor around. If I miss the blood clot and there’s no doctor and the nurse doesn’t pick it up, well, I should have picked it up.(PT-MJ)

In addition to the more common physical assessments, they also felt that they should have assessment skills in areas such as mental health and be able to recognize signs of sexual abuse, suicide and narcotic addiction. It was felt that these health issues were more prevalent in poor rural communities and while they existed in urban areas, it was not likely that all practitioners in all urban areas would encounter them on a regular basis. Another reason that these skills are important in rural communities is due to patient privacy and confidentiality in smaller communities. Participants implied a sense of responsibility for monitoring the health of their patients and one participant noted that this responsibility extended to looking after colleagues who may not seek services, in particular mental health services, in light of the small medical community.
Because if you’re in northern rural practice it’s hard for yourself to go in and get help because somebody might just see you go in to drug and alcohol and see you go into Mental Health and know that you’re not there on work, you know. We need to pick up when our colleagues are starting to run into challenges. (PT-K)

The overarching sense of responsibility often contributed to a larger workload. Another skill deemed necessary by participants for practicing in rural areas was waitlist management. Participants described how the limited resources in rural areas, in particular health human resources, resulted in long waiting lists and the need to prioritize caseloads. Participants emphasized the extremely limited service options; in most circumstances, the only alternative for patients seeking care was to travel a long distance to an urban area at great expense.

So if you know that you’re going to meet some unique things in a rural setting, that perhaps you don’t see as commonly in an urban centre or the person in an urban centre may see a one-off every now and then and this is part of your practice, you need to be prepared for that. Or likewise, you might have one-offs in your rural practice. Who can you contact to support you in that so that the individual can stay supported in their home community. The infamous ‘closer to home’ should not be unless you live north of Hope.(PT-R)

Some participants felt that the long waitlists that resulted from limited availability of and access to rehabilitation services compounded the disparity between rural and urban areas. Many participants described the personal and professional strain that large caseloads and long waitlists placed on them as they regularly saw people who were on their waitlist in the community.

The biggest difference being in general practice is, it’s kind of, you’re shell-shocked because you’re being asked to prioritize. (OT-M)

I’m having to make pretty tough decisions on how to prioritize the case load, that is overwhelming, because there is no other therapist. …So, I would say, we’re looking at pretty close to two hundred people. And I only work two days a week in each place, so I have to prioritize and pick the very, most compromised people, and how do I measure compromise?(PT-M)

According to participants, practicing as a generalist also necessitated skills in self-reflection and reflective practice. Awareness of their skills and knowledge and regularly reflecting on their practice, their own strengths and weakness was acknowledged by many participants as a routine and fundamental aspect of their practice in rural areas. This was an essential feature of meeting the demands of rural practice and delivering best practice. While all health care practitioners are encouraged to be reflective, participants emphasized that
working in isolation combined with their wide scope of practice presented additional
drances to maintaining competency and standards of practice.

And, again if you really are out of your depth, if it’s obviously not something you
can cope with, being able to acknowledge that you can’t, and having to find, make the
effort to find out how you can access some of those resources from outside of the
community. (PT-H)

...what we need for continuing competency is those self-reflective skills where
you know where you need to learn because you’ve thought about it. And off you go and
find it or do it. So we need to set that self-learning, self-reflection skill in the way they
learn when they’re new or when they’re in their first year of practice. (PT-K)

Maintaining competency as a generalist in rural practice was one of the challenges
identified by participants of rural practice. The broad nature of general practice and the
inability to specialize by focusing in one area meant participants were continually grappling to
maintain the array of clinical skills and knowledge needed to serve the population.

I see that [competency] as becoming more burdensome as time goes on.
Because... as a practitioner I’m also not satisfied with mediocrity and mediocre care, ... I
feel more challenged because I feel that there’s certain areas that I would like to have
more experience and expertise in but the more broad my case load, the more difficult
that is to pin-point- and the more it’s impossible to be even an expert in everything. And
that becomes a personal challenge then too, is to try and define your practice when
perhaps your practice really isn’t definable because it’s so varied. And then,... you start
looking at: well, what are the needs within the community? And what are the population
needs within the area? And that just leads you to a whole host of things and there’s the
challenge. (PT-J)

Some participants indicated that the longer they spent in practice, the more difficult it
was to maintain competency and to reconcile this challenge. One of the features of rural
practice was the irregularity to which participants saw complex or rare cases and as a result,
some of skills and knowledge was not used very frequently and they needed to be aware of
their limits and set learning goals.

I’m just aware that I think my practice gets shallower as I go farther from school.
And so I need to be aware of that and set specific goals about learning again... building
up my skills again. Because your experience is here [indicating low down] and your
book learning is here [indicating high up]. Some point they meet, but then what do they
(OT-A)

Participants displayed an enormous variation in the degree of comfort they associated
with their competence. This did not seem to be associated with the length of time they were
in practice. Some participants expressed that the breadth of their practice challenged their confidence.

While in a rural setting, often in any given day you have such a plethora of things that come at you that it’s quite shocking how inadequate you can feel every day. (PT-R)

I think in an urban area I would be able to/ there’d be a lot more options for specializing like in certain areas if I wanted to. And this is definitely a more general type of practice that I do, I think. Which I like, and it sort of maintains a lot of my skills but I think it is also is a little bit harder to become really confident every aspect of it, I think. (PT-G)

Others felt it was the nature of rural practice and was something that rural practitioners had come to grips with and that this suited some people and not others. They expressed reaching a place of being comfortable admitting to patients and other health care professionals when they came across something they were unfamiliar with.

So I think that is part of the personality that you have to be ok to say ‘I am more than basically competent in these areas’. (PT-H)

I was kind of scared when I came here actually I didn’t feel prepared. I remember that feeling coming out of school and feeling like I wanted to go to a place for two to three years where I got my feet wet but I felt like I could answer to a certain area of scope of practice and feel competent and get that competence. Maybe you need a little bit of that before you feel okay not feeling competent. You know, not always knowing and knowing you’re going to get asked questions that it’s alright you don’t know the answer to. But maybe you can help find out. And there isn’t going to be that physio all the time but maybe that’s okay because you can call. Or you can look things up or you can just, you know, figure things out. I mean it is like being a family doctor of medicine. I’m not, but just being more a generalist and being okay with not being an expert in every area because you’re going to get a lot of things thrown at you. And it’s okay to go, ‘I don’t know. I’ll find out’ and accessing the resources of people that do know. (OT-P)

The challenges of maintain this breadth of skills and knowledge amidst limited resources and fewer colleagues meant they were forced to be resourceful and find the answers, as noted in the previous quote. They described taking initiative in order to learn new skills and stay current with their professional knowledge. They were also required to be self-directed, resourceful and to have good communication skills to network with colleagues or other professionals to find solutions.

In the north you have to be able to/ or anywhere in rural, I think / you have to be willing to put yourself out there and go ‘Well, I don’t know but I’ll try it’. And then you, you’ll learn it. (OT-A)
The notion of how to network, I think is very important. That because you read it on the web doesn’t make that a network. (PT-R)

Being resourceful and having the skills to seek solutions was critical. Participants saw part of their role as a generalist to seek the answers to things that they did not know. However this placed a lot of pressure and added work on participants.

If we don’t have that level of expertise I think it behoves us to try and help them [patients] find that answer. But it then adds to that, the challenge within our own case loads, because I can’t just say “oh, I’m going to send you to see my colleague, you know, two block down because she’s had experience with this thing”. It’s like, well, you can’t really afford a flight down to Vancouver to make that happen, so I’m going to call her, and I’m going to spend my time- my own personal time- trying to figure that out. (PT-J)

Participants in this study noted that general practice also required them to be flexible and to adapt their practice and treatment to the rural context. This challenged them to be creative, sometimes expressed as experimenting and to be humble when they came across something they were unfamiliar with.

It is the way I practice, because when you’re the only person doing it, you approach it differently than if you have five other people to talk things over with. And I think I’m a lot more resourceful than I would have been if I’d stayed in a big centre. I think I’m braver… I’m willing to experiment and to try different things more. (OT-A)

Participants felt that they needed good skills to find the latest evidence, practice protocol, or clinical practice guidelines across such a diversity of cases and yet the infrequency in which they saw some cases presented a huge challenge and required additional time and investment.

Choosing in what to invest is hard. And same thing for... reading articles, I would read everything but I don't have time! If I [had] a specialty, I could look at the table of contents of [the Journal of] Physical Therapy, and say ‘Okay that I don't read ...’ But, I look at the table of contents, everything is relevant to my practice because I see so many people with different things. (PT-S)

Participants reported using the internet and other technological resources on a very regular basis. They were grateful for the ease to which they could locate clinical practice guidelines, surgical protocols and patient information on the internet. Participants noted that much of the information they required needed to be just-in-time learning (i.e., information that they would use right away) as they might not be required to use it again for a significant period of time, after which the information may have changed.
I think / because in rural practice… because you’re such a generalist and you have to / you want to try and keep up to date with so many different areas. For example, when I get an amputee patient, I get them rarely, say I might get them once a year. But, by the time I get the next amputee patient the technology has gone through several steps already, and so the prosthesis has undergone revolutions. Every time you get the patient you basically have to keep up, right? And, so it comes to a point where, for example, with amputees I don’t even try to keep up in between patients, I’ll just wait for the next patient and then update myself. (PT-K)

This was a significant advantage of the internet. Participants noted that advances in technology greatly assisted them in accessing the evidence. They also took advantage of podcasts, teleconferences and videoconferences for their continuing professional development (CPD) whenever possible. However technology was not seen as a single solution to the challenges of accessing CPD.

Yeah, … but it’s the clinical skills part … I can listen to a lecture, I can look at things on the teleconference, I can see the pretty slides but … we are a hands-on profession, … just to be able to share ideas with… [others]. You know, you can listen to all the research in the world but to take that and put it in your practice. (PT- J)

Participants also felt that they needed good evidence appraisal skills as they relied on their own information searching and synthesis. Again this was seen as more critical in rural practice because of isolation and preponderance towards sole charge practice.

I think it’s very important if you’re in a rural situation that you get out and touch base at regular intervals with what’s happening in the mainstream…. I think is very important and really, really important if you’re in rural practice. Because I think it could be easy to fall out of step and I think it’s important to reinforce that you’re not off on some road way less travelled… And there’s lots of ways to stay connected now, I think. (PT-R)

The challenge of maintaining current knowledge and best practice in rural areas also required participants to depend on their relationships with colleagues and other health care professionals, both in their own community, as well those in urban areas. They discussed building and fostering these relationships at conferences and through regular phone connection and keeping in contact with instructors or specialists from whom they had received referrals. All participants stated that they frequently turned to professional colleagues in urban areas who specialized in certain areas.

I would suggest that I rely on some of my non-rural colleagues with expertise in certain areas, to provide me with information when I really get stuck on a case. And so as a rural practitioner you then have to foster those connections in order to make that happen. (PT-J)
But if you’re in a rural place, your strive for excellence requires a skill set and a willingness to put yourself out there and to share and to be willing to learn from the resourceful people that you work with. And it’s not about the lowest common denominator but it’s percolating to see who the doc is that knows about this, who the nurse is who knows about that, what care aid has the experience in this. (PT-R)

All participants noted that one of the benefits of working in rural areas was the collegiality with other health care professionals. Participants who had previously worked in urban areas noted that rural communities were more conducive to collegiality between professionals than urban areas. This was due to the proximity in which health care professionals worked as well as their dependency on each other. This offered participants the opportunity to communicate more frequently with their colleagues. However it also resulted in difficulties such as avoiding treating colleagues as patients.

I have personal relationships with the doctors where you don’t generally in the big, in the big centres. They were just a name on a page and maybe some guy in a black shirt sitting there. There was no relationship with the doctors whereas here I know all of them personally and some of them are close family friends. So, it makes a huge difference. So that affects the way I practice, definitely. (OT-A)

Collegiality was referred to more often for the benefits it had for health care professionals than the benefits for patients. This quote illustrates how health care professionals relied on each other to complement their skills and knowledge and for professional development.

It was a very collegial group who I think, really it was very isolated and so I think people realized how much they relied on each other and each other’s skills and knowledge and just being a part of that team. (PT-H)

One participant, who was working in a community that did not have any rehabilitation services for a period of time before she arrived, commented on the flood of referrals she received from physicians when she started practice. This demonstrates how health care professionals working in isolated areas with limited resources rely on their colleagues not only for their expertise but also to share their caseloads.

I think as far as the docs are concerned, you know, they’re just really happy to be able to pass some of these people off to someone else. (PT-M)

While participants noted their dependency on other health care professionals, participants were not always fortunate enough to have a complement of other health care
professionals in their community in order to make a team. This resulted in them developing different ways to deliver services to meet the needs of their patients.

**Stretching Roles for Client Centred Care**

Participants described how the lack of resources and services of rural practice required them to stretch their role and work to their full scope of practice. In this context, scope of practice refers to the tasks and services legally offered by a profession to the public. (102) Scope of practice includes reserved acts but is not exclusive to them and may include areas that overlap with the scope of another profession. The scope of practice of an individual physical therapist and occupational therapist may be more specific than that of the profession as it will depend upon education and competence to perform. (53) Through using the broad range of skills in their scope and stretching their role beyond what might be normally expected of them, participants felt that they could offer effective services and avoided denying services to patients in need.

"I have to really be careful of my scope so that I’m always battling that fine line of not overstepping and going beyond my scope but also not saying, ‘Oh no, not me.’ Like, that’s not my responsibility because I don’t think that’s effective therapy if just every time you come against something you wouldn’t be asked to do in a larger city, you say, ‘Oh sorry, not OT practice. You’ve got to find someone else.’ So you have a wider range of skills that you need if you choose to do that." (OT-M)

Stretching of roles permitted participants to work to their full scope of practice and meet their patients’ needs. It also reflected a means to address the gaps in care that exist in many rural communities. In particular, this occurred in communities where there was only one profession (either OT or PT) and to seek services of the other profession, patients would be required to travel long distances. *There may not be the opportunity for services for a client within a 250km radius,* (PT-H) and patients would have to arrange their own transportation which is often very challenging.

"So as much as you will never sell yourself as a physio or say you got all that background, you can’t ignore that’s something that maybe that patient needs ... how do you kind of also support that to happen and stretch your role a little bit to do all those things you never thought." (OT-P)

Participants were cautious in describing how they stretched their role, yet they appeared to be cognizant of the boundaries of their scope of practice.
Although the role is primarily, obviously PT, I think that I had to sort of adapt and, if you will, play at being other things, whether it was play at being somewhat OT focused or social work focused, counsellor focused. And not trying to sort of suggest that I was any of those things, but that ... with some experience you know how far you can go into those roles without stepping outside your own comfort zone or stepping inappropriately into one of those roles beyond your scope, beyond your experience. (PT-H)

Scope of practice issues were much more difficult for new graduates to grapple with. They sought the experience and advice of more advanced practitioners and learnt skills to draw boundaries around their practice and recognize their own competence.

I guess in addition to that not having all the disciplines. So like we’ll get a lot of referrals for what I would say are physio issues. Well do I try to figure out this problem even though I’m not a physio and it’s not my area of expertise and maybe shouldn’t be. (OT-J)

Some participants commented on the pressure that they felt from patients as well as from other health care professionals in providing such a broad scope of services to the population regardless of their comfort level with their skills in that field.

I don’t have the expertise to offer that service, that I feel is competent. So I’ve actually had to learn to say no to some of the requests that I get. (OT-M)

Another example of the way in which participants stretched their roles was noted by sole charge participants, both OT and PT, who referred to providing services that overlapped the scope of practice of the other rehabilitation profession. Participants did not express concern over this or guard their professional territory. They appeared to respect each other and were content to work out the overlap in the best interest of the patient.

There is no physio here. So as much as you will never sell yourself as a physio or say you got all that background, you can’t ignore that’s something that maybe that patient needs a little bit. Well I maybe don’t know how to help somebody with stairs but maybe I’m going to find out. Because I’m the one at the house right now and there isn’t going to be a physio and it costs money to go to physio and transportation and all those things.(OT-P)

Three participants were combined trained therapists\textsuperscript{1} practicing as physical therapists. One of these participants, who was working as a sole charge therapist, noted that her combined training as an OT was very useful in the absence of an OT in her community.

\textsuperscript{1} Prior to 1982, graduates of UBC School of Rehabilitation Sciences graduated with a combined degree in occupational therapy and physical therapy. Licensure was required from the professional regulatory college to practice in that profession. All combined trained therapists in this research study retained licences as physical therapists.
She felt this background assisted her to think more broadly about function and that it allowed her “to know what questions to ask”. (PT-M).

While participants recognized the need for and the value and importance of a team-based approach to care, they also identified a number of barriers to providing team-based care such as a shortage of health care providers, the size of caseloads, limited capacity due to time constraints, and health care systems that do not support a collaborative approach. Again, participants referred to stretching their role as a means to overcome these limitations. In particular, all participants noted that social issues had a significant impact on their patients and that there was a dearth of social support services available, including a shortage of social workers. As a result, participants often provided social support to their patients as they felt that this was a crucial aspect of patient care.

…if they had access to speech. I don’t have that skill. If I had a person to resource to. Social workers – very hard to come by. We live in the North. There’s a lot of social issues and there’s no one person to go to. And again that’s missing another person off that team approach that we have in larger areas. I need to, I do need to be a social worker of sorts if I want to be as effective as I can be because nobody else on the team is going to pick it up… (OT-M)

But in this place that I work now there’s not somebody that you necessarily send someone to, a social worker. It’s realizing that sometimes it means that you help that person figure that out or support them. You become the social worker, in that ‘try your best’. (OT-P)

One participant noted that addressing social and cultural issues took precedence in the community as compared to physical rehabilitation. However, the lack of social support services had implications for their practice. Participants implied that they were not adequately equipped to deal with these issues.

Seems to be that [First Nation’s community] is not as far along in their healing after the residential schools. And there’s a lot more alcohol and violence and that kind of thing. So I think they need a lot more sort of social support; that seems to be a higher priority for them than the physical problems I think. (PT-M)

Despite the challenges, participants noted that the autonomy of rural practice, the breadth of their practice and the ways in which they stretch their roles were a significant reward of rural practice.

I think that my career has been as varied and as rewarding because I’ve had to stretch. I’ve had to stretch. I’ve had to respond out of my comfort zone. I’ve had to be challenged. (PT-R)
Many participants described policies and procedures that limited their autonomy and impacted their ability to practice to their full scope. Participants expressed frustration as to the implications this had on patients and on the health care system. In particular, participants who were physical therapists in the public system noted the inefficiency of the hospital regulation that required patients to have a physician’s referral prior to receiving physiotherapy. They emphasized that their expertise in musculoskeletal assessment could assist in streamlining and reducing the physicians’ workload by eliminating the additional step of patients having to seek a referral to rehabilitation services. However one barrier to this was the poor understanding internationally trained physicians had of the role and scope of practice of rehabilitation professionals.

“Well I remember going to one meeting when we were a pilot project for some sort of primary healthcare initiative. And there was a physician there and he’s foreign trained and, you know, he was complaining about the workload that doctors face and the number of people that they have to see and stuff. And but then a simple situation came up where we talked about someone with an ankle sprain and how they could come right to physio without having to go to the doctor first. And then it was, like, ‘But no, no, we have to see that person in order to know what’s happening.’ So, you know, in one sense they’re too busy and in one sense they don’t want to give up that, that role as well.” (PT-A)

Enlarging the scope of physiotherapy practice to ordering x-rays and prescribing anti-inflammatory medications was another area in which participants signalled necessary changes to improve the efficiencies of an under-resourced system. PT participants noted that they wished to refer their patients directly to an orthopaedic surgeon. Participants from one community noted that their close partnership with the orthopaedic surgeon was considered to be an efficient way in which to manage and solve lengthy waitlists. It was suggested that this partnership could serve as a possible mechanism to improve health outcomes through expedited assessment and treatment.

“I mean, I don’t think that our scope would have to expand tremendously but I think just a few basics. Because often times, we are suggesting that someone have an x-ray, say, and then it just seems to be a waste of resources to have to refer back to the doctor. (PT-A)

“I really find, well I get frustrated, when I have to call the doctor to ask for an x-ray. And I get frustrated when I have to call the doctor to ask for anti-inflammatory. And I would feel very comfortable to see a patient coming for the first visit without referral and… to assess any type of pain because I feel we have the knowledge to, not discriminate, but to eliminate what is not related to our practice. And I can also tell… ‘This is not musculoskeletal, it’s not coming from your neuro or musculoskeletal, go see
your doctor’. We can do it, we are / we have the knowledge to know that it’s a problem that requires probably a surgery or more advanced examination or investigation. And we also can recognize if we can treat the patient. So primary health care in orthopaedics, for me is, that’s the way I would see it. (PT-S)

Rehabilitation Practice as Participation and Partnerships

The professional practice of the OTs and PTs who participated in this study appeared to be shaped by the rural context and resulted in rehabilitation practice being characterized by participation in the health of individuals and in the community and a greater emphasis on relationships with individuals and with the community. Participation in an individual’s health required the combination of understanding the context of an individual within their community and the tacit knowledge of rural rehabilitation practice. Tacit knowledge is defined as a personal understanding, often synonymous with intuition and contrasted against explicit knowledge. It is usually acquired through practical experience and socialization. (103) The following quote explicitly demonstrates the sense of knowing the individual context that participants in rural communities exhibited:

I suppose the aspect of rural practice that does makes it different is that it is likely that you know the bigger picture of the person’s life style and life and environment so there may be the sense more of being able to know at the beginning what this big picture is going to look like. ...sense of knowing where you are starting and knowing where you are heading, what your goal is because the chances are that you will see them through the whole process, ... you will see them again, so what you do, will come back at you one way or the other. It would give you a sense of participation, more participation possibly in that person’s life... (PT-H)

Participants provided a number of examples of the way in which they participated in health issues at the community level. Three participants, from different communities, made reference to lending their expertise to the development of a community recreation facility such as a swimming pool. Community recreation facilities were recognized as not only providing a place for their patients to exercise and for the wellbeing of the community but also served as a recruitment incentive when attracting health care professionals to the area.

...that it [practice] gets out and beyond about: well, you want to see this change happen even if it’s, like, trying to get a recreation site or trying to get a new rink here. I think it [practice] is about community structures like, ‘is there a pool we can go to?’ It is also about what, how can people access things to be well and healthy? (OT-P)

Knowing individuals, the community and the context of practice led to enacting practice through participation, and building relationships and partnerships with individuals.
and communities. Together these features offered an opportunity to enhance health outcomes. This quote provides an example of how a participant took advantage of these features of rural practice which in turn made it easier to provide seamless care and preventative services:

_in lots of situations where you’re not necessarily going to make huge functional goals but at least you’ve made a connection with somebody so that they know who to come to if they’re having trouble. It’s way more about relationship here than it was in a big centre. So it’s kind of one of those things where then if you, the person needs a walker in ten years or five years they’ve already met me. I’m not here as the big heavy going ‘You need a walker’, you know? (OT-A)_

Participants frequently looked at the positive aspects of the challenges in delivering services in rural areas. One of the advantages of the small rural context and limited resources was that it facilitated therapeutic relationships with patients that spanned the continuum care.

_I take care [of] all areas in the community. There is a continuity of care for the person. Follow up is really good as compared to [the big city]. Back there, they have to do lots of referrals. ‘Okay, I am done with this client. It’s your turn.’ You can arrange to see the person at home or arrange to, yeah, do an out-patient basis or sometimes I even request a client to go to the acute care for admission (OT-B)_

Participants discussed the nuances of providing services in a smaller community. The physical size of rural communities appeared to foster the development of both professional/therapeutic relationships and personal relationships with other health professionals. Participants indicated that this, in turn, assisted their practice. On the one hand it facilitated close relationships with other health care providers which may benefit patients but it also offered advantages to the participants, either through advancing their skills or their practice.

_We’ve become personal friends with a lot of the physicians. So our referral circuit is really tight and close knit. They know us well and they respect us and vice versa. And you may not get that so much in a big centre. We all know each other and I see them at the grocery store and that’s, I think, a good thing. We have this really unique advantage to develop and expand our career really because we can see people acutely and develop different system where we have time to do that. And in the way that we can expand our skills in a way that we might not have done otherwise. For instance, I’ve had many cases where I’ll make a clinical decision and have an opinion and forward it to [the physician]. (PT-MJ)
On the other hand, the small rural context and close personal and therapeutic relationships often resulted in additional strain on participants.

*The disadvantage is that when you see someone in the grocery store and they’re crying they’re in so much pain they can’t see, there is that feeling perhaps of pressure. I should really help that person because I know them. They’re my son’s baseball coach and that puts an added and unique pressure on your practice and yourself to perform and, oh, the volume. That can be tough. It can be tough to manage and balance that.* (PT-MJ)

Sometimes small communities and close relationships were both positive and negative at the same time. This participant felt it allowed her to observe her patients in many contexts and evaluate her practice based on the honesty of a small community feedback loop. As patients do not have the luxury of choice regarding where and from whom they receive their service, participants noted that they must uphold a high standard as word travels quickly in a small town.

...one of the huge joys of rural practice for me is that I have the opportunity to observe many of my clientele in different settings. And so if I’ve messed up, it’s not a secret. (PT-R)

Many participants used the example of discharging patients to illustrate the rural context. Specifically participants discussed how participation in people’s health and building relationships resulted in not discharging patients from a rural practice.

So I think a big thing about rural practice is that you don’t often discharge people. It is not about one time in and out. There’s people that I have worked with for almost the whole [time] I’ve been here. (OT-P)

...because they are not actually going to disappear off the radar when they finish seeing you, you are going to see them in the grocery store, you are going to see them downtown, and... there is certainly not a sense of ‘They are finished with you, they are gone’, because they are not. (PT-H)

On the other hand, the geographical context and access to services contributed to the complexity of providing services in rural areas and participants described the necessity of building relationships as instrumental in discharging a patient. Participants described adapting their practice to overcome geography and access issues by providing home programs and offering consultation services over the telephone as exemplified in this quote:

*Often you are forced to … discharge patients or cut… hands on therapy short because they are going back …700km up north and his nearest access to therapy is*
700km. It is a big undertaking for them to come for therapy... If this person is not coming back, cannot afford to come back [I will] say well 'If you run into trouble, give me a telephone call'. (PT-K)

Regardless of profession and workplace setting, participants in this study described how practice extended beyond the individual and reached into the community. Some participants described how parts of their practice related to population health issues and building capacity for health in the community. This is an example of how a participant adapted her practice to the rural context of this specific community in an effort to improve health beyond the individual. This approach was often seen as an appropriate means of delivering services.

You are part of a community and it’s about supporting a community towards health and social determinants of health and supporting people to garden and do all [those things]. So there are times where it’s, like, well ‘Can I help you write that letter to the Band Office?’ or ‘How about we sit here and you say your ideas and I’ll write them down.’ All those things of trying to get community things happening for the family, like preserving of salmon and doing the smokehouse. So if it’s supporting them to kind of be able to feel like they have that capacity to be fulfilling those huge roles that they play in the community. Then that’s going a lot of ways towards managing their chronic disease. (OT-P)

Some participants noted that, compared to urban practice, a greater portion of their practice was devoted to advocating for their clients. As noted in the previous quote, the emphasis on advocacy was likely due in part due to the specific population and the specific context of rural practice: the lack of resources and the decreased access to services.

I do a lot of advocacy for clients and I think I’m convinced that I do that a lot more in rural practice than I would and did do in urban practice. Rural people have, like, this ‘do without’ attitude. So they don’t realize that they’re entitled to maybe some new knees! So why isn’t anybody advocating at an earlier stage to have a knee replacement to create or maintain functionality? So they are very stoic. A lot of times people who have lived with and are born and raised in a little more, well I guess, ‘do without’ is a good way to describe it. You kind of ‘just make do’ with the environment and ‘make do with what you have’ and you ‘make do with what you’re dealing with’. (PT-L)

Participants described the importance of creating and developing partnerships with other health care professionals and with community partners to enhance client centred care in rural areas. Sometimes the proximity to other health care professionals or the small size of the community made this easier and resulted in more comprehensive care according to the participants.
We work really well together down this hall. It definitely helps. Yeah, you zip down there and a long term care assessor is there too. You can just zip down and talk to them pretty much anytime or vice versa we refer to each other all the time and wound care is a big one. Just transferring and all the stuff we need to do for home support to be able to help them safely in the bath, for example, or whatever. Yeah, they refer to us a lot. (OT-A)

Participants recognized the need for ‘innovative’ ways in which to deliver services to cater to the rural context and overcome some of the challenges. Participants emphasized partnering with community and taking services to the community as a means to respond to that context. Participants felt that providing education in the community and community based interventions were more effective for addressing chronic disease and population health services than one-on-one rehab. This next quote also speaks to accounting for the specific rural context of service provision and knowledge translation. Specifically, this participant refers to the oral cultural tradition of many rural communities in northern BC and considering this as the most appropriate form of education.

... if we’re looking at an elderly population with a lot of issues, like chronic issues, you need to eliminate the barriers ... you go to them or you find the natural gathering spots or you eliminate the transportation barrier which is huge in a small town or even in a big town... So it’s that kind of innovation... How are they used to learning?... there’s an oral tradition. ... we’ve got to make that partnership between what’s happening in the community, like, so cultural events or wherever people go for coffee... Like Tim Horton’s. And ultimately if we really measure them, they’re going to cost less and they’re going to be more effective. (OT-M)

Fostering partnerships between public and private practice and with community partners to overcome limited resources and harness the strengths and expertise of others was recommended as a strategy to overcome challenges such as a lack of resources.

And even though we may add some benefit to that, there’s this absolute separation between public and private practice. It’s a cavernous gap. (PT-J)

Private practitioners participating in this study felt that they were potentially in a better position to address some of the upstream health promotion and prevention aspects of rehabilitation as they had a greater capacity to be responsive to changes in the system. They noted that they offered the efficiency of a business model:

If we save one, you know, person on long term disability, now you have to look at the cost effectiveness, but I think again, if you run things on a private practice model you can intervene pretty efficiently pretty quickly to prevent stuff from making/getting worse to the point that oh now they’re a surgical candidate, now you know, and now or if they
are a surgical candidate can we get them into that surgery way healthier than they ever would have been. Can we get them into that surgery 30 pounds lighter than they would have been? And again if you look at that model of ‘if you can save one LTD in a place like [local employer] you save 1.5 million dollars’. So what we don’t have the stat for is ‘if I save one person from not being able to contribute to their community in their retirement, or to be able to look after their family, or to be able to...’ you know, whatever. (PT-J)

These partnerships with individuals and community to address issues upstream fell into the context of primary health care and to make this happen, there was a need for alternate funding models around primary health care.

**Primary Health Care**

To consider rural rehabilitation practice within the larger health care system, participants were asked what they understood primary health care (PHC) to be and the ways in which they were involved in this health care approach. While some participants were not able to provide a coherent definition of PHC, a number of them had a good grasp of the concept, stating:

*I know what I want it to look like. I want it to look like prevention instead of treatment.* (OT-A)

*Primary health care includes... well, currently primary health care is dealing with issues as they come up, downstream from the causes. That’s what, in my mind, that’s what primary healthcare is currently. What should primary health care look like? Primary health care should spend WAY more time, including us, on dealing with those upstream issues that are leading to the downstream consequences. And we, as physios, I see it every single day, have an enormous role to play there. We have an enormous role to play in prevention, exercise/ and exercise within a population that is aging very quickly but wants to be active.* (PT-J)

Participants in this research study frequently confused or interchanged the terms PHC and primary care. They did however agree that PHC encompassed more prevention and health promotion activities, inclusion of more health care professionals and more emphasis on populations such as the frail elderly and those with chronic diseases. All participants felt that rehabilitation services were integral to PHC and, whether they were practicing officially within it or not, saw a role for themselves in PHC. Currently only three communities in the Northern Health Authority have instituted formal primary health care initiatives. (104) Interviews were conducted in two of the three communities and yet only one participant referred to a primary health care initiative that involved rehabilitation providers.
Participants identified a large number of upstream issues throughout their descriptions of rural practice and health. Predominantly these upstream issues included the social determinants of health that result in poor health outcomes, however participants also referred to issues such as poor physical conditioning due to lack of physical activity, pre-diabetes or musculoskeletal issues as health issues that should be addressed by rehabilitation practices within primary health care in rural areas. Participants saw their role as addressing these health issues before they became health care concerns that cost the system and society.

Let’s see - what are the key things to general health? Let’s see mental health, hmm exercise, um depression- exercise, um weight control – exercise, diabetes control- exercise, obesity control- exercise, childhood obesity- exercise… And what do we do? And better than any other practitioner, we know how to look at a person and say ‘Ok, you’re good, you go to the gym.’ ‘You’re great, you go you join that group.’ ‘You’ve got some issues and I see you have some concerns over here that need to be addressed before you [go].’ How can we do that because those are the people that are just on the fence and just on the line of either not costing as much to society or costing us a huge amount. It’s that line that we wanna walk.’ (PT-J)

One participant provided an example of a PHC initiative aimed at providing services to seniors that involved an occupational therapist. The participant noted the practicality of this PHC and how it aligned with the focus of rehabilitation practice in rural communities.

It just totally makes so much more sense to me to catch the caregivers, ... they’re not even on our radar, like the next thing you know, they are going to have a fall and we won’t even have done any prevention for them. (OT-A)

A number of participants referred to barriers in the system that restricted their ability to fully engage in primary health care. These included a lack of health care providers necessary to make a team, and communication between health professionals- which worked very well when providers were all located in the same small hospital but large geography and dispersed services as well as different professions and professional cultures compounded the communication struggle.

So the majority of time we do; do a primary health care model of service. And then every once in awhile like last week we’ll get a personality difference or a communication thing or something like that and you can see people just cuddling into their own little desk. You know, again because it’s not, it’s not an easy thing to implement unless you’ve got really clear communication. (PT-K)
Participants in the private system expressed frustration with the lack of a level playing field between professional groups as well as between private and public practitioners. This was an issue for private practitioners when working on primary health care initiatives with public employees who were compensated for their time. It was also mentioned in terms of fee for service between professions.

I see it through the hospital that they’ve had, you know, primary health care initiatives and everything. And, you know, things have been tried, but it seems like things are tried and things are discarded. You know, they had group sessions in the doctor’s office, but it was still, it was doctor led. It was, the doctor was getting paid for every single person who was in that room. (PT-A)

Partnerships were differentiated from collaborative practice and there was a wide spectrum of responses as to whether the practice of participants was collaborative. In some cases it appeared that traditional practice and disciplinary silos prevail in health care in rural areas.

When I think of some things I’ve done with the OT it has been sort of, you know, ‘I’ll focus on this area and then you can focus on this area’ or, you know ‘Why don’t you work on this portion first and, you know, get the arm, you know, limbered up’ for instance and then the OT will work on the hand kind of thing afterwards. So sometimes it is / it has been very collaborative but… yeah mostly it’s / I think mostly it’s just / it’s advice. (PT-G)

I find it very difficult to work as part of a team. We tend to be isolated in our department. I also don’t think our medical staff is that conducive to being part of a team either? You know you need them to be on board. It’s just not collaborative. I think the majority of it will be training the doctors, really. I think everyone else is pretty comfortable in terms of collaborating with each other. I know that the medical school at UBC promote that a little more. But you know, we don’t just have the Canadian trained doctors. (PT-A)

While interprofessional practice was referred to on a number of occasions, it was predominantly raised as a strategy born out of scarcity of resources and occasionally professional support. It was very rarely discussed in the context of central to the provision of client centred primary health care. This participant provided an example of the exception.

Very complicated discharges too… And, yeah, without a discharge planner and a First Nations liaisons worker it’s like / it almost becomes insurmountable. (PT-K)

An exception to this would be a group medical visit organized around a visiting rheumatologist. This interprofessional collaborative approach involved an occupational therapist, physical therapist and pharmacist. It was designed to continue even when the
rheumatologist was present and reduced the duplication of assessments and facilitated greater patient learning. It was suggested that this was an efficient model that should be expanded to other areas.

Many participants endorsed their role in health promotion and prevention and taking a team approach to health care provision, however some participants expressed frustration with the lack of infrastructure to practice in this team based approach. They bemoaned the investment in time and cost in planning for primary health care and saw little reason to make an effort to develop collaborative skills when the infrastructure to implement primary health care programs at the community and health care systems level was absent. A number of these issues are raised in this quote:

But I have to say I’m not happy with much of the professional development with other non-physio related, non-/ the fluffy stuff. Like to have an interdisciplinary conference about ‘falls prevention’- for me as a clinician, for what I need to do, and what I need to implement at my clinic and at my level- that for me isn’t education. And that doesn’t further ... my professional development. ... I don’t necessarily need to work within a multidisciplinary team on that assessment because currently there’s nothing like that developed around here. And I see that as one of the biggest wastes because, now if there were multi-disciplinary teams set up within this region that had expertise identified in various fields, I would bring my contribution, somebody else would bring theirs and we would have a whole team approach. And then I would be able to say, ok in order to better serve this team I need to do this particular course- I’m going to run off and do that because I’m interested in contributing to this team in a way that I think, and the team thinks, would be beneficial. But, I’m not interested in just sharing ideas. In the sense that there is nothing in place, there is no movement in that direction, and I’m just one practitioner. I can’t change the whole thing. I think it’s ... a whole public health issue that needs to be addressed at the provincial, if not national level. (PT-J)

Many of the OT participants in this study noted that one of the barriers to their involvement in primary health care and integration into team based service provision was the limited understanding by other health care professionals as to what OTs do.

…actually that’s one of the things too about a rural area is that OT’s were slower to go into those areas I think. So um, I have a hard time really knowing if people know what I do, because I’ve even recently met one of the doctors [who] just said “yeah, I don’t really know what an OT does”, and I was kind of like “Okay!”. (OT-J)

This lack of understanding of the professional role of OTs and poor recognition of rehabilitation practice in general were significant challenges noted by participants. Greater recognition of rehabilitation practice, and its unique features and challenges was requested by all participants.
The following section describes the challenges associated with rural rehabilitation practice. Specifically, it describes education as the most significant challenge identified by participants. This does not form a separate interpretive category as it is embedded and inherent within each of the interpretive categories described to date and therefore, is denoted by a shaded balloon in the background of Figure 3.1.

**Participant’s Reflections on Educational Needs and Challenges**

A number of challenges to rural practice were noted by participants. There was unanimous recognition by participants of the increasing demands for rehabilitation services and the shortage of OTs and PTs.

*So to start dealing with these upstream issues you then have to deal with the upstream, upstream issues of having enough people to deliver those programs. You can’t do anything consistently when there’s a person shortage.* (PT-J)

*I don’t know if these assessments would ever come up if I wasn’t here. So it could be easy for a health authority or for a manager to think, ‘Well this area has done without so therefore they don’t need’.* (OT-P)

Health human resource shortages resulted in significant strain on participants and they suggested that it did not allow them to practice to their full potential or in way they considered would be optimal for delivering best practice.

*If we had more therapists, our waitlist wouldn’t be so huge, and then you’d feel you had more time to be able to, you know, do some of those extra things in your practice. If you didn’t feel the pressure of, oh I need to fit another patient here because I can’t use that hour of time to do a lit search on, you know, whatever because there’s 80 people waiting on this list, right? And I can’t just sit here and do this while these people wait, right?* (PT-A)

Participants in a managerial role talked about being very creative with budgets and with positions so that services for patients could be maximized. A few participants made reference to communities recognizing the need for rehabilitation services but a lack of resources and support at multiple levels for rehabilitation practitioners.

*There must be some support for them to come to some of these smaller practices. Like [small town], they haven’t had a physio now again for awhile. And there’s a huge hole, you know. And it’s a halftime job. Well it doesn’t work. So we’ve got to get creative about these jobs. Like, so how did we get an OT here? Well because I gave part of my physio budget to get a full time OT position. Because you can’t get a part-time OT to a small community.* (PT-K)
Participants made a link between health human resources and practice education placements in rural areas. Participants that exposure to the challenges and rewards of practice would improve recruitment and retention in rural areas.

I’d like us to have everybody understand what rural practice is so that the more students that got into rural had to do some rural practice, the better.(PT-K)

When asked about the particular education requirements or preparation needed for practice, participants noted that much of their knowledge was gained experientially after they had graduated from their professional training. For the most part, the skills that participants felt were necessary for rural were acquired through experience and, consequently, rural practice was understood to be challenging for new graduates.

I was kind of scared when I came here actually I didn’t feel prepared. I remember that feeling coming out of school and feeling like I wanted to go to a place for two to three years where I got my feet wet but I felt like I could answer to a certain area of scope of practice and feel competent and get that competence. Maybe you need a little bit of that before you feel okay not feeling competent. You know, not always knowing and knowing you’re going to get asked questions that it’s alright you don’t know the answer to.(OT-P)

I think I felt just as competent as everyone else in my class. You know, you don’t learn much when you are in school. You learn everything on the job. We all felt that same level of trepidation coming into any sort of practice.(PT-A)

This speaks to the importance that participants placed on experiential learning and practice education. Many participants described that years in rural practice had resulted in developing a practice style that was reflective of the context in which they practiced.

An educational framework for someone working in a rural setting is ‘jump in the deep end’. But that is my educational framework. It’s [x] years of experience.(PT-E)

Experienced participants who had worked elsewhere prior to rural practice admitted that they did not feel that they would have been prepared for rural practice directly out of school. Participants offered a number of different suggestions when they were asked what they felt was the best way to prepare participants for rural practice. Given that rural practice required participants to be generalists, participants felt that the broadest possible education was critical.

So in that sense, I believe that if you’re planning on a rural practice, if you train for rural practice, it would prepare you for everything else in life. But if you train to work
cardiac care in an ICU, you’d be really hard-pressed to go the other way. But I think the skills that you would garner to be an effective rural clinician; you could take those skills sets and apply should you choose to specialize in a narrower field. But I think it’s really hard to go from narrow and then expand it. (PT-R)

Participants noted that there were some aspects of practice that should be included in the education of students for rural practice. These included ethical issues that are frequently faced in rural practice, the advanced skills in assessment referred to earlier and health service delivery models that are conducive to the rural context and current health care system.

We probably need some stuff on the ethical dilemmas of what happens in small towns and you know everybody and stuff. And ethical decision making needs to be strong in the northern rural practice that way. We also need some work… Well if we’re going to go to primary health care and we’re going to do the model different, we also need some work on understanding [PHC].(PT-K)

One participant described the challenges associated with running a community based program designed to educate people with chronic disease about self management and health interventions. This example illustrates the lack of resources available, in particular the social support and health human resources needed to address these issues and the inadequacy of the education preparation and professional training for the individual context of rural practice.

We didn’t get much education in school in terms of chronic health. We learned about arthritis, you know, in a really short amount of time. Just being aware of those issues so that you’re looking at the whole person and all those issues involved with that, right? A lot of times these people are dealing with issues that are related to whether it’s abuse or whether it’s trauma in their past, right? We just found we couldn’t deal with. So all we were able to address was we were able to address nutrition. We were able to address exercise but because we didn’t have social workers, a psychologist or anything like that, we couldn’t, we couldn’t change any of that behaviour, right. See, we learned the ideal world, right? You know, and I think even when we started this program, we still thought that we were in this ideal world and if we just gave people the tools in terms of nutrition and exercise, they would change… And it wasn’t as simple as just offering them exercise. (PT-A)

The most frequently suggested educational approach for students to gain the skills for rural practice was practice education.

I think students need to have as much clinical practice in all the areas as possible. Basing that on the fact that if you have the practical experience your further learning, whether it’s books, courses, whatever form of education, is being built on your basic foundation. But I think with the broad clinical experience, it’s going to be very, very hard to step into areas that are really going to be outside your comfort zone. And I sort
of see that there are a lot of advantages to that kind of system and that hopefully every person coming up should have had clinical experience, a reasonable amount of clinical experience, in each of the areas. (PT-H)

Many participants noted that schools needed to offer more rural placements to expose students to general practice, and to emphasize subject areas such as determinants of health and skills for interprofessional collaboration. Some participants noted that the rural environment was well suited to learning many skills useful anywhere in the profession.

And especially in a small town. So lines really get blurred ... an inter-professional team ... I think it is important that everyone knows exactly what each person’s role is. I think that's a huge part of like the school programs too, is learning about other disciplines I think is really important. (OT-J)

A number of participants had trained under a problem-based learning model and felt this was particularly beneficial in preparing them for the challenges of rural practice, where clinical decision making required advanced assessment skills, a strong foundation of professional knowledge and being resourceful.

Having had one university degree with very traditional non-progressive learning, didactic, memorization, which really wasn’t my thing and then comparing that to my second degree. I learned light years more in my second degree [PT]. I can remember to this day, and when did I graduate?, I can remember, many of my problem-based learning sessions. I can remember discussing and challenging within that setting. Like that stuck with me way more than just 'tendonitis – page 34’. Like, you’re not going to remember what you read. But when you sit down and talk about it, you researched it and you can discuss it and be challenged. That sticks with you. And the thing I also remember is those crazy things they did with those mock patients. I mean I will never forget any of those sessions. Like for me that really stuck for me, particularly the one on Alzheimer's. (PT-MJ)

Rotating positions for the first year of practice was also suggested as a model that would allow new graduates to experience all areas of practice. These rotating positions would provide new graduates exposure to the rich learning environment of urban areas. A number of participants had experienced this rotating model as part of their training and found it be very beneficial. This suggestion was offered while acknowledging its impracticality in the current system given that a greater emphasis was being placed on specialization and very few facilities could integrate rotating positions.

We did rotations so we had to rotate from cardio resp. to orthopaedics to neuro, and so you maintained your skills in all the areas by doing rotations, but I think we have an awful lot more knowledge and an awful lot more research going on into areas that
need a lot more work to keep up with what’s coming out of research in each of the areas. (PT-H)

Participants had a recommendation to mitigate the challenge of gaining and maintaining the skills, knowledge and experience for rural practice. This was a mentoring program. Mentoring was noted by all participants as a way to assist new graduates and those new to rural areas to meet the challenges of being a generalist and rural practice. It was suggested that a formal mentoring program be established that matched for similar community, rural setting and learning style. Some participants noted that they had been promised mentoring when they were hired, albeit in an informal manner, however it had not materialized. Greater recognition of the importance of personal support for new graduates was noted by both new graduate participants as well as experienced therapists participating in this study. Given the large cohort of OTs and PTs in BC nearing retirement, participants suggested that mentoring would keep the wealth of experience in circulation.

[I would recommend] that there’s a strong basic mentoring system... they get their own personal network of folks that they can contact almost like, in my view, like a branch phone out system that, ‘okay, my first go-to person is here’. (PT-R)

All participants noted that one of the greatest challenges to practicing in a rural area was the limited access to local opportunities for continuing professional development (CPD). Participants bemoaned the fact that most CPD courses and workshops took place in urban areas which resulted in significant time away from work and expenses associated with travelling. The travel costs are always involved and that more than doubles the cost of the education because you have to travel. (OT-C) This applied to both public and private practitioners, although the additional costs associated with closing a private practice for the period of time of the educational course were acknowledged. Participants who were employed in the public sector noted that shrinking education budgets did not account for the fixed cost of travelling expenses or time loss. Continuing professional development was identified as an important factor in the decision-making process of many participants when considering moving to or from rural areas. A few participants commented that if they were unable to continue accessing the CPD that they felt that they needed, due to restricted release time by the health authority for education, they would consider leaving rural practice. A number of participants talked about access to CPD and funding as barriers to attracting and retaining therapists to work in rural areas.
So having the opportunities and the funding available to do education and knowing that up front is I think a big recruitment thing. (OT-C)

Of particular concern to participants who were physical therapists were the new requirements for orthopaedic manual therapy CPD. These courses demanded large amounts of time taking courses in urban areas as well as mentorship alongside specialists who almost exclusively are located in urban areas. While many participants felt that a strong foundation in orthopaedics was critical to rural practice, they were very concerned about the impact that this specialization that was urban focused had on employee attrition.

We don’t have close access to a lot of things like that [CPD]. If I wanted to do a mentorship and do my orthopedics, take more orthopedic levels than I currently have, that stream of education is currently evolved to make it actually prohibited for me and anyone who lives in rural areas. So access and education and mentorship not, doesn’t happen. So it is actually quite a barrier to recruitment and to moving your education forward. When I took it I think we did it two weekends or even one long weekend, like five days. So one ticket, you’re down and back up, all done. Now it’s, you can’t do that anymore. They make it so it’s done over many different sessions so it’s really cost-prohibited and practically speaking it just doesn’t work. Too much travelling and so that’s one unfortunate part of our profession. The province as evolved to really make it a disadvantage to work rural. (PT-MJ)

Another feature of CPD that many participants noted was the collegiality and contacts that attending CPD courses, workshops, or seminars provided. Given that many participants in rural areas are isolated and working sole-charge, contact with other participants was emphasized as being very important.

I was just recently on an education in Vancouver and just being able to connect there with OT’s. I just kind of forgot, it’s like oh yeah there’s all these other OT’s out there! And it was so great just to talk. (OT-C)

A few participants suggested that more continuing education needed to be hosted in rural areas. By having specialists travel to rural areas, there would be an exchange of learning, as rural practitioners had much to offer urban practitioners. Participants talked about how this would build local capacity while allow for a greater understanding of context and ways in which education material can be adapted to the circumstances of rural practice.

I would love to see more courses here, people being brought up here. Let them actually see and get a feel for how things work up here. (PT- E)

You know to get/to have a practitioner to come up here every now and then, once or twice a year to review skills would be huge for us. But again the challenge is
what area do you pick that in? But honestly, because I’m a generalist, well there’s probably a lot I can learn from anyone.(PT-K)

Some participants recognized visiting specialists, such as prosthetists and rheumatologists, as a source for their ongoing learning, and a guaranteed way to stay on top of the latest information. The cancellation of these services in rural communities due to cut backs was regarded as having an impact not only on patients, as it required them to travel to urban centres for care, but also on professionals in the community who lose the opportunity for informal learning and building professional relationships.

The issue of inequity between professional groups with regards to accessing CPD was also raised by participants. This was seen as problematic in light of the increased emphasis on professionals working alongside each other in interprofessional teams.

It’d be better if [support for CPD] was something the province did across the board with either taxation or incentives or more time in contracts. Because what happens is especially if we’re going to go as we are into more and more interdisciplinary practice and stuff like that, you pit one practitioner against another and you start getting those conflicts. (PT-K)

Participants also identified professional organizations as a source of support for rural practitioners. They felt that professional associations could play a greater role in advocating for equity in accessing CPD for rural practitioners and provide clinical support tools easily adapted for rural contexts. PT participants were overwhelming appreciative of the assistance their provincial association (105) provided through services such as the librarian and knowledge broker. They indicated that they took advantage of as many technological education resources as were available. One participant was grateful for the opportunities and noted that professional associations were even more important when you were isolated as a professional.

And also the opportunities I think that the Physiotherapy Association affords us. I’m a very staunch believer of that the more rural your practice, the more you really need a strong professional association.(PT-R)

Occupational therapists in this research were less enthusiastic about their professional association. OT participants felt that the British Columbia Society of Occupational Therapists could offer more resources, in particular to new graduates, internationally trained OTs and those in rural areas. Some participants specifically became involved with their professional associations and/or colleges in order to promote change.
To tell you honestly, our provincial society, I don’t think they are helpful. They are more focused on helping OT’s working in the urban area than OT’s working in the rural area. There is more practice resources suitable for OT’s in the urban areas than for the rural areas. (OT-B)

Conclusion

In summary, this chapter presented the findings of this research study aimed at constructing an emerging understanding of rural rehabilitation practice. Using the methodological approach of interpretive description, analysis and interpretations of the participants’ experiences and experiences resulted in an overarching picture of a rural context that was influenced by geography and issues of access. My analysis revealed how this context shaped the participants’ definition of health and influenced their practice in a number of distinct ways: specializing in general practice, stretching of roles, and participation and partnership. Participants described enacting rural rehabilitation practice within the context of their description of a primary health care system focused on prevention. They encountered challenges associated with accessing education and offered recommendations to improve access and preparation for rural practice. This provides the foundation for the construction of an emerging understanding of rural rehabilitation practice which unfolds in the next chapter.
Chapter 4 Understanding Rural Rehabilitation Practice in British Columbia

Overview

The overall objective of this research was to construct an understanding of rural rehabilitation practice within the broader context of the current health care system. I embarked on this research journey believing that a greater understanding of rural rehabilitation practice was necessary to inform education, practice and policy so that improvements could be made to the health of rural residents in British Columbia. This chapter presents my emerging understanding of rural rehabilitation practice based on the findings of this research study and discusses the results of this research and implications for education, practice and policy.

The chapter has been organized into three sections. The first section explores each interpretive category of the analysis by expanding upon the interpretation of the findings while situating the findings within the existing literature to determine points of connection of divergence with other research. Following the flow of the preceding chapter of results, the rural context in which rehabilitation practice occurs is portrayed and the way in which participants understand the influence of rural on their practice is described. This is followed by a discussion of the three ways in which participants in this study enacted their practice: general practice as a specialty, stretching roles, and participation and partnerships. These interpretations are then discussed in the broader context of the delivery of rehabilitation services within the health care system in British Columbia, and specifically within primary health care. The last portion of this section details finding of the research as they relate to education: continuing professional development and professional training. In the second section, I present my emerging understanding of rural rehabilitation practice based on the findings. Finally in the third section, I offer some reflections on using interpretive description as a methodological approach in this research and outline some of the limitations of this research.

Rural Context

Through participants’ perceptions and experiences, it became evident that the rural context and rurality, or the characteristics of the rural context, played a very significant role in
shaping the practice of rehabilitation professionals working in rural areas. The complexity of a rural context was illustrated in the numerous and varied ways in which participants defined and described rural and the diversity of experiences that exemplified the rural influence. This certainly resonates with the perpetual struggle in the literature to define rural. (24, 26, 106) Rather than defining rural as part of rural rehabilitation practice, the descriptions and reflections from participants constituted a rural context, and illustrated the influence of rurality on practice. In particular, descriptions of practice and professional experiences were frequently related to the features of geography and access. Participants described how the rural environment and the geographical distance influenced the health of their patients, their definition of health and their practice. When intersected with health care services, geographical features of rural areas frequently resulted in limited access to care and to resources. This complex web of geography and access became a rural context in which participants enacted their professional practice. This context was manifested in what, where, when and how services were delivered, what skills, knowledge and attributes the participants drew upon to deliver those services, and the supports and resources required for rehabilitation professionals to practice in rural areas. This comprehensive place-specific conceptualization of rural provides a more useful reference in understanding rural rehabilitation practice than a descriptive definition of rural. This aligns with Williams and Cutchin’s (25) suggestion that research should focus on the contextual references to rural rather than seek a universally understood definition of rural.

The rural context and its influence on rehabilitation practice have not been studied elsewhere so it is valuable to draw upon the field of rural nursing to consider similarities and differences. Howie developed a conceptual Rural Framework Wheel to illustrate the many ways in which the rural context influences nursing practice in rural areas. (18) The Rural Framework Wheel situates the rural context in the centre of four systems: health, socio-cultural, occupational and ecological, each placed in a separate, equal segment around the wheel.

The four systems of the Rural Framework Wheel(18) provide a useful way to categorize the various factors that make up a rural context. Beginning with the health system, participants in this research study made reference to a bigger and broader definition of health and the numerous ways in which the determinants of health where altered by the rural context. Access to health care and services and the ‘just make do’ way of thinking about health that rural residents’ displayed was also a result of the rural context. Participants made
numerous references to socio-cultural determinants of health in rural areas including the impact of First Nation’s culture on health and roles in the community, the importance of relationships and the challenges of housing. The occupational influence of the rural context was illustrated in this study in two ways. Firstly, participants made reference to how their occupation as a health professional was influenced by the context, including working in isolation, filling multiple roles and being more creative and resourceful. Secondly, they discussed how the occupations of their patients were linked with the rural context, such as the example of fishermen and loggers that were dependent upon the natural resources for their livelihood, and that this was a consideration for the patient’s health and for delivering services. This overlaps with the fourth domain of the Framework Wheel, the ecological system which participants referred to extensively in terms of the influence of the geographical characteristics of rural communities, the isolation and the distance on their practice. Geography and access were the two main features of a rural context that participants from this research described. The complexity of many of these issues and features places them across the four systems. This differs from Howie’s interpretation which appears to confine the factors into each system separately. The complexity found in this research study may be better represented in the emerging understanding presented at the end of this chapter (Figure 4.1) which illustrates the overlapping and interdependent nature of the context as it relates to health and health care.

Howie also used this Framework to examine rural nursing practice as a professional identity. (18) While developing an identity was not the intent of this research study, the findings exemplify the importance of the situatedness of practice and the importance of contextual understanding to practice. These have also been identified as distinguishing features of rural nursing (107) and critical to establishing rural nursing as an identity. (19, 28) Establishing a professional identity may result in greater recognition and the participants in this research study felt that there was a need for recognition by their peers and other health care professionals of their practice and the unique and distinguishes features of rural practice.

The importance of understanding the context and how this affects practice is described by Scharff (108) who notes the difference between rural nursing and nursing practice in a rural setting. Rural nursing is described as a way of practicing that evolves with an understanding of the context, whereas new nurses are described as practicing nursing in a rural setting. (108) Similarly, new graduates participating in this research study described
their practice in rural areas through their professional knowledge and without relational reference to the context. Their description of practice was characteristic of rehabilitation practice in a rural setting. This may be because they are still in the process of forming their professional identity.

In contrast, rural rehabilitation practice could be construed as the ways in which many of the participants in this research who had more experience working in rural understood the rural context and rurality. They stated that they ‘knew rural’ or had a ‘sense of knowing’, how they came to know their patients and the community, ‘knowing’ what knowledge they had or what they didn’t know, and how they gained that knowledge, often ‘through knowing others’. From the analysis of the findings of this research, this ‘sense of knowing’ illustrated their understanding of the context. These discrete ways of knowing were then translated into ways of enacting rural rehabilitation practice.

The knowledge required of OTs and PTs to practice as health care professionals, regardless of location, is a blend from different sources. Higgs and Titchen categorized knowledge as emanating from three foundations: propositional or scientific knowledge, practice knowledge and personal knowledge. (109) Scientific knowledge would encompass the discipline specific knowledge of the rehabilitation sciences. Participants made reference to the discipline specific skills required of them such as seating assessments or splinting skills for occupational therapists and cardio-respiratory assessments or joint mobilization skills for physical therapists.

Practice knowledge is the combination of previous disciplinary learning and the professional’s unique experience in the particular context. When applied to rural practice, practice knowledge in this research study was translated into an understanding of the rural context (19, 39) and described in the results as a bigger definition of health. For example, in this research, OT participants described their practice knowledge around discharge planning extending to address the larger contextual issues such as creative solutions to the inability to obtain equipment in the isolated community for weeks or months, rather than days, as might be the case in an urban area. PT participants described providing patients with entire post-surgical exercise protocols since follow up would be conducted by telephone consultation.

Personal knowledge is the tacit understanding of experiences and learning. This tacit understanding was clearly illustrated by participants ‘sense of knowing’ and what appeared as intuition from being in a rural context. Participants also demonstrated this through the importance they placed on reflective practice to maintain their competency and boundaries to
their scope of practice. The personal knowledge was also displayed in their description of the relationships that they had with the community and their patients.

In summary, participants appeared to rely on a combination of knowledge sources to inform their practice. These included their disciplinary knowledge, their practical knowledge of the rural context, and their tacit knowledge as a rural practitioner. Together these different types of knowledge make up what could be considered the epistemology of the rural OTs and PTs in this research study and the basis of their practice.

Approaching professional practice through the perspective of ways of knowing led me to consider the relevance and value of the philosophical framework *The Continuum of Generalism* developed by the Australian Primary Health Care Research Institute for generalist physicians. Gunn describes generalism as the concept of professionals with a broad knowledge base and generalist skill set and provides this conceptual model to illustrate how the practice of generalists is guided by values and principles about health, well-being and context. This framework refers to a health professional’s epistemological knowledge base as ‘ways of knowing’, their ontology as ‘ways of being’, and the ‘ways of doing’ practice as their identity. Gunn notes that while the continuum framework was designed for medicine, this concept can be applied to generalists of all professions and recognizes the collaboration that is required where generalists typically work, such as in rural settings. This framework is also useful in illustrating how the three concepts of understanding the context of practice, professional identity and the ways in which practice is enacted are inextricably linked.

Ways of knowing was discussed previously and examples from the research findings were provided. The ‘ways of being’ of participants in this study was exemplified by the ways in which participants described their values and principles of health. There were numerous examples of this including the moral responsibility to deliver health equitably and to detect any serious pathology that might otherwise go unnoticed. It was also referred to by participants who described being a lifelong learner and reflective practitioner.

Participants’ ‘ways of doing’ can also be referred to as the ways in which they enacted their practice. These ways of doing are reflected in the three interpretive categories from the analysis: general practice as a specialty, stretching roles, and participation and partnerships. The next section of this chapter will expanded each of these categories in detail.
In summary, this research illuminated how the features of the rural context, or rurality, shaped the practice of OTs and PTs through their ways of knowing and ways of being, and the ways of doing or enacting their practice. Together with the distinction of rural rehabilitation practice from rehabilitation practice in rural areas, these form key underlying dimensions of my emerging understanding of rural rehabilitation practice.

**General Practice as a Specialty**

All participants in this research study labelled their professional practice as general practice. They described the necessity of maintaining a general practice to meet the needs of a wide variety of cases across all areas of practice and the lifespan and in a variety of settings. These features of rural practice concur with those of a number of other studies describing the nature of rural rehabilitation practice.(37, 40, 111, 112) All participants in this research study noted that their practice was general yet only a few labelled themselves as generalists. Sheppard concluded that maintaining a broad expertise in response to the diversity of patients and cases and the variety of workplace settings did not allow PTs in rural settings to narrow their focus and achieve specialization.(40) The rural health care literature is filled with the term ‘specialized generalists’ and ‘generalist expertise’ to describe health professionals delivering care in rural areas.(39) Participants in this study did not consider themselves specialists or experts because they appeared to be conscious that this would imply specialization of their practice and that specialization would result in denying services to the breadth of cases and patients they served. Regardless, participants considered rural general practice as a specialty due to the distinctive features and demands of rural practice. They emphasized the need to maintain a general practice because they felt, what appeared to be, a moral responsibility to provide services equitably to all residents in the community. This was displayed in the way that participants described stretching their skills and knowledge as necessary to meet the needs of the population who had limited access to health care services. This awareness by participants of issues of access and enacting their practice to provide equitable services appears to be a particular feature of rural rehabilitation practice. OTs and PTs working in rural areas of Australia expressed this altruism and the desire to serve community needs.(113)

In addition to the features previously listed, participants described a complexity to patient care that was inextricably linked to the determinants of health. They described being aware and accounting for many social, cultural, economic and education factors in their provision of health services. Coupled with providing health care with limited resources, this
required them to maintain skills and knowledge that were contextually quite different from OTs and PTs elsewhere who could refer patients to specialists in their own profession or another health profession. Assessment skills, in all areas, were noted as being particularly important to rural practice. Being able to perform accurate assessments that could identify, or rule out, serious pathologies as well as identify mental health issues and sexual abuse was also seen as critical in the context of limited health professionals to offer health care services. This suggests a need for advanced assessment skills for rehabilitation professionals in rural areas, something which has not been identified elsewhere in the literature.

The Australian Physiotherapy Association (APA) released a position statement on rural and remote physiotherapy and noted that there are two fundamental levels of skills and knowledge needed for delivery of services in rural areas.(114) The first level constitutes the discipline specific clinical and practical skills and knowledge. While the APA position statement does not list these specific skills, the advanced skills in assessment identified by the participants in this research study would be examples of this first level knowledge.

According to the APA, the second level knowledge and skills are those that are essential to effectively deliver these clinical and professional skills to patients in rural communities. In this research study, participants noted a wide variety of skills necessary to deliver services in rural areas. Many of these have been noted elsewhere in the rural health care literature. Participants described the need to be resourceful,(52) creative,(52, 115) flexible,(32, 40, 45) and adaptable,(52) and be skilful in problem solving,(50, 51) networking,(51) communication (32, 39, 44, 111) and self-reflection(45). A number of participants also noted that the professional autonomy of rural practice required them to be self-directed, take initiative and possess a level of confidence.(45)

Another set of skills that participants felt was necessary for their practice included those to address the challenges of delivering services to communities with a high proportion of First Nations people. In particular they described the importance of understanding the cultural aspects of health (such as hidden expressions of pain), the social issues (such as the trauma of residential schools) and the political milieu (such as the role of band offices) as part of understanding the context. This speaks to the need for rural practitioners to have skills related to cultural safety. This term is defined as the delivery of health care service to be defined as safe by those who receive it(116) and constitutes awareness, sensitivity and reflection on behalf of a care provider of the many ways in cultural identity can be harmed.(117) Cultural safety has also been recognized as a feature of rural practice in the
literature (30, 45, 46) and in the professional training of physicians.(117) Many of the participants felt that greater emphasis should be placed on developing these skills during professional training.

The complexity of rural practice also required participants to have additional skills including program development and management, leadership and building community partnerships. They identified waitlist management as a significant challenge for rural therapists and a critical skill in the face of workforce shortages and increasing demands for rehabilitation. This was also noted by Lannin et al who suggested that new graduates in rural practice who lack the caseload prioritization and administrative skills to manage the workload may feel overwhelmed and that this may result in attrition.(58) Miller and Bzdell found that use of a prioritization tool for physiotherapy service on Baffin Island, Nunavut improved service utilization, increased use of technology for consultation, increased the number of high priority patients receiving services, and improved physiotherapist’s satisfaction in the workplace.(43) As caseload management and long waiting lists was a universal challenge amongst participants, the use of prioritization tools may be considered and evaluated in these rural areas.

Participants’ opinions varied as to whether having worked in rural general practice made employment as a rehabilitation professional in an urban centre easier or more difficult. Some participants felt that rural practice set them up for all walks of the profession and others were concerned that the specialized nature of many urban practices meant there was no place for them there. This was also noted by Lee and McKenzie who found that general practice inhibited prospects of career development because specialist skills rather than generalist skills were more professionally valued.(51) As professions wrestle with increasing specialization and employers look at changing roles in the health care system, recognition of the work of generalists and consideration of career development opportunities are imperative.

In summary, findings from this research study illuminate the features of general practice of OTs and PTs in rural areas and build upon existing research by emphasizing the sense of responsibility participants had to maintain a general practice to meet the needs of their patients and address issues of equity. Participants also identified a number of skills and additional areas of knowledge that were essential to rural practice and due to the context, in which proficiency was required. These included assessment skills and cultural safety which have not received significant attention in the literature. Despite previous literature detailing
the importance of waitlist management skills, participants in this study indicated that greater support was needed in this area. These skills and the knowledge essential to general practice, together with the influence of rurality, constituted some of the distinct features of rural practice that participants felt was worthy of designating rural practice a specialty. They hoped that, in turn, this recognition might harbingor greater support.

**Stretching Roles**

Another example of the ways in which participants enacted their practice was that of stretching their role. Participants described how the lack of resources and services, and the difficulty of referring patients to specialists resulted in them stretching their role and working to the full extent of their scope of practice so as to not deny their patients services. While none of the participants attempted to define their *role*, they referred to ‘stretching their role’ when they described providing services that they considered were beyond what traditionally they considered part of their practice. In particular, they made reference to stretching beyond what their training had prepared them for. However they were clear that this did not mean that they were providing services outside of their scope of practice. Stretching their role included offering services that were within their scope of practice as defined by their respective professional colleges, but might also be in the shared scope of another rehabilitation professional or of a social worker. For example, OT participants referred to giving exercises to patients post joint arthroplasty and PT participants described wheelchair adjustments.

Stretching of roles required participants to recognize the boundaries of their practice and the areas that overlapped with other professions. Some participants explicitly noted that the importance of reflective practice and self-reflection as a skill in order to evaluate professional scope and boundaries. Others made frequent reference to boundaries which made it appear as if they engaged in reflective practice on a regular basis. In a study of the attributes of allied health professionals in the Northern Territory of Australia, Thomas and Clark identified learning from mistakes and being a reflective learner as important attributes common to participants in their study. Sheppard also noted that working to full scope of practice required practitioners to know their professional boundaries.

As noted in the results, the sample population of this study included three combined trained therapists. Each combined trained therapist noted during their interview that they made use of their multi-disciplinary training regularly and considered it enormously beneficial to their rural practice. Perspectives and experiences from these participants concur with the
literature on stretching and overlapping roles. In a study of the work practices of physiotherapists in two regions of Australia, Sheppard found that 59 percent of PTs reported extra demands on their role or demands to be multi-skilled due to the lack of availability of other allied health professionals, including occupational therapists, social workers or speech therapists. (40)

Overlapping scope of practice also occurred in reference to compensating for the absence of other members of a health care team, in particular speech language pathologists and social workers. Participants made reference to addressing issues that would otherwise be dealt with by a social worker or qualified mental health worker. All participants noted that the extent of social issues in rural and northern BC had a significant impact on their ability to facilitate behavioural change. It is well known that the population in rural and northern Canada faces significant mental health and social issues.(118) Some participants felt the shortage of social workers and mental health workers in their community warranted additional mental health training for all health professionals working in under-resourced areas. Greenhill(119) identified the need for a strong mental health workforce composed of clinicians, clinical educators and researchers in rural Australia. He also suggested that universities should consider offering double degrees that combine mental health with other clinical programs, such as occupational therapy.(119) Occupational therapy training programs in Canada already cover mental health in the curriculum and while double degrees might not be what participants in this research had in mind, the experiences of participants illustrated the need for increased resources for mental health and social issues in rural British Columbia.

In addition to stretching their role, the shortage of health human resources in rural areas also required participants to work very closely with other health care professionals to make up for the gaps in care. This necessitated a good understanding by all health care team members of each other's roles. Specifically, this was an issue noted by OTs in this study who felt that other health care providers did not have a clear understanding of what OTs do. Devine also reported that OTs working in rural Australia were discouraged by this lack of knowledge among health professionals and patients.(41) A paper on the role of OTs in PHC in Manitoba asserts the need for OTs to communicate their expertise to the public and to other professionals.(120)

Role clarification has been determined a core competency in interprofessional collaborative practice.(121) Given that collaboration is sometimes essential in rural areas due
to resource shortages, (80) the need to understand the role of each health professional available is critical to delivering effective and efficient service. It is only when health professional understand each other’s roles in delivering patient care that health service delivery can be optimized and that professionals will have the capacity to work to their full scope of practice.(23)

Participants also noted that in addition to serving the patients’ needs, the demand for service in an under-resourced health system and the nature of general practice behoved them to practice to the full extent of their scope of practice. While most participants felt that they often did practice to their full scope, a few expressed frustrations with policies which restricted them from doing so. One example was the policy imposed by hospitals that prevented patients from accessing rehabilitation services without a physician’s referral, even though direct access to physical therapy service exists within British Columbia. This policy has implications for patients, professionals and the system. Due to the shortage of physicians and long waiting lists, patients are often delayed in obtaining rehabilitation services. Participants in this study expressed dissatisfaction with not being able to offer primary care and utilize their differential diagnosis assessment skills and finally, participants were annoyed at the additional cost to the system.

A few PTs in this research study wished to extend their scope of practice to include ordering x-rays and making direct referrals to specialists. The primary driver behind extending scope was to assist family physicians who are already overburdened in rural areas. Greenhill et al. recognized that allied health professionals need support for extending their scope of practice in order to address system wide inefficiencies.(119) Extended scope in rural practice has been suggested by Butler (122) and was promoted by the Productivity Commission of the Australia’s Health Workforce (123) as a means to maximize skills and improve recruitment and retention. Extending scope of practice is one of a variety of models emerging to reconsider the role of practitioners. There continues to be much discussion in the literature regarding the roles of PT clinical specialists2 and extended scope practitioners3.(125, 126) Recently, rural health has been discussed as an area of practice worthy of exploring the potential of these roles.(124) Ruston(124) cautioned rural Australia in adopting the UK model of extended scope practitioner and encouraged consideration of both

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3 Extended scope practitioners have additional training in tasks or roles which are recognized as being beyond the scope of practice for that profession.124. Ibid.
extended scope and clinical specialist models for rural PTs in Australia to determine the best suitability for rural health. Participants in this research study appear to be interested in increasing their scope primarily for the purposes of increasing the efficiency in an under-resourced system. In light of how readily participants in this study stretched their role within their scope of practice, were cognizant of boundaries in their scope, and considered their practice a specialty, further investigation is warranted into the potential for role changes.

The findings of this research provide examples of how OTs and PTs in rural practice enacted their practice through stretching their roles in response to health human resource and health services shortages. It became evident that they needed to work to the full extent of their scope of practice in order to be responsive to the rural context, however a number of barriers such as role clarity, health human resource shortages and policies prevented OTs and PTs from enacting their full scope of practice. These form some of the recommendations noted later.

**Participation and Partnerships**

Rural rehabilitation practice was also epitomized by the ways in which participants provided services in ways that focused on participation and partnership. Participants described *participating* in a patient’s life as the way in which participants were involved in the delivery of rehabilitation services through the continuum of care of a patient, as is often the nature of rural health care because of limited professionals. Participation also referred to knowing the patient in a number of different contexts (as a patient as well as their role(s) in the community). This afforded participants the advantage of setting short and long term goals with their patients, following through with them and offering additional services such as health promotion and illness/disability prevention. Service frequently extended beyond a traditional clinical interaction, and occasionally involved participating in the community to achieve health outcomes whether individual or population-based. This is an example of the ‘bigger’, or expanded definition of health and health services referred to earlier. Rural rehabilitation practice as participation in an individual’s life or the community was not identified elsewhere in the literature. This finding from this research may be a result of the nature of the communities where this research took place, where participation might have been related to the socio-cultural characteristics of the communities. It also may have surfaced as a finding in this study due to the nature of this qualitative inquiry focusing on what was unique about rehabilitation practice in a rural area.
As a result of the ways in which rehabilitation professional’s participation was a feature of rural service provision, relationships were considered central to rural practice. Participants noted that relationships with patients and with other health care providers were seemingly more important in rural areas than in urban areas. This may be due to some of the identified features of rural practice such as a shortage of resources, decreased access to care, isolation of health providers and their integration with community. The significance of rehabilitation professional’s relationships with community and with other health care providers has been identified in the literature. Manahan et al. acknowledged relationships with the community as important to allied health providers working in rural communities in northern BC,(115) however this appeared to be important for retention reasons rather than enhancing or facilitating health care service.

In the current research, relationships also extended into partnerships in order to achieve individual or community health outcomes. Partnerships were particularly underscored by participants in this study who were sole charge, as these assisted them in carrying out services with limited resources. The partnerships that participants in this study described and the way in which they participated in community, occasionally resembled community development. In particular, a few participants had advocated for and participated in the development of recreation facilities in the community. Battye and McTaggart also noted the role of rehabilitation professionals in community development in rural and remote regions in Australia.(5) Chenoweth also described a community embedded practice of rural health professionals characterized by integration of professionals into the community.(127)

This concludes the detailed interpretation of the three interpretive categories of ‘general practice as a specialty’, ‘stretching roles’, and ‘participation and partnership’ and their place relative to the literature. These three interpretive categories illustrated the ways in which practice was enacted due to the influence of rurality. In order to construct an emerging understanding of rural rehabilitation practice from these research findings and my interpretations, I need to place the research findings in the context of the health care system.

Rural Rehabilitation Practice in the Context of the Health Care System

This research examined rural rehabilitation practice within the context of the health care system and specifically the emerging approach of primary health care and asked participants to describe their understanding and involvement in PHC. In a similar way that the rural context influences the practice of participants, the health care system in which they deliver services has an effect on practice.
In this research study, participants frequently used the terms primary care and primary health care (PHC) interchangeably when discussing their practice within the context of the health care system. When asked to define the term primary health care, they frequently cited that of primary care (i.e., the first contact within the health care system, in which an individual may receive a diagnosis and treatment for their illness or injury).(64) However, a few participants recognized PHC as extending from a socially-oriented and wellness paradigm,(128) as opposed to the illness model. Despite confusing the terminology, participants in this research unanimously articulated agreement with the core principles of PHC such as addressing health at a population level with a variety of services using an interprofessional collaborative approach.(129) Participants also articulated ways in which they practiced within the PHC paradigm, whether officially part of designated PHC initiative or not. This was illustrated in the way they addressed the determinants of health, such as housing and transportation, and prevention, such as increasing physical activity in middle-aged sedentary men prior to any health condition. Another example of the ways in which they engaged in the principles of PHC include the ways in which their practice resembled participation and partnership with community to address health lifestyle and roles in the community. Wakerman et al. notes that faced with resources shortages, rural communities have long practiced and delivered services using the primary health care approach out of necessity.(29)

While PHC is the basis of health care reform in Canada, it has been slow to unroll as a universal concept in the province of British Columbia.(130) Currently only three communities in the Northern Health Authority have instituted formal primary health care initiatives out of the 68 communities across the province.(130) Interviews were conducted in two of the three communities and yet only one therapist referred to a primary health care initiative that involved rehabilitation services.

All participants made a case for their involvement in PHC. This is no surprise given that many of the principles such as prevention and health promotion are core tenants of the rehabilitation professions.(11, 22)

A number of barriers to participation in PHC were identified in this research. Communication presented a challenge on a number of fronts. Firstly, participants noted that communication was difficult across geographically dispersed services, and while electronic records were being introduced in some communities this was not standard practice. As noted
earlier, OT participants felt that other professionals did not understand their role which occasionally resulted in physicians not making referrals or appropriate referrals. Lowe and Lawrence looked at the role of allied health professionals in Australia, including OTs and PTs working with GPs with a view to identifying a model and strategy for integration, however it was evident that GPs had little knowledge of the services of allied health professionals in general.(131) Secondly, as described previously, policies requiring patients to obtain referral prior to attending publicly funded services frustrated participants who felt that this was inefficient as well as contrary to a PHC approach. Many of these same issues were also reported by patients as barriers to accessing primary health care in rural British Columbia.(7) Another barrier to participating in primary health care was that of payment schedules. Participants who worked in the private sector felt that they could offer services in a way that were more responsive to the needs of the population and contribute to primary health care initiatives within the community; however, there is currently no payment mechanism to reimburse private practitioners. Public/private partnerships were raised numerous times throughout interviews and yet this has not been researched in the rural health literature.

In summary, this research highlighted a number of points regarding rehabilitation practice and PHC in rural BC. Firstly, there was a high degree of variability in participants’ understanding of PHC. Secondly, very few of the participants were engaged in PHC initiatives despite two communities where interviews took place being designated PHC sites for the health authority. Finally, a number of barriers were identified by participants that may have prevented engagement of rehabilitation providers and services in PHC programs or models. These included communication and understanding of the role of rehabilitation providers and the breadth of their scope of practice. However the findings from this research also expose how OTs and PTs in rural areas are in fact delivering services in a way that could be considered to be in keeping with a PHC model. This includes the ways in which they offered services in an interprofessional, and sometimes collaborative, manner, which I discuss in this next section.

Interprofessional Practice

Participants in this research study recognized the need for, as well as the value and importance of, interprofessional health care. However as participants described their practice experiences, it became evident that there was a variety of understanding of interprofessional and collaborative practice and approaches to these concepts in practice. There were also a number of motivating factors to interprofessional practice. Some participants described
providing care alongside other health care professionals but did not describe a collaborative approach. This was exemplified by the descriptions of each profession individually providing services for the patient. This appeared to be the nature of the majority of patient visits. However other participants described delivering group treatment or education programs in an interprofessional team approach to care. Home and community care as well as pediatric services was offered as examples of this collaborative approach to delivering service. These participants recognized the value in this approach to both the care of their patients as well as for their professional satisfaction. Some participants described a willingness and desire for interprofessional practice; however they were unable to implement this due to the lack of human health resources. Still others noted that despite valuing a collaborative approach, not all health care professionals in rural areas were aware of interprofessional practice, valued it or had the skills to engage in it. The high percentage of internationally trained medical graduates working in rural areas who may not have been exposed to interprofessional approaches in health care was offered as one possible reason for this.

Participants described a number of motivating factors to participate in interprofessional practice. Some participants noted that interprofessional practice assisted them in mitigating the challenges of limited resources. They described relying on their colleagues to share the load and to provide services outside of their scope. Bent and Sheppard also noted the importance of interprofessional collaboration as integral to the ‘survival’ of allied health professionals where colleagues from the same profession are not likely to be present.(39, 40) Millsteed also found that rural OTs felt that an interprofessional approach was necessary to meet the health care needs of the population.(132) A number of studies cite interprofessional practice, cooperation and networking as essential to service delivery in rural and remote areas(59, 133, 134) for patients as well as for professional job satisfaction and professional development opportunities. Many participants from this study also relied on collaboration with other health care professionals to enhance and support their professional learning. Stagnetti et al. noted that interprofessional practice allowed for a means to share ideas, improve skills and communicate.(135) Despite the evidence that has shown interprofessional collaborative practice to have positive benefits for patients,(136)

4 Collaboration has been defined as an interprofessional process for communication and decision making that enables the separate and shared skills and knowledge of care providers to synergistically influence the patient care provided.79. Way D, Jones L, Busing N. Implementation strategies: collaboration in primary care-family doctors and nurse practitioners delivering shared care Toronto ON: The Ontario College of Family Physicians2000.
participants did not articulate this as a reason or motivating factor in their care delivery design. This may be due to the forefront issue of a lack of health professionals with whom they can collaborate with. Another factor may be the culture of health care in the setting where this research took place which has a large number of internationally trained physicians. Participants noted that some of these physicians did not have as good an understanding of the roles and scope of practice of rehabilitation professionals and were not as collaborative in their approach. As noted previously, role clarity also restricted collaborative practice for many of these participants. Finally some participants noted that there was a lack of ‘infrastructure’. I believe this to mean a lack of leadership, established care pathways and/or an organizational structure to assist and support interprofessional practice. One participant noted that she was not willing to participate in an interprofessional education initiative until there was ‘something in place’. This speaks to the need for leadership and commitment at all levels if an interprofessional practice approach is to be adopted.

As some of the participants also worked under a private funding model, they discussed the organizational and financial barriers to practicing interprofessionally. They noted the divide between public and private practice and the lack of involvement in private practitioners in interprofessional initiatives, such as chronic disease management, and when they did occur, a funding schedule to provide compensation did not exist. However participants in private practice described significant efforts to achieve collaborative partnerships with other practitioners. This was seen as a benefit for the patient, critical to a private practice model of service delivery and important to the participant in building relationships for professional support.

In summary, my interpretation of the findings suggested that interprofessional practice was understood and implemented by the participants in a variety of ways. In general participants do not appear to be involved in ‘interprofessional collaborative practice for patient centred care’.(82) Rather there appears to be an informal team based approach to care that exists out of necessity, to compensate for the lack of resources and services and as a means to maintain professional development. However there is little collaboration between health care providers. In addition to the human health resource shortage, a number of barriers to interprofessional collaboration are noted including understanding of professional and team roles and lack of organizational leadership and systems. In recognizing the importance of interprofessional collaborative practice, some participants recommended that
noted professional training programs place a greater emphasis on interprofessional education and on the skills needed to engage in collaborative practice.

**Education Needs and Challenges**

The last section of this chapter will address one of the most significant challenges faced by participants in this research study in enacting their practice as rehabilitation professionals in rural BC. The education needs and challenges was a finding of the analysis that appeared to be inherent in each interpretive category. This section has been divided into two sections: continuing professional development and professional training programs.

**Continuing Professional Development**

Access to continuing professional development\(^5\) (CPD) was identified by all participants as the greatest challenge to maintaining their practice in rural areas. Participants noted that there was an enormous variety of CPD opportunities available and they took pride in seeking them out, being resourceful and using technology to maintain their skills and knowledge. They frequently used the internet, took advantage of existing web-based educational opportunities, read articles and felt comfortable in appraising the resources they used. However, they all noted that this was not a substitute for hands-on learning and face-to-face interaction with colleagues. While some of them noted that this was because of the hands-on nature of rehabilitation practice, the literature also attributed this to the isolated practice environment in rural areas. Wielandt and Taylor found face-to-face learning as highly important to OTs working in rural areas of Alberta and Saskatchewan.(44)

Access to face-to-face CPD opportunities was restricted by a number of barriers that were unique to rural practice. These included: 1.) the difficulty of prioritizing which educational opportunities were most important to attend when practice was so broad and general, 2.) the additional time required for travel (as compared to urban counterparts) and for private practitioners, this additional time resulted in additional loss of revenue, 3.) costs associated with attending courses, the majority of which were held in urban areas, including travel, accommodation, registration fees, etc., and 4.) coverage for their caseload, especially if they were sole charge therapists. Health professionals in all disciplines and in all geographic locations face similar time and cost challenges, however rural practitioners have the additional challenges of travelling long distances (for the participants in this study, this

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\(^5\) Continuing professional development refers to all professional opportunities including education, networking and career development.
usually meant adding a day on either side of the event) and having to maintain competency in
a breadth of skills and knowledge. All of these issues have been well documented in the
literature.(39, 41, 44, 52, 135)

My findings echo the challenges identified elsewhere in the literature around
maintaining the skills and knowledge for a large and diverse caseload.(58, 137) Prioritizing
information needs was a struggle for some participants who felt that the needs of the
population they served was so diverse that there were many courses appropriate to their
needs. This is in contrast to the study by Wielandt and Taylor who found that OTs in rural
areas had difficulty accessing courses that were appropriate to rural practice.(44)
Participants in the current study noted that they frequently needed ‘just in time’ information.
This referred to information needed to address a particular clinical problem at hand. This was
seen as a strategy to cope with the unusual cases that participants may only see once every
few months or a year, at which time the evidence may have changed. The need in rural
areas for information that was time sensitive was also noted by Sheppard.(40)

One such just-in-time learning that participants valued was partnering with medical
specialists and travelling health service programs. This served the dual purpose of providing
services for patients that might not otherwise receive that service while also increasing the
skills and knowledge of both the rural and urban practitioner as contextual knowledge was
exchanged with skills and knowledge of the specialty. This was similar to findings by Lannin
et al. regarding use of networks and maintaining strong professional links with specialists for
CPD.(58)

In addition, access to CPD was noted by participants as a significant obstacle to
recruiting therapists to work in rural areas. For example, employers wishing to recruit PTs felt
that the new CPD requirements for orthopaedic manual therapy severely hampered the
prospects of hiring PTs who had an interest in orthopaedics. Set out by the Orthopaedic
Division of the Canadian Physiotherapy Association, PTs who wish to pursue skills in manual
therapy must attend week long courses located in urban areas and complete mentorships
alongside specialists who are located almost exclusively in urban areas.(138)

Support for continuing professional development was also identified as an important
retention factor for a number of participants. Denham and Shaddock(139) and O’Toole et
al.(140) also identified professional development opportunities as an important factor in the
recruitment and retention in rural areas. Access to CPD was of particular concern to some
participants who felt it might impact their professional competency. Participants in this
research acknowledged the challenges in maintaining their professional competency in light of the breadth and depth of skills and knowledge required while working in isolation. Their concern was derived from self-reflection, recognizing the effort and time required to maintain their competency. Participants described engaging in reflective practice as a means to guide their decisions about choosing CPD activities. There is a dearth of literature related to competency for rural practice. In 2009, Lin et al. published a competency framework and a self-assessment/collaborative assessment tool designed for allied health professionals and senior managers working in rural Western Australia.\(^{(141)}\) Evaluation of this tool following implementation has not been reported in the literature. Competency tools may offer a useful guide for rural practitioners concerned with their competency.

Although CPD challenges are not unique to rural therapists, as noted earlier, those from rural regions have much greater costs, and time commitment associated with travel and accommodation. This is compounded by the lack of coverage or backfill for those in sole charge positions, resulting in a larger workload upon their return.\(^{(58, 140)}\) Some participants noted the inequities across professions with regards to support for accessing continuing education. Currently in BC, there are no provisions for rural rehabilitation practitioners to attend CPD courses in the urban setting, aside from the fixed educational benefits offered to public employees regardless of their location of practice. Some suggestions provided by participants included offering discounts for travel in order to access CPD, a reduction in course fees for rural practitioners and an external funding source for attending courses in urban areas. This would assist in levelling the playing field by offering support to professional bodies in addition to medicine. For example, rural physicians, including locums, are subsidized through an agreement between their professional association and the provincial government of BC for attending continuing education.\(^{(142)}\) A similar plan also assists medical students who originate from rural areas as well as students who complete rural placements.\(^{(142)}\) These schemes form part of the rural medical education pipeline. This will be expanded on in the implications section in Chapter 5.

In summary, findings from this study indicate that there are a large number of CPD opportunities available to rural OTs and PTs. Access to face-to-face CPD was highly valued and our participants have identified a number of challenges unique to rural practice. Participants provided suggestions for improving access to CPD at the organizational and provincial level.
When participants were asked about how their professional training prepared them for rural practice, there was a myriad of responses. In general, participants were quick to say that the practice experiences, regardless of location, were the best preparation for practice. Participants who had graduated in the previous two years indicated that they felt prepared for practice but as a new graduate, they had not known what to expect. They noted that while the learning curve was steep, they may have found this to be the case regardless of location. Interestingly, participants with greater experience felt that rural practice was not suitable for new graduates, primarily because of the breadth of skills and knowledge needed as a generalist. Bent also noted that rural practice was not suitable for new graduates. (39) The differing responses of participants may be due to individual perspectives and experiences as well as personalities that may be more or less confident with challenges. Personal characteristics suitable for rural practice have been noted by Manahan et al. (115) and Wielandt and Taylor. (44) Participants who were managers acknowledged the challenge that rural practice presented to new graduates however indicated that there was little choice when recruiting and that they did what they could to implement the supports necessary. This may speak to a ‘make-do-with-what-you-have’ attitude adopted out of necessity by new graduates and employers in rural areas.

Many participants, regardless of years in practice, felt that while their professional training had given them the basics, there were many elements of rural practice that were not covered in training. These included knowledge and skills to address the determinants of health, cultural safety, behavioural change, waitlist management and interventions at the community level regarding prevention and health promotion. Rural OTs in Alberta and Saskatchewan also identified the need for management and organizational skills to be offered in professional training. (44)

As noted previously, participants recognized the role that determinants of health play in the health of rural residents and felt they needed more skills and knowledge to address these issues. The WHO’s Commission on Social Determinants of Health and a report by the Health Officers’ Council of BC Health Inequities in British Columbia recommend the development of a workforce that is trained in the social determinants of health. (143, 144) When comparing rural and urban medical practice, Rourke noted the differences were the social determinants of health, the disease and illness patterns and the need to understand and address the barriers to access care. (56) Rourke claims that medical education is
universal but it is imperative that it is placed into the context in which it is to be delivered.(56) Participants in this research study noted the importance of contextual learning and reinforced the importance of rural placements for attracting therapists to rural, as well as preparing them for practice regardless of future choices.

Some participants felt that they would not have been ready for rural practice immediately following their training and that their experience (regardless of length of time) working in a variety of areas of practice prior to working in a rural areas gave them the skills necessary for their practice. This was also noted by Wielandt and Taylor.(44) All participants in this research study noted the value of rural experiences during training and this provided excellent exposure to rural practice. McNair et al. noted that rural placements offered unique learning opportunities, in particular around primary health care and interprofessional practice.(55, 59)

Most participants in this study reported acting as a preceptor for rehabilitation science students in the recent past. Many of them felt that accepting students provided enormous benefits including possible recruitment to rural areas and a learning opportunity for them, positively challenging their knowledge and skills. They also expressed concern that student placements were not adequate in length to build a foundation for learning. Some participants noted they did not take students as the shortage of resources (physical space as well as personnel) prohibited them from doing so. This was also noted by rural therapists in Australia.(49)

There are numerous studies showing rural undergraduate education to have a positive influence on subsequent rural practice location choices.(44) Hageman and Meyer found both rural admissions and revision of the physiotherapy curriculum to include rural content to have a positive influence on new graduate PTs interest in practicing in rural areas. (145) Devine and Crowe and MacKenzie also noted that rural placements had a positive influence amongst OT graduates choosing rural practice.(41, 146 ) While Playford et al. did not find an association between placement and rural employment; students reported a positive rural training experience. (61) Lee and MacKenzie found that amongst OTs working in rural practice, undergraduate student placement did not have an effect on later practice decisions to work in a rural area, but rather reinforced pre-existing decisions regarding practice locations. (51) Some of the variation in results may be explained by Crowe’s argument that students’ experience of placement will largely depend upon the preceptor.(146)
Participants in our study acknowledged the shortage of health professionals resulted in stretching their roles in patient care. Therefore it is important for students to gain an understanding of the roles and responsibilities of the other members of the health care team and develop strong communication skills. The need to communicate and collaborate with other health care professionals prompted many participants to recommend interprofessional education in training programs. Interprofessional education offers an ideal medium to teach other content also need for rural including health promotion, disease prevention, cultural safety, self management and team based care. Exposure to rural interprofessional learning opportunities (55, 59, 147) and positive rural learning experiences (44, 51) have been shown to result in rural recruitment and retention.

Mentoring was noted by the majority of practitioners as a way to support new graduates or those new to rural and allow experienced therapists to share their expertise and experience with others. Programs such as MentorLink have shown mentoring to be an effective means of supporting new graduates or those new to practice. (148)

Finally, many participants recommended a mechanism to maintain contact with other rural practitioners and exchange information. A number of web-based platforms exist in Australia to support health professionals working in rural areas: SARRAH web portal, the Rural Health Alliance and the Rural Health Professionals Network provide professionals with access to resources, share experiences, and create networks regarding their practice. (53) While this technological medium is not a replacement for the face-to-face learning and collegiality necessary when working in isolation, the concept of similar network might be explored in BC and/or nationally.

In summary, the findings of this study assert the importance of integrating content related to the rural context into the curriculum of professional training programs in BC as well ensuring practice education opportunities in rural locations for students. This will assist in preparation for rural practice as well as have the potential to positively influence the future practice location decisions of graduates.

The next section of this chapter will present an emerging understanding of rural rehabilitation practice based on the findings and interpretations of this research study.
An Understanding of Rural Rehabilitation Practice: The Rural Context of Rehabilitation Practice

As noted earlier, I approached this research from the epistemological perspective that knowledge is socially constructed. Therefore to meet the objective of this research study, the process of constructing a conceptual understanding involved comprehending individual perspectives as well as common ones, conceptualizing and interpreting findings, considering relationships between concepts and ideas and reflecting on knowledge gained through the process. (149, 150) An understanding of rural rehabilitation practice began to emerge through my interpretation of the findings from the data analysis and was constructed through conceptualizing a rural context and the influence of rurality on rehabilitation practice. To illustrate the relationships between the interpretive categories and the concepts and dimensions of practice that evolved through this understanding, I created a schematic representation of my emerging understanding (Figure 4.1). My interpretation of the findings informs the organization of this diagram and as such, it will likely continue to evolve as my work in this area continues. This schematic offers a way to explain my emerging understanding and illustrates the complexity of rural practice and the relationships between and among the themes interpreted. It also served to locate the interpretations in relation to the literature as I considered the implications of this research.

Recognizing its complexity, the narrative following the diagram guides the reader and describes this representation of my emerging understanding. True to the complexity of rural health and the findings of this research, this emerging understanding of rural rehabilitation practice is composed of relationships and roles that stretch across multiple sectors. Each of the interpretive categories from the research findings are presented in arrows or banners and italics in the diagram and the arrows indicate their relationship to each other and larger concepts.
This diagram represents an emerging understanding of rural practice and therefore rural practice is placed at the centre. Rural practice is enacted by OTs and PTs (who consider themselves as generalists) and are members of a health care team (many of whom are also generalists) and the fluid borders of this banner symbolize the collaboration, overlap and fit within the team. The ways in which practice is enacted is depicted through participation and partnerships with individuals and with community (individuals being a part of community). The bi-directional arrow shows the reciprocation that occurs between individuals and community, and the health care team and health care system. The health care team sits within the health care system. The overlapping circles and penetrable line around health care system illustrate how health extends into the context, includes the patient and receives input from all systems including education. The practice of OTs and PTs in rural areas is also enacted through stretching of roles within the health care team, and because roles and scope of practice have implications for the health care system and for education, the arrow stretches across each of these domains, symbolizing the tension of competency and emerging roles on practice. As per the analysis of this research, the practice of OTs and PTs occurs within the context of the larger health care system. Primary health care is designed to be integrated into community and population health and is shown as a dotted line in close proximity to the determinants of health. The education of health care professionals overlaps.
with the rural context, encompasses the health care system and intersects the individual/patient and the community (as they are valuable teachers and a rich learning environment). The education of health professionals has enormous effect on all these dimensions and has a relationship and dependency on all of them. The rural context sits as a backdrop to the entire practice of OTs and PTs and the findings of this research study. It is composed of the features of rurality identified by participants such as the determinants of health, access, and health and wellness and shown with a dotted line to illustrate the impervious nature of the influences. This diagram portrays these dimensions and their relationships however should not be considered a framework for the professional practice of individuals.

Many health professionals utilize theory to guide their practice. In designing this research project I searched for a theory that might be applicable to the research and while a number of theories do exist within the field of rehabilitation sciences, I was not able to locate a theory that related to rural rehabilitation practice. A number of rural health theories exist in other professions. One such example is the Rural Nursing Theory,(151) however this did not appear to be applicable as it included relational statements regarding rural health beliefs, work ethic and nursing roles. However it could be proposed that an understanding of practice may be more useful than a theory of practice. Nikon and Creek suggest that occupational therapists:

...do theory by learning how to align thoughtfulness and practice within specific contexts that require constant negotiations across complex professional, cultural and social boundaries. (152) (p81)

The emerging understanding constructed through this research portrays the complexity of a rural context and rurality and the numerous intersections that influence the practice of health professionals. Therefore, this understanding of rural rehabilitation practice offers a framework for the constant negotiations across the complexities.

Interpretive Description: Reflections on the Methodological Approach

Interpretive description was chosen as the methodological approach for this research as it offered the researcher the use of the disciplinary knowledge and context as well as personal experience throughout the inquiry.(94) It allowed me to use my skills as a reflective practitioner and my experience in practice to reach a greater depth of inquiry. I attempted to be cognizant and explicit regarding my position in the research. While at times my position
presented some challenges, it also strengthened the findings of the research and permitted a
richer data collection and analysis.

As a data collection procedure, in-depth interviews offered an opportunity for
participants to share their perspectives and experiences in a free form and identify what was
important to them, as opposed to a scripted survey or questionnaire. An in-depth interview in
and of itself is a reflective process, demanding reflection on the part of the participant. The
varying degree to which participants were able to reflect on the deeper meaning of their
practice appeared to be dependent on the attributes of the professional rather than the length
of time in practice. It is possible that the interviews may have been heuristic in allowing
therapists to consider the challenges to their work while also providing recognition of its
importance. However there are some inherent limitations in interviews; these include filtering
on behalf of the participants with regards to what information they shared and the range of
abilities of people to be articulate and perceptive. (153) During this research, there was
enormous variation in the length of responses to questions and the depth of insight provided.
It should be noted that the length of interview could not be equated with the depth of
perception or insight into practice. Some, but not all, new graduates provided relatively short
and shallow answers during interviews. This may be because they had little experience to
draw upon when answering questions. This was also a finding of a study of new graduate
OTs in Australia. (113, 122) Equally, some participants found it difficult to reflect on their
practice either because they had no reference to another experience, urban or rural, and so
their responses may have been more reflective of the work setting than of the rural context,
or they may not have had much opportunity to be reflective about these features of their
practice.

The outcomes of interpretive description research have both practical and theoretical
applicability and translate into policy and practice easily. I have engaged in a number of
knowledge exchange activities in the final stages of this research project which the
methodology readily permits (90) and this application to practice has been well received by
both rural OTs and PTs and decision makers. Further knowledge exchange activities
targeted at professional practice and health authorities are feasible through this applied,
practical methodological approach.

Researcher Reflections

As this was my first experience with in-depth interviewing for research purposes, the
learning curve was steep. Eliciting deeper meanings of an experience or perception through
reflective questioning and clarification requires practice and skill on behalf of the interviewer including how to avoid asking leading questions or divulge opinions. The interview guide was scripted with open ended questions; however at times the flow of the interview resulted in questions being reworded with less clarity.

I believe that my inexperience as a researcher was offset by my experience as a therapist. Having worked as a colleague with some of the participants, they conveyed trust in me through sharing their perspectives and experiences. I was aware that this also raised the expectation of the research and its outcome. It was evident that during some of the interviews, participants did not restrict my position to that of a researcher. On a few occasions they looked to me for reassurance regarding a clinical scenario or interjected comments that only had meaning because I knew the players. Many of them explicitly stated their expectation of me or of the research. They asked me to record certain points or provided directive comments about what I needed to do with the research. In and of itself this research study met one such expectation by recognizing their practice. I was aware that some participants may have perceived this research as a means to solve their clinical problems and find solutions to their practice issues. During the interviews, I aimed towards the role that permitted me to be a listener and to communicate that it was my responsibility as a researcher to record the viewpoints of all participants. Throughout this journey I attempted to be reflexive on my position in the research and the ways in which the researcher-participant reciprocity impacted the findings.

**Reflexive Accounting**

In discussing some of the features of interpretive description, Thorne discusses the additional obligation that researchers in the health sciences have to ensure that their research is credible.(90) This stems from considering that findings, and possibly new knowledge, may find its way into the health care setting and may be adopted into practice. As a result, Thorne suggests that researchers enhance the credibility of qualitative research and demonstrate a form of “reflexive accounting” (154) of the measures taken to ensure the validity of the conclusions.(90) The criteria include moral defensibility, disciplinary relevance and contextual awareness of the research.(90) I believe that in the opening chapter of this thesis I made a strong case for why this research was necessary, its aim in helping to reduce health disparities and the final chapter outlines the ways in which this research can be used. From the knowledge exchange activities I have engaged in, including presenting my interpretations to participants, this research has relevance to the profession, beyond just
those working in rural areas. Finally, just as a significant finding of this research was the contextual awareness by participants of their practice, I believe that this research and the write up document also demonstrate an acute awareness of the perspectives and influences that form the context of this research.

**Limitations of this Research**

It is proposed that rigour in qualitative research analysis can be enhanced by multiple readings and analysis being conducted by more than one person. One potential limitations of this research may be that as a PT and the only researcher conducting analysis, I may not have been sensitive to some of the perceptions and experiences of OTs. Conducting the analysis with an OT with experience in rural practice would offer additional perspectives and serve to strengthen the research results.

Concurrent analysis is a feature of interpretive description, however is a complex process. As the data collection period was relatively short, the timeframe did not allow for adequate reflection between interviews to inform subsequent interviews and gave little opportunity to seek greater clarification or depth on some of the concepts as they materialized. Concurrent analysis may have enhanced the data collection method and subsequently the findings, however as this was not logistically feasible, I endeavoured to be fully conscious of the interpretive process as I participated in interviews.

An additional evaluative criteria used in qualitative research is the transferability of research. This refers to the extent to which the findings of the research can be transferred to other settings or groups. Many of the insights illuminated by this research are specific to rehabilitation professionals working in their rural context; however some of the challenges faced by these participants, in particular access to continuing professional development, may be applicable to other professionals working in rural areas. A limitation of the transferability of the research may be the participant sample that was used. Participants were purposefully selected from a variety of work place settings and from private and public practice, however all worked in the geographical region of a single health authority. Consequently the findings are limited to this particular social, economic, cultural, political as well as rural context.

**Conclusion**

In conclusion, this chapter presented the interpretations of the findings of this research in order to arrive at an emerging understanding of rural rehabilitation practice.
Through exploring each of the interpretive categories derived from the analysis (rural context, general practice as a specialty, stretching roles, participation and partnership), the primary health care context and the education needs and challenges, and relating these findings and interpretations to the literature, this emerging understanding offers a framework to consider the complexity that OTs and PTs negotiate as part of rural practice. This chapter concluded with some reflections on the research process and the limitations of this research. The next and final chapter will present my conclusions, the implications of this research, some recommendations for education, practice and policy and directions for future research.
Chapter 5 The Viewpoints: Conclusions and Recommendations from Research on Rural Rehabilitation Practice

Overview

This research study sought to understand the practice of rehabilitation professionals working in rural and remote areas with the aim of contributing to redressing the health disparities of rural residents. In this final chapter, I draw together the conclusions of this research study and share the viewpoints that I reached through this research journey. I conclude this thesis by presenting what I believe rural rehabilitation practice to be, offer some of the implications of this research, provide recommendations for education, practice and policy and finally, I offer some directions for future research.

Summary of Findings

The objective of this study was to construct an emerging understanding of rural rehabilitation practice within the context of the larger health care system through eliciting the perspectives of OTs and PTs working in rural and remote BC. From my analysis and interpretation of the perspectives and experiences shared by participants, I have constructed an understanding of rural rehabilitation practice and the dimensions that make it distinct from rehabilitation practice in an urban setting. Rural rehabilitation practice as I have come to understand it is characterized by: 1.) an understanding the influence of rurality on the health of rural residents; 2.) the depth of clinical knowledge and breadth of skills necessary to provide services and meet diverse needs, and 3.) how OTs and PTs adapt professional practice and clinical skills to provide patient-centred and community oriented to a rural context.

Rural rehabilitation practice is understood to be significantly influenced by the concept of rurality. Rurality is important for considering the ways in which the determinants of health, in particular the socio-cultural and economic factors, intersect with geography, affect access to health care services and resources and shape the health of rural residents. As a result, OTs and PTs practicing in rural areas are charged with understanding rurality and addressing these determinants of health and adapting their practice to suit this context. The diversity of needs requires a greater depth of knowledge due to the limited ability to refer patients to other health care professionals who specialize, and a breadth of skills including advanced
clinical assessment skills to detect serious pathologies, essential due to the limited access to health care services and resources. Practitioners must also have the skills to adapt their practice to a rural context. This approach to practice requires OTs and PTs to be resourceful and reflective of professional practice, to stretch their roles and to participate in patients’ lives and the community. Through this research study it became apparent that this approach to practice results in a number of challenges to the confidence and competency of OTs and PTs, and to their educational preparation and professional support. However, this comprehensive approach to practice reinforces the suitability of OTs and PTs in providing health care services in rural areas within a primary health care approach, as it aligns with the socially oriented model of care.

Sandelowski believes that all health care research should advance practice and policy and ought to be presented in a form that is accessible and useable.(156) One of the features of the methodological approach of interpretive description is that the research process is conducted with applicability to practice at the forefront.(89) The new knowledge generated from this research has implications for education, practice and policy. Through informing each of these sectors with an emerging understanding of rural rehabilitation practice, this research may redress some of the health disparities in rural communities.

**Recommendations for Education**

Through examining the professional practice of OTs and PTs, this research arrived at a number of conclusions that have implications for the professional training of OTs and PTs as well as the continuing education of professionals.

**Introducing Curricular Content that Addresses the Rural Context in Professional Training Programs**

This emerging understanding of rural practice emphasizes the importance of addressing rural content in Occupational Therapy and Physical Therapy professional training programs. Rural content is composed of the skills and knowledge considered essential to an understanding of the rural context and the development of skills to adapt practice to it. Several content areas related to rural practice emerged as key in health professional education. These include: advanced assessment skills to compensate for the limited access patients have to health care services and resources, delivering culturally safe service and addressing some of the determinants of health and social issues, and being a reflective, resourceful, creative problem solver and self-directed practitioner. Participants reinforced the
importance of practice education placements in rural communities in offering students the opportunity to experience providing services through the continuum of care, interprofessional education and to understand a rural context. The recently released study by Wielandt and Taylor of occupational therapy practice in rural Alberta and Saskatchewan also noted the importance of rural placements and interprofessional skill development in the educational preparation of OTs for rural practice.(44) The knowledge gained through this research of the influence of rurality on the practice of OTs and PTs working in rural areas provides education programs valuable information regarding the preparatory skills and knowledge needed by rural practitioners.

Education programs also have a responsibility to prepare future health professionals for existing and emerging health service delivery models.(55, 157) Primary health care as an approach to care may place less emphasis on restorative rehabilitation and require rehabilitation professionals to have greater skills is early detection, population health promotion, illness prevention and interprofessional collaboration. It is recommended that training programs place greater emphasis on the skill and knowledge needed for working within PHC and collaborative practice.

According to some of the participants interviewed in this study, there appears to be a gap between training and practice with regards to the knowledge needed to place practice in context. This perceived disconnection between professional education and clinical practice was also noted by Roskell et al.(158) By identifying the characteristics, barriers and facilitators of the professional practice of rehabilitation therapists in rural regions, this emerging understanding of rural practice may help to close this gap. Participants engaged in this study offered a comprehensive list of the knowledge, skills and attributes required for practice and this offers educators guidance in program planning. Ultimately, reducing the gap between training and practice and enhancing the educational support for health care providers has the potential to enhance the health of rural residents.

**Supporting Rural Practitioners through a Rural Education Pathway**

Accessing face-to-face continuing professional development (CPD) opportunities was identified as a significant barrier to rural practice. Participants noted that the additional costs and challenges incurred by rural therapists should be given consideration by organizations, educational programs and professional associations. Suggestions for mitigating this challenge include discounts on CPD fees for rural therapists, compensation for costs
associated with CPD, increasing the number of courses offered in rural communities and maintaining the number and variety of visiting specialists to rural communities.

This research study reinforces the need for a comprehensive education support pathway for rural practitioners. This pathway would be designed to provide educational support to 1.) students from rural communities through their professional training (as professionals of rural origin are more likely to return to rural communities), 2.) all students to participate in rural placements and 3.) OTs and PTs in rural practice to attend continuing education opportunities in urban areas.(119) An education pathway would offer supports through employers, professional organizations and educational institutions in the form of educational modules and tool kits on rural health, and provide practice support using information technology. Education pathways may include financial assistance and may also provide incentives, discounts, and organizational/administrative support. A similar rural education pipeline exists for medical training in Canada which is designed to attract and keep physicians in rural communities,(17, 159) and assists individuals from rural communities to attend medical school, requires all students to complete rural rotations and then provides ongoing support through continuing professional development for physicians working in rural communities.

Education and professional practice are interdependent and D’Amour and Oanadason suggest that if system wide changes are desired then both should be examined and addressed together.(160) This research provides valuable information that can inform education and in turn influence practice. Participants in this study provided a number of recommendations for professional practice which are discussed below.

Recommendations for Practice

Recognition of Rural Rehabilitation Practice as a Specialty

Participants in this study overwhelmingly sought greater recognition for the distinctiveness of their practice from colleagues and other health care professionals in urban areas, educational institutions and professional associations. Despite their practice being general, participants also considered their practice as a specialty due to the distinct features of practicing in the rural context.

Increased Support for Rural Practice from Professional Associations

From participant interviews it became clear that educational and professional support from professional associations can be an immense benefit to rural practitioners. While the
needs of each profession are distinct, contributions such as education, practice support and mentorship facilitated by professional associations were seen as added value. The Australian Physiotherapy Association Position Statement on PTs working in rural and remote areas provides recognition of the requirements of PTs in a rural role and the support necessary. (114) This position statement offers four key declarations: 1.) that appropriate professional development be made available and accessible to practitioners to assist them in developing and maintaining their skills, 2.) that practitioners be recognized with incentive programs, 3.) that mentoring is essential for rural practitioners, and 4.) a specialization process would assist the recognition of advanced level of skills required for rural practice. (114) Findings from this research study align well with these declarations. The provincial and national professional associations for occupational therapy and physical therapy should consider the practice supports needed by their rural membership.

**Formal Mentoring Program for Rural Practitioners**

Mentoring was seen by all participants as critical to assisting new graduates but it was also seen as important to the more senior professionals in rural practice. The workforce of today is aging and mentoring would harness the wealth of expertise and experience that exists in the profession and enable it to be shared with other members of the profession. Study participants acknowledged the challenges of professional competency in light of the challenges of accessing continuing professional development, the breadth of their scope of practice and working in isolation. Mentorship could also assist rural practitioners to maintain their competency through ongoing learning activities. Greater support is needed from educational partners, and professional organizations in formalizing a mentorship program.

**Implementation of Rural Practice Leaders**

Practice leaders within rural areas could act as resources for OTs and PTs in specific areas of practice. This would allow rural therapists to develop a focus, in addition to their general practice, and would provide much needed professional development opportunities. Mentors and practice leaders in rural areas could easily make use of technology. These roles should be implemented through collaborations between educational institutions, professional organizations and health authorities.

**Recommendations for Policy and Health Care Planning**

Our emerging understanding of rural practice informed by this study has implications for organizations with respect to health policy and may assist planners to make decisions
regarding resource allocation and health human resource planning informed by evidence. Participants frequently made reference to the increasing demand for rehabilitation services and the shortage of human health resources in rural areas. However, recognizing the challenges of recruitment and retention, many participants sought assistance from their organizations in the form of innovative service delivery models and strategies that could increase efficiencies.

**Changing Policy to Allow Practitioners to Practice to the Full Extent of their Scope of Practice**

Currently publicly funded health facilities require patients to obtain a referral prior to rehabilitation service. Eliminating this step would increase efficiencies and also recognize the skills of OTs and PTs to perform primary care assessments, and in turn, may serve to increase participants’ work satisfaction. The findings of this research support a change in health care policy to allow all rehabilitation professionals to be primary care practitioners and work with them to facilitate full use of their professional training.

**Increased Role Understanding amongst Health Care Professionals**

Equally important, effectively working to the full extent of scope of practice requires an understanding by management as well as by all health care professionals of roles, responsibilities and competencies of each other. Another example provided by participants was the lack of rehabilitation services in the funding model for PHC despite evidence that shows that primary health care offers a cost effective and comprehensive approach to the provision of health care.(161)

Participants also emphasized the importance of continuity of leadership as fundamental to implementing changes to system level processes designed to improve the practice and provision of services. Continuity of leadership has implications for human health resources as increasing the support within an organization has been found to have benefits for recruitment and retention.(112) While this study purposely did not seek analysis of the issues of recruitment and retention, the findings do offer insight into the practice of OTs and PTs in rural areas, including the skills and knowledge necessary for practice. This provides valuable information for both employers and potential employees. Employers can use this information to provide the supports necessary for employees and potential employees may be better informed as to the challenges and rewards of rural practice.
Closing the Gap between Public and Private Rehabilitation Services in PHC

Another finding that has implications for policy and planning includes the gap that exists between public and private rehabilitation services in rural communities. This research highlighted the lack of involvement of rehabilitation professionals in rural PHC and the challenges that private practitioners face in providing these services when they are well equipped to do so. Given the shortage of resources generally, there are enormous gains to be made by increasing partnerships among service providers with careful consideration of the best use of different sets of expertise. Establishing a funding model that includes private rehabilitation professionals would help reduce this gap and maximize the services available to residents in rural communities.

In summary this research has implications for education, practice and policy and provides a number of recommendations for each of these sectors. Many of these recommendations centre on increasing awareness of the challenges associated with practicing as a generalist within the complexities of a rural context. The comprehensive approach to providing services presents challenges to individuals in maintaining their competency, to education programs preparing students for professional practice and to employers situating professionals in their most effective roles. However additional research is needed to assist moving this emerging understanding forward. This is discussed below.

Directions for Future Research

This study has highlighted the importance of considering the geographical, social, cultural and economic context of rural communities in the design, planning and delivery of rehabilitation services. Implementing best practices in research requires accounting for the way the evidence is influenced by the specificity of the rural context, including resource availability. Participants noted that clinical practice guidelines and practice protocols need to be operationalized in the specific context of rural practice. Much of health research, in particular clinical research, occurs in urban areas or excludes rural residents from trials which makes translation of this research problematic.(162) It is essential that more research is done involving rural populations and that research outcomes are considered for their suitability for rural health issues. Specifically, there is a need for more research on effective rural health service delivery models and their effectiveness relative to changing health outcomes.(35)

This study provided insights into the practice of a group of OTs and PTs working in rural and northern BC. To facilitate a broader understanding of rural practice, additional
research is needed to examine the perspectives and experiences of therapists working in a different health authority region. This would offer a rich perspective on the influence of differing contexts on practice. Additionally, this research could be extended to consider the patient perspective of rehabilitation practice and services, potentially looking at utilization, satisfaction, and health outcomes.

The findings from this study indicate that there is both a poor understanding by OTs and PTs as to what PHC is and a lack of involvement in PHC. In order to better understand the ways in which rehabilitation professionals can be integrated into PHC in rural areas, there needs to be more research into PHC models in rural areas and potential roles for OTs and PTs. However, there continues to be a disconnect between the call for primary health care renewal and support for primary health care research.(163)

The concept of a rural health education pathway and practice network to support OTs and PTs in rural areas requires further research. This research identified some of the educational and professional supports that are necessary for rural OTs and PTs however determining the points along the education and professional development continuum where support is needed and from whom, needs further exploration.

Finally as professions wrestle with increasing specialization, rural rehabilitation practice will need to find a place along the spectrum of generalist, specialist, advanced practitioner and extended scope of practitioner. While a few PT participants felt that extending their scope of practice would assist their rural practice and increase efficiencies in the system, more investigations are needed to determine which model(124) would best serve the health care professional, the profession, the political environment and ultimately, the patient. It is also imperative that the optimal means to implement and sustain such a model be regarded in the current and emerging health care system.

**Conclusions**

Through constructing an understanding of rural rehabilitation practice from the perspectives of OTs and PTs practicing in rural areas, insight was gained into the ways in which the rural context and rurality influenced the practice of OTs and PTs in rural northern BC. This study builds upon the small but growing body of literature regarding rehabilitation practice and rehabilitation professionals in rural areas. The findings echo the message of other rural health care research concluding that rural rehabilitation professionals require greater educational and professional support such as mentoring, access to resources,
including health human resources for collaboration, and locum provision or back-fill in order to maintain their competence, energy and passion for their practice. This study adds a different perspective and a comprehensive picture of rehabilitation practice in rural areas through combining the perspectives and experiences of OTs and PTs to look at rehabilitation practice as a whole. The study illustrated the regularity with which OTs and PTs must stretch their roles to compensate for rehabilitation workforce shortages. It also touched on the overlap in the practice of OTs and PTs in the face of shortages. While this study did not create a profile of therapists’ practice, it is possible to get an overview of service delivery in this rural area and possible gaps in care. The inclusion of both private and public sector in this research adds greater perspective on system wide issues and the potential for improvement.

This research provides a greater understanding of rurality and its impact on the delivery of rehabilitation services. The findings also offer new knowledge regarding the skills and knowledge distinct to rural rehabilitation practice and the ways in which practice is enacted within rural contexts. The increased understanding of rural rehabilitation practice stimulated by this research has the potential to inform the curricular content and design of professional training programs as well as human health resource planning. Through influencing education and health services planning, this research has the potential to change the care that is delivered, increase access to rehabilitation services in rural communities and ultimately, redress the important health disparities of rural residents in BC.
Bibliography


54. Baum F, editor. The social determinants of health in rural Australia. 10th Annual Rural Health Conference; 2009; Cairns, QLD, Australia: National Rural Health Alliance.


68. Humphreys JS, Wakerman J. Primary health care in rural and remote Australia: achieving equity of access and outcomes through national reform.2009.


90. Thorne S. Interpretive Description. Walnut Creek, California: Left Coast Press; 2008.


159. Curran V, Bornstein S, Jong M, Fleet L. Strengthening the medical workforce in rural Canada: the roles of rural / northern medical education St John's, NFLD Memorial University of Newfoundland 2004.


Appendix A Letter of Invitation to Participate in Research

THE UNIVERSITY OF BRITISH COLUMBIA
Faculty of Medicine - Dep’t of Physical Therapy

Invitation to Participate in Research

Title of Project: Understanding Rehabilitation Practice in Rural and Remote British Columbia

Principal Investigator: Robin Roots, PT, MSc candidate
Department of Physical Therapy,
University of British Columbia

Co-Investigators: Linda Li, PT, PhD (Thesis Supervisor)
Lesley Bainbridge, PT, PhD (Thesis committee member)
Helen Brown, RN, PhD (Thesis committee member)

Dear Occupational Therapist or Physical Therapist,

First, thank you for taking the time to read this letter inviting you to participate in research.

I am a physical therapist and a graduate student completing my Master’s of Science at the University of British Columbia. As an academic requirement of the program, I am conducting a qualitative research study to better understand the barriers and facilitators to rehabilitation practice in rural and remote regions of British Columbia. The aim of the research is to inform the development of an educational framework to assist the preparation of occupational therapists (OTs) and physical therapists (PTs) to work in rural practice.

I am writing to ask whether you would be willing to participate in this study.
I wish to hear from OTs and PTs working in rural and remote British Columbia what their experience is with regards to practicing in rural areas and their perception of the differences between rural and urban practice. I am interested in what skills they feel are important to rural practice, what barriers they encounter and the strategies they employ to meet the challenges.

Taking part in the study would involve one individual interview of between 45 and 90 minutes conducted by me (Robin Roots, principal investigator of this research). It is preferable that the interview be conducted face to face and I am happy to travel to your worksite, home or a location of your choice, at a scheduled convenient time. Interviews will be held during the months of February and March 2010 across northern BC.

If you agree to be in the study, meet the inclusion criteria and consent to participation, you will be asked during the interview to respond to questions about your experience working as a rehabilitation professional in a rural setting. You may refuse to answer any questions and you may withdraw data and/or your participation in the study at any time, without any repercussions or harm. Every effort will be made to protect your identity and ensure confidentiality of the information you provide and your participation in this research. If you agree, you will be contacted after the preliminary data analysis and asked to review the interpretations of the research findings and will have the opportunity to provide additional comments and feedback to the researcher.

Participation in the study is voluntary. There are no known risks associated with your participation in this research. The expected benefits of your participation are increased understanding of the barriers and challenges faced by therapists, which will be valuable to educators in designing curriculum that reflects the realities of rural practice and to health care policy makers regarding recruitment and retention of rehabilitation professionals to underserved rural communities.

This research study has received approval from the University of British Columbia’s Behavioural Research Ethics Board and from the Northern Health Authority’s Research Review Committee.

If you are interested in being a study participant or would like more details about any aspect of the study, please contact Robin directly. I greatly appreciate your time and your consideration to be involved in this research study.

Warm regards, Robin Roots
Title of Project:
Understanding Rehabilitation Practice in Rural and Remote British Columbia

Principal Investigator: Robin Roots, PT, MSc candidate
Department of Physical Therapy,
University of British Columbia

Co-Investigators: Linda Li, PT, PhD (Thesis Supervisor)
Lesley Bainbridge, PT, PhD (Thesis committee member)
Helen Brown, RN, PhD (Thesis committee member)

Invitation to Participate:
As an Occupational Therapist or Physical Therapist working in a rural community in British Columbia, you are invited to take part in a research study being conducted by Robin Roots from the University of British Columbia.

Please read this consent form carefully. Ask as many questions as you like before you decide whether you wish to participate in this research study. You are free to ask questions at any time before, during or after your participation in this research.
Purpose:

The objective of this research project is to construct an understanding of the barriers and facilitators to rehabilitation practice from the perspectives of occupational therapists (OTs) and physical therapists (PTs) working in rural and remote British Columbia. The aim of the research is to inform the development of an educational framework that will prepare OTs and PTs to work in rural practice.

Study Procedures:

The study involves one individual interview of approximately 45 to 90 minutes. The interview will be conducted by Robin Roots (principal investigator). During the interview you will be asked about your experiences working as a rehabilitation professional in a rural community. Specifically, you will be asked to identify skills and knowledge that you feel are important and unique to working in a rural community, to describe your understanding of primary health care and your experience working on a primary health care team. You will also be asked to describe the barriers you have encountered to practicing in a rural community and what strategies assist you in overcoming these challenges. At the end of the interview, the interviewer will summarize the content and give you the opportunity to make any additional comments.

The interview will take place in person at a location that is convenient for you and at a mutually agreeable pre-scheduled time outside of work hours.

With your permission, the interviews will be audiotape recorded and later transcribed. You can ask for the tape recorder to be turned off at any time, or let the interviewer know that you do not wish to be recorded.

After all the research data has been collected and analyzed, if you agree to further participation, you will be re-contacted and asked to review the preliminary interpretations of the findings and provide comment. The feedback will occur by telephone at a scheduled time that is convenient for you.

It is anticipated that the total amount of time taken to participate in this study will be between 45 and 90 minutes, including interview and follow-up.
Your participation is entirely voluntary. You may refuse to participate or decide to withdraw at anytime without consequence. If you chose to withdraw from the study, your data will be removed from the final transcription. At some future date, the data may be revisited by the researchers involved in the study to gain further understanding or to evaluate the outcome of this research. You are given the opportunity on this consent form to select whether you are willing to be re-contacted for your informed consent about subsequent analysis of your interview, or to say that you do not wish your interview to be used for analysis in a future study.

Confidentiality:

With your permission, the interviews will be audio-tape recorded and later transcribed. Your identity will remain completely confidential. All documents will identified only by a code number. Short anonymous extracts of your interview may be used in research papers and presentations, but your name, those you mention during the interview, and any other identifying features such as location of work or community, will never be used. All tapes, transcripts and consent forms will be identified by code. Your name and identifying details will remain confidential. Only the researcher will know the associated participant and code. Any data records that are kept on a computer hard disk will be securely protected through a confidential password system. The only people who will have access to the tapes and transcripts will be the research team and the transcriptionist.

The information gained from this research will be written up in publications and / or reports and these will be shared with other health care providers, health care decision makers, educators and funding agencies. You may request a copy of your interview transcript. As part of the dissemination of research findings, you will receive a written summary of the research findings when the research project has been completed.

When the preliminary analysis is complete, the principal investigator and/or co-investigators may conduct further analysis in order to compare the findings of this study with the findings of other similar studies. Thus the transcripts, field notes, and other research documents will not be destroyed. With your consent, they will be stored by the researchers in a locked filing cabinet in a secure location and may with your permission be used for future analysis. If you do not give your permission for future analysis, the research documents will be kept in a locked cabinet for five years in line with UBC policy requirements, and then destroyed.
Risk and Potential Benefits:

There are no anticipated risks related to your involvement in this research. It is possible that some topics discussed may raise some issues that you are uncomfortable with but you need only answer questions or express your views when you wish to do so.

There may be some benefits to you as a result of participating in this research, such as discussing your experiences and perceptions will allow you to reflect on your practice. The study may also result in benefits to your work. This research will increase the profile of rehabilitation practice in rural communities and recognize the unique skills and knowledge required of rural practice. Findings of this research have the potential to influence recruitment and retention strategies and allocation of health care resources and thereby improve the sustainability of rehabilitation services in rural communities. This research may also benefit future students through contributing to the development of an educational framework that reflects the reality of rural practice.

There is no payment related to your participation in this research. Any parking expenses incurred while attending the interview will be reimbursed directly by the researcher.

Contact:

It is very important that your participation is entirely voluntary and based on a clear understanding of the research process. If you have any questions or concerns you may contact Robin Roots (principal investigator). You may also contact Linda Li (co-investigator and Robin’s thesis supervisor) to request additional information.

Further, if you have concerns about your rights or treatment as a research subject, or would like to register a complaint, you may contact the UBC Office of Research Services.

Consent:

Your signature below indicates that:

- The study has been explained to me and any questions have been answered to my satisfaction.
- I understand that my participation is entirely voluntary and that I can refuse to participate in this research or decide to withdraw at any time without consequence.
- I understand this consent form and agree to participate in one interview.
Please check one of the boxes below:

☐ I agree to be re-contacted to review the preliminary analysis of this research in approximately 3 months.

☐ I do not wish to be re-contacted to review the preliminary analysis of this research in approximately 3 months.

Please check one of the boxes below:

☐ I agree to be re-contacted to ask my permission for my interview to be used for analysis in a future research project.

☐ I do not wish my interview to be used for future analyses.

☐ I have been provided with a signed copy of the consent form to keep for my records.

____________________  ____________________  ________________
Participant Name    Participant Signature    Date
Appendix C Interview Guide

Understanding Rural Rehabilitation Practice: Perceptions from Occupational Therapists and Physical Therapists Working in Rural and Remote British Columbia

Interview #:

Pseudonym:

Date: Time of the Interview:

Description of Setting:

Welcome and Thank you in advance for participating in this research project. The purpose of this qualitative research is to expand the understanding of rehabilitation practice in rural communities and create knowledge regarding the influence of rural context on rehab practice. Through this interview today, I hope you will share your perspectives and your experiences with me to assist in enriching our understanding of what rural rehabilitation practice is all about, the barriers and facilitators, with a view to guiding the preparation of rehab professionals entering rural practice and informing policy decision makers of the challenges faced by therapists.

Guidelines for Interview: You may stop the interview at anytime or you may refuse to answer any question without need for explanation. You may also withdraw data at any time by asking me to delete or erase anything that you are uncomfortable with. I will also be making notes from time to time during the interview to help my poor memory. I will remind you that as per the consent form, the interview will be recorded on this digital recorder, so that it can be transcribed. Your interview will be identified by a number code and I will ask you for a pseudonym to help the transcription process. Only I have knowledge as to your true identity and the code on the transcription. I will ask you to answer some demographic data at the beginning of the interview but it will in no way be linked to your answers or responses.

Do you have any questions or concerns regarding the interview or the recording procedure?
I will now turn the tape recorder on and test it.

**Participant Background:**

I’d like to start with the fun part. I would like you to choose a pseudonym just for the purposes of the transcript:

**Demographic Questions:**

- What year did you graduate from OT or PT school? How long have you been in practice?
- How long have you worked in a rural area? population less than 10,000; population 10,000 to 20,000
- Are you a sole practitioner where you work now? Is your current position sole charge?
- Did you grow up in a rural area Y or N; if Y then a population less than 10,000 or population of 10,000 to 20,000?
- How do you define rural? What are the characteristics that make up rural for you?

*Check tape Recorder*

**How do OTs and PTs view rural practice?**

- Given the definition of rural that you have just given me: Do you see your practice as a rehab professional in a rural community being different from a practice in an urban setting? How?
- To illustrate this point, please describe how you think the rural context shapes the way in which you delivery rehabilitation services to a patient with a chronic condition (such as arthritis) who lives in this rural community?
- Could you give me an example of a chronic condition that you see frequently and give me an overview of how being in a rural location changes the way in which you provide services- in a way that helps me to understand the rural issues?
- Illustrate how the rural context shapes your practice?
Please use examples whenever you like to illustrate your points:

What skills and knowledge do they perceive as being unique to rural practice?
- What are the skills and knowledge you see as being unique to working in a rural and remote area?
- Are there additional skills and competencies that are required of PTs or OTs working in rural/remote practice as compared to those in an urban area?

Educational Preparation:
- What do you think is the best way to acquire these additional skills?
- Did your professional training support or prepare you for your role as a therapist in a rural community?
- What educational support would have facilitated rural rehabilitation practice for you?
- If a Physiotherapy and/or Occupational Therapy program is established at UNBC, is there any material that you think they should provide that is specific to rural practice?
- What professional development support would you like to have as a rural practitioner?

How do OTs and PTs understand Primary Health Care?
- What is your understanding of Primary Health Care?
- One of the key principles of primary health care is interprofessional practice. Are you involved in a primary health care team?
- If so, what role does rehab play on that team?
- How do you think your skills and/or knowledge could be better utilized towards improving patient outcomes? What changes would need to be made to the system/organization?
- One of the barriers that has been identified is the current payment structure- what could improve this?
– What barriers do they encounter and what strategies do they employ to meet these challenges?
– What are the biggest barriers you face in rural practice as an OT or PT?
– How do you address these challenges?
– What advice would you have for a physiotherapists/occupational therapist entering rural practice?

I just have two more questions. However, before that, Is there anything that we did not cover that you would like to share or anything that you would like to elaborate on?

What do you hope that I will learn from this research?
How do you think I could use what you have shared with me most effectively?

Closing:
Thank you for participating in this research project and for all your thoughtful responses to my questions. I’d like to reassure you that your responses will be kept strictly confidential and anonymous. With your permission, I will contact you with the preliminary analysis and interpretations and ask for your feedback. If you have any questions or further reflections in the future, you are welcome to contact me.

Thanks again. This ends the interview.
Appendix D Returning to the Source

This letter was sent to all participants in September 2010 along with the link to the webcast.

Hello (addressed to individually participants),

I hope this finds you well.

You are likely too busy to even remember the research project I engaged you in this spring, but if you haven’t forgotten, you are probably wondering whatever happened to it!!

Well here I am to bother you again! I am now offering you the results of the analysis and asking you to provide me with feedback and share your thoughts of my interpretations. While it has always been my intention to share my research with you when I had completed it, a recent request from the Northern Health Authority to present my “findings” has sped things up and prompted me to contact you and ask for feedback now. They have asked me to discuss some of the challenges that rehab professionals in rural areas encounter as they relate to program planning and implementation. I consider this invitation from NH an opportunity to bring your voices and perspectives to the table, however I feel that it is important that you hear the results of my research from me first and that you have the chance to comment prior to this presentation.

I would dearly love to escape the city and come north to deliver this presentation in person. However, I must resort to technology. You will receive an email with a link to a presentation that I have created especially for you. I am not very skilled in front of a camera so please excuse the rehearsed nature of it.

After viewing and hearing the presentation, I would greatly appreciate it if you could share your feedback and comments with me. I would like you to challenge the assumptions and interpretations that I have made. I would like you to tell me if my interpretations resonate with you. I invite you to tell me what I missed and what you think I should know!

Finally, considering that I will present some these findings to the Health Authority, I would like you to tell me what you think is the most important message I need to convey to them regarding your practice as rehabilitation professionals in rural areas.
You can email me or phone me. It would be most helpful if I could hear back from you before October 6th.

Thank you so much once again- for both sharing your insight and for the time and effort you have given to participating in this research. I will send you a full report when I have completed my thesis!

All the best,

Robin Roots