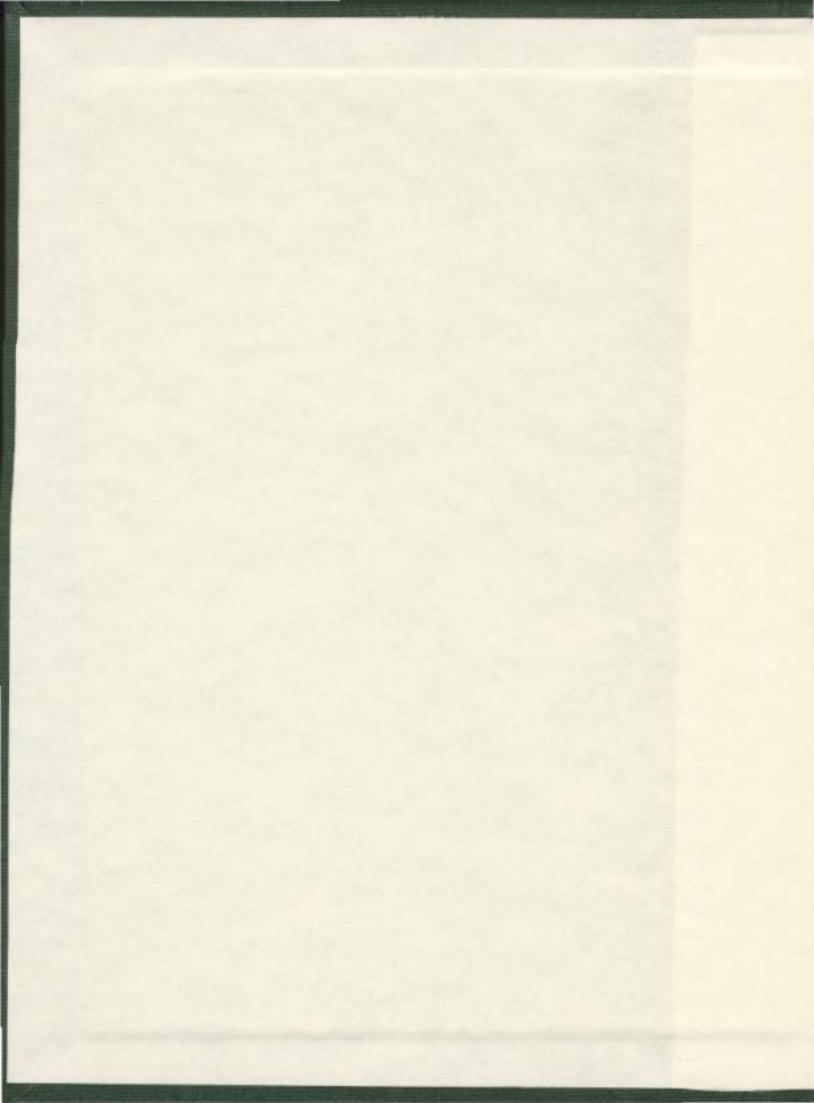TOWARDS EFFECTIVE TEAMWORK:
AN EXAMINATION OF THE PERCEPTIONS OF
INTERPROFESSIONAL TEAMWORK AND
CONTINUING EDUCATION NEEDS AMONGST
PRIMARY HEALTH CARE PROVIDERS
IN RURAL NEWFOUNDLAND

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Towards Effective Teamwork: An Examination of the Perceptions of Interprofessional Teamwork and Continuing Education Needs Amongst Primary Health Care Providers in Rural Newfoundland

by

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Abstract

In this thesis, the author will describe a research project that examined the perceptions of rural primary health care providers pertaining to collaborative practice, professional development and continuing education needs. The methodology included analyzing data collected through semi structured interviews with a purposive sample of primary health care team members in the Connaigre Peninsula Primary Health Care Project. As well, secondary data collected by the Provincial Office of Primary Health Care was also utilized. This paper will discuss participant's perceptions of the barriers to collaborative practice in their region including the challenges of the geography of the region, ineffective communication and knowledge deficits related to primary health care teams and interprofessional practice. It will also discuss recommendations to overcome these barriers and enhance interprofessional teamwork through continuing education and effective communication technology.

Acknowledgments

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Chapter 1 : Introduction

Introduction

The introductory chapter will discuss the rationale for the study undertaken for

this thesis project. It will describe the political background which makes the study

significant at this time as well as define the purpose of the study and limitations of its

design. It will also provide an overview of how the study will be presented in this paper.

Background of Study

The Canadian health care system is facing the greatest challenges in its history as

federal, provincial and local health authorities grapple with solutions to address the

complex needs of today's population. In Newfoundland and Labrador, key health care

issues are complicated by higher than national rates of Circulatory Disease, Cancer and

Diabetes, an aging population, out migration of the province's youth and the delivery of

quality services to meet the needs of a predominantly rural population base (Strategic

Social Plan for Newfoundland and Labrador, 2001). Planning for the provision of quality

health care services that are accessible to the population and sustainable in a time of fiscal

restraint has been the recent focus of the Government of Newfoundland and Labrador's

Department of Health and Community Services and has prompted the development of a

strategic health plan for the province.

Healthier Together: A Strategic Health Plan for Newfoundland and Labrador

(2002) outlines goals and objectives to addressing the health needs of the province. The

plan emphasizes primary health care, known as the first contact people have with the health and community services system, as the central focus for the delivery of service. Specifically, the World Health Organization (1998) defines primary health care as "essential health care made accessible at a cost which the country and community can afford, with methods that are practical, scientifically sound and socially acceptable (Moving Forward together, 2002, p v.). The plan speaks to a noted shift from provision of service in large tertiary care centers far away from a patient's home, to care provided by primary care clinicians that are accessible to the people in all regions of the province.

As outlined in the Strategic Health Plan (2002), the Primary Health Team Strategy ensures reasonable access to a core set of primary health services for all citizens of the province regardless of their geographical location, with the central focus being the development of a team based, collaborative approach. The Primary Health Care Advisory Committee report in 2001 identified system disconnection as a significant obstacle to achieving this goal (Healthier Together, 2002, p.4). That is, rather than team based care, clients are provided health services in a fragmented manner in which services may be delivered by multiple providers in parallel with limited integration, especially in prevention and health promotion. Changes to primary health care services are identified in the Strategic Health Plan as the "most significant reform the system will undergo" (p.18). Primary health care is a focal point of the Strategic Health Plan, with the aim being to develop an integrated system which will deliver needed services where people

live including health promotion, screening for disease, diagnosis, treatment, rehabilitation and social programs. The new model will focus on the integration of services of the primary health care team, the physician network and the primary health care network. The plan promotes a team-based, interprofessional approach where physicians, nurses and other health care professionals collaborate in providing service to the population they serve.

Drinka and Clark (2000) defines the interdisciplinary health care team, stating that it " integrates a group of individuals with diverse training and backgrounds who work together as an identified unit or system. Team members consistently collaborate to solve patient problems that are too complex to be solved by one discipline or many disciplines in sequence. Team members determine the team's mission and common goals; work interdependently to define and treat patient problems; and, learn to accept and capitalize on disciplinary differences, differential power and overlapping roles" (p.6). Utilizing the interdisciplinary team approach will enable primary health care teams to work collaboratively to solve the complex health problems of both individual patients as well as groups within the population.

Moving Forward Together : Mobilizing Primary Health Care (2003) identifies health promotion and prevention of illness as key components of primary health care services, calling on teams to adopt a population based, community development and interprofessional approach to health service planning, implementation and evaluation

(p.4). To achieve this end, health care professionals need to enhance knowledge and skills that enable them to work with communities to engage them in health promotion and illness prevention strategies. These strategies must be needs based and reflect sound collaborative assessment of the community's health needs as per the determinants of health.

The Public Health Agency of Canada (2005) describes the Population Health Framework approach which considers the determinants of health as factors both inside and outside the health care system that affect the health of the population including social and economic factors, the physical environment and individual behaviors. Determinants of health include income and social status, social support networks, education and literacy, personal health practices, healthy child development, biology and genetic endowment, gender and health services. These factors must be considered when assessing the health needs of the population within which a primary health care team is working.

Creating working environments in rural areas where continuing education is supported and facilitated is crucial to the continuity of quality primary health care teams. The Information and Communication Technologies (ICT) and Continuing Health Professional Education in Canada Summary Report (2003) identifies a commitment to lifelong learning as one of the distinguishing characteristics of a profession. It notes that this commitment to learning beyond basic pre licensure requirements, known as continuing education, is vital to the health professional, considering the constant

acceleration of change in health sciences information (p.15). Health professionals engage in continuing education to ensure their practice is current, scientifically sound and therefore what is known to be the best practice of their profession.

Moving Forward Together (2003) discusses supports needed for successful implementation of primary health care programs in the province including education of service providers concerning the principles of primary health care and continuing education to facilitate a best practices direction for care and services. Health care professionals of various disciplines need to be provided with continuing education opportunities to learn new and innovative skills which will enhance the delivery of needed services to the community, reducing the need for patients to travel to distant sites, thus increasing accessability to health care services. In order to practice to the full potential of their respective scope, primary health care team members need educational opportunities to maintain and enhance their skill sets, especially in rural practice. Continuing education is critical to the success of primary health care. Giving consideration to the specific issues associated with meeting the rural practitioner's learning needs, it is important to carefully examine the needs that exist, to define if and by what means they are being addressed and to identify what gaps remain.

Continuing education has been identified as key to ensuring the continuity of service in rural areas of the province. Joining Forces in the Central Region (2003), a project of the Central Regional Strategic Social Plan, was initiated in 2001. This project

brought together representatives of health and educational organizations, the regional

economic zone boards, government agencies and community stakeholders to address the

issues of recruiting and retaining professionals to fill positions in the Central Region. The

project conducted a research study with professionals regarding why they had chosen to

work in the region and why they stay, aiming to identify successful strategies for future

human resource planning. It's recommendations included the themes of partnering to

provide professional training and development opportunities, as well as supporting

organizations to build on existing programs which will help to recruit new people to

positions and retain those who are already employed here. It is pertinent at this time to

continue with the trend that has been initiated within the Central Regional Strategic

Social Plan by conducting research in the Central region of the province to determine the

continuing education needs of health professionals.

To support primary health care renewal in the Canadian health care system,

primary health care pilot projects have been implemented in all provinces and territories.

Projects in Newfoundland and Labrador began in 1997 at Twillingate, Port Aux Basques

and Happy Valley - Goose Bay. Regarding the primary health care service delivery

approach, the Romonov Report stated "there is almost universal agreement that primary

health care offers tremendous potential benefits to Canadians and to the health care

system ... no other initiative holds as much potential for improving health and sustaining

our health care system." (Health Canada, 2005).

Strengthening support to the development of a national primary health care system

has been the recent focus of the Canadian government. On September 11, 2000, First

Ministers agreed that "improvements to primary health care are crucial to the renewal of

health services" (Health Canada, 2003) and highlighted the importance of

interprofessional teams. In response to this agreement, the Government of Canada

established the $800M Primary Health Care Transition Fund (PHCTF). Over a six-year

period (2000-2006), the PHCTF is supporting provinces and territories in their efforts to

reform the primary health care system. Specifically, it provides support for the

transitional costs associated with introducing new approaches to primary health care

delivery. In addition to direct support to individual provinces and territories, the PHCTF

is also supporting various pan-Canadian initiatives to address common barriers and offers

the opportunity for participation by health care system stakeholders. Although the PHCTF

itself is time-limited, the changes which it is supporting are intended to have a lasting and

sustainable impact on the health care system.

In Newfoundland and Labrador, the PHCTF has supported the development of

new projects in rural and urban areas of the province including sites in Bonavista, Bonne

Bay, Grenfell Region, Labrador East, St. John's, Twillingate / New World Island and the

Connaigre Peninsula.

Located on the South Coast of Newfoundland with a population of approximately

5,300, the geography of the catchment area of the Connaigre Peninsula project includes

the provincial economic zone 13, an area of land covering 2,000 square kilometers adjacent to Fortune Bay, Hermitage Bay and Belle Bay, encompassing the communities of Rencontre East in the east and McCallum in the west and the communities of Seal Cove, Hermitage, Gaultois, Harbour Breton, Belleoram, St. Jacques. Mose Ambrose, English Harbour West, Coombs Cove, Boxey and Wreck Cove in between.

Health care services are presently delivered to the citizens of this area under the auspice of the Central West Health Care Corporation and the Central Regional Health and Community Services Board. The Connaigre Peninsula Community Health Center houses institutional and community health services which include acute, long term, respite and palliative care, 24 hour emergency services, diagnostic services and satellite clinics which provide ambulatory care at Mose Ambrose and Hermitage with clinics provided on a weekly basis in Rencontre East, McCallum and Gaultois. Community based services include Public Health and Continuing Care Nursing, Child Youth and Family Services, Youth Corrections, Family Rehabilitative Services and Mental Health.

Figure 1 provides a visual description of the geography of the Connaigre Peninsula.

Figure 1: A Geographical View of the Connaigre Peninsula.

Purpose of Study

The purpose of this study is to examine the perceptions of interprofessional teamwork and continuing education needs of the primary health care providers who practice in the Primary Health Care Project area of the Connaigre Peninsula. The study will add to the research that has been conducted regarding barriers to continuing

education in rural practice and will enable the researcher to make recommendations

regarding approaches for improving continuing education and professional development

for rural practitioners.

Significance of Study

This study is significant at this time as it will provide information to the

Connaigre Peninsula Primary Health Care Project that will help guide decision making

around continuing education initiatives to meet the needs of employees regarding the

successful implementation of an interprofessional approach to team based care. It will

also provide a methodology that may be duplicated by other projects in the province to

address these issues. Finally, the findings will provide baseline data for government,

regional partners and health care organizations to benchmark progress in facilitating

training and development to meet identified needs.

Limitations of Study

This study examines the perceptions of primary health care professionals that

practice in the Connaigre Peninsula Primary Health Care Project area only. This study is

limited to a purposive sample of health care professionals that have been identified as

being members of the primary health care team of direct service providers in the

Connaigre area and who have volunteered to participate. The study is further limited in its

data collection methods, as only a survey and interview process were used to gain insight

into the perceptions of health care providers. No observations were conducted of the

participants in their work environment to examine the current utilization of a

collaborative approach to care.

Overview of Study

A complete description of the process undertaken to complete the study will be

presented in this paper. Chapter one will present the groundwork, outlining the

background, purpose, significance and limitations of the study. Chapter two will present

pertinent literature relating to the importance of collaborative team approaches in

primary health care and challenges to the development of interprofessional teamwork.

The study will also examine literature related to the significance of meeting the

continuing education needs of rural health care professionals. The chapter will then

discuss how this study will add to the existing body of knowledge.

Chapter three will describe the methodology of the study, explaining the semi

structured interview method as well as the survey questionnaire. It will outline the

selection of participants and the data collection procedures. The chapter will also describe

how the data was analyzed utilizing the constant comparison approach and the statistical

program used to analyze secondary quantitative data gathered through the Team

Effectiveness Survey.

Chapter four presents the data gathered in the study and discusses emerging

themes which have been identified in the analysis process. It outlines the perceptions of

the participants as they relate to the research questions including the nature of

collaborative practice in the Connaigre area, ways to improve the level of collaborative

practice, challenges and enablers to meeting these goals and the identification of

continuing education needs. Chapter five summarizes the interpretation of the findings,

discussing implications of the research for practice including team development in the

primary health care project and continuing education initiatives for this population as well

as to further research in this field.

Chapter 2 : Literature Review

Introduction

This chapter will outline the literature related to the benefits of the interprofessional team approach in the primary health care model. It will examine and discuss what the literature has suggested to be critical components of a successful interprofessional team and the process of team development. It will also discuss the role which continuing education plays in the team development process, outline the barriers to professional development in rural settings and the subsequent impact of these issues on the quality of care provided. The chapter will also review research undertaken to assess the continuing education needs of rural health care professionals.

Primary Health Care Model

The importance of the utilization of the interprofessional collaborative team approach in primary health care has been identified as critical to its success. Way, Jones and Busing (2000) define collaborative practice as "an interprofessional process for communication and decision making that enables the separate and shared knowledge and skills of care providers to synergistically influence the client / patient care provided" (p. 3). In the report Primary Health Care Strategy: Report to the Minister of Health and Long Term Care (1999), the Health Services Restructuring Commission (HSRC) identified interprofessional collaboration as one of the five essential features of the primary health care model. The HSRC believes that primary health care is most effectively delivered by

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an interprofessional group of providers who share common goals, contribute in a coordinated manner according to their competencies and skills and respect the functions and distinctive contributions of others (p.12).

Benefits to interprofessional collaboration in primary health care, cited by the HSRC, include an increase in the quality of care provided as consumers receive care from the professional best qualified to meet their needs, identified through the collaboration of team members. Collaboration also ensures that coordination and continuity of care increases for clients and population groups. Collaboration maximizes the skills of health care professionals, encouraging them to practice to their full professional scope. This increases the quality of work life, thus enhancing job satisfaction, a major factor in retention of staff in rural areas. Interprofessional collaboration capitalizes on the skills of all professionals, improving utilization of services in under serviced rural areas. Finally, when all health care professionals are working to their full scope of practice in an interprofessional team, it is more cost effective for the health care system (Primary Healthcare Strategy, 1999).

Interprofessional Team Development

Interprofessional collaboration is an essential element to effective primary health care. In a meta-analysis of eighteen studies of effective collaboration, researchers found the main factors affecting the success of collaborative efforts included mutual respect, understanding and trust, an appropriate cross section of members, open communication,

skilled conveners, and members sharing a stake in the process and outcomes (Amherst H. Wilder Foundation, 2001). Moving Forward Together (2003) identifies the need for team building processes to enable primary health care teams to work together collaboratively, building team trust and developing conflict resolution skills (p. 21).

Way et al.(2000) identify seven essential elements for optimum collaboration including shared responsibility and accountability for outcomes of the patient care plan, coordination of the treatment plan, effective communication among members, cooperation, assertiveness of members to express views to the team, autonomy of members to carry out team goals and mutual trust and respect (p.6). These elements will be facilitated when team members are educated regarding each other's roles and their respective scopes of practice, as well as through the acquisition of skills such as conflict resolution and effective communication.

In their report Interdisciplinary Collaborative Teams in Primary Care, the Pew Health Professions Commission (1995) discusses elements of interprofessional team formation. Team members must learn to identify overlaps in skills, clarifying means of sharing responsibilities rather than drawing rigid boundaries of practice, thus aiming for compatibility rather than conflict. Skills required include conflict resolution, effective communication, as well as the ability to facilitate equal participation, leadership and decision making amongst team members. Comprehensive assessment of the required competencies for health care professionals to work effectively in the primary health care

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model and the subsequent meeting of identified continuing education needs that exist is essential to it's success.

Interprofessional teamwork is influenced by many key factors. The Interdisciplinary Education for Collaborative Patient - Centred Practice Research and Findings Report (2004) discusses literature that identifies the determinants of successful collaboration. These factors present challenges and, in some cases, barriers to successful implementation of interprofessional teams. Barriers include power differences amongst professions whereby lack of equality impedes true interprofessional sharing and communication. The process of professional socialization in the education process hinders the development of true collaborative practice. There is a need for the education system to help students to recognize the values and responsibilities of their own profession while teaching them professional plurality (Glen, 1999). Organizational structure can be a barrier to collaboration. Henneman, Lee and Cohen(1995) found successful collaboration requires a shift from the traditional hierarchical model to a more horizontal reporting structure. The organization's philosophy must support collaboration and organizational leaders must be able to convey the organization's vision of collaborative practice to team members. Teams require resources including availability of time and space to meet. Mariano (1998) found space sharing and physical proximity helped to reduce professional territoriality.

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As well, Way et al.(2000) identified ineffective communication as a barrier to collaborative teamwork in primary health care. Henneman et al.(1995) found availability of standards, policies, interprofessional protocols, unified and standardized documentation, forums and formal meetings of all professionals to be effective in increasing communication. Increased communication would help to reduce the barriers related to decreased understanding of other team member's roles and would increase the comfort level when interacting with other professionals (Dieleman et al., 2004).

The HSRC (1999) identifies education as an essential mechanism to support the development of primary health care teams. The report discusses the negative impact that traditional health professional education has had on the development of interprofessional teams. That is, there has been an emphasis on the acquisition of professional skills required for the particular profession rather than learning to work effectively in groups and with other professionals. Subsequently, the result has been a limited understanding of the roles of others in the health care team. With regards to utilizing an interprofessional approach to continuing education, Clark (1997), Cott (1998) and Hall and Weaver (2001) all indicate that professional socialization of health professionals to seek support and information within their own respective discipline creates a barrier to sharing and learning in an interprofessional manner.

Defined as "the acquisition of the knowledge, skills, values, roles and attitudes associated with the practice of a particular profession" (Clark, 1997, p.442), professional

socialization results in a reliance on the members of one's own profession and reduced

understanding and appreciation of the roles played by other participants in the health care

team. Housed, trained and socialized in separate schools and campuses, new members of

the various health care professions are acculturated to work in isolation from other

disciplines, not as an interprofessional team.

In order to practice to the full potential of their respective scope, primary health

care team members need educational opportunities to maintain and enhance their skill

sets, especially in rural practice. Also, to fulfill the mandate of helping consumers

become aware of how they influence their own health, team members must be educated in

health promotion techniques aimed at the population they serve. The HSRC

recommended that the Education Task Force develop educational and training programs

on how to work effectively in groups of interprofessional providers; training programs to

enhance the skills of health care providers so they practice to the full extent of their scope

of practice; and strategies of how primary health care team members can work together to

educate consumers regarding health maintenance (Primary Healthcare Strategy, 1999).

In response to meeting the needs of primary health care service providers, the

federal Primary Health Care Transition Fund announced the multi jurisdictional project,

Building a Better Tomorrow Initiative in 2003 (Health Canada, 2003). This project

involves the Atlantic provinces of Canada and aims to facilitate change in Atlantic

Canada by engaging current providers in a renewed primary health care system. A variety

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of training modules will be developed and delivered to existing health care providers

which will focus on supporting and sustaining change to primary health care service

delivery (Health Canada, 2003). The development of training modules will be based on

available literature and information received through a needs assessment process

conducted with service providers in the four Atlantic provinces, thus creating educational

programs to meet identified needs. The needs assessment process included a Team

Effectiveness Survey Tool which measured service provider's perceptions of the current

effectiveness of the interprofessional collaboration in their respective project areas.

Identifying the education needs of primary health care service providers related to

teamwork is essential to the development of interprofessional teams as identified in the

literature.

<div align="center">Continuing Education in Rural Practice</div>

Continuing education beyond that provided by pre licensure health professional

education is essential to keeping current with best practice approaches to patient care. The

Information and Communication Technologies (ICT) and Continuing Health Professional

Education in Canada Summary Report (2003) identifies a commitment to lifelong

learning as one of the distinguishing characteristics of a profession, noting that the

provision of high quality health care services is dependent upon the health care

professional's access to effective ongoing professional development and continuing

education programs (p.1). The report notes that rural health care providers have an even

greater challenge than their urban counterparts in gaining access to timely information because of isolation and distance from the larger tertiary centers (p.15).

The importance of addressing the continuing education needs of the rural health professional has been identified in literature. Dorsch (2000) reviewed studies of the information needs of rural health care professionals and found that the primary reason cited for seeking information was to provide effective patient care, as the provision of quality care that is based on up to date findings is difficult in a rural setting. In a study of the expanding roles of Public Health Nurses practicing in rural Saskatchewan, MacDonald and Schoenfeld (2003) found that continuing education programs were essential to nurses developing or increasing their skills to enable them to carry out the expectations of their work. In Australia, the Central Queensland Task Force (1990) reported that 73% of allied health professionals identified minimal continuing education as a major disadvantage of working in a rural area. Wolfendon, Blanchard and Probst (1996) found lack of professional support and specialized training as some of the reasons for high turnover of staff in rural and remote areas of Australia. To provide high quality continuity of care in rural areas, continuing education must be addressed.

The barriers to the provision of continuing education in rural areas have been documented. Lundeen, Tenopia and Wermager (1994), Burnham (1996) and Shelstad (1996) all found geographic isolation was a major barrier to accessing information needed in the provision of care. This isolation limited access to health sciences libraries,

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specialist colleagues and telecommunications infrastructures. Farmer and Richardson (1997) conducted a needs assessment of rural nurses and found remoteness from a medical library, lack of local information and a general lack of awareness of available information were common barriers to continuing education.

Barriers to the use of technology to meet needs in rural areas was also cited by Dorsch and Pifalo (1995) who found that rural health care professionals did not utilize technology to meet continuing education needs. Reasons for not utilizing technology included a lack of the appropriate equipment (26%), and a lack of skills needed to operate computers and access information through online library search processes (61%). The ICT report (2003) indicated several barriers to technology adoption and use including: concerns about security and confidentiality; finding time to use and learn to use technology; inadequate funding to purchase the equipment needed; lack of access to technology such as databases and internet, and the level of comfort, experience and skill of the professional to utilize the technology available.

With the shift towards primary health care services, health care professionals in rural areas are becoming burdened with providing care in increasingly complex cases locally, often working in isolation from other colleagues in their particular profession. Health care professionals who were traditionally generalists find themselves having to develop knowledge and skills far beyond their training with little access to education services (Crandall, Dwyer and Duncan1990). Without adequate training and support, the

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impact in rural areas is seen through high staff burnout, turnover and vacancy rates (Barer and Stoddart, 1999). Lack of opportunities for continuing education and limited support systems have been identified as major problems for those working in rural areas (Parkin, McMahon, Upfield, Copley and Hollands, 2001). To ensure quality primary health care, health care professionals who practice in rural areas must be provided with ongoing support to meet their learning needs, utilizing methods that promote interprofessional collaboration. The Strategic Health Plan (2002) discusses human resource strategies needed to make the transition to this approach including enhancing the curriculum of health professional education to equip students and practitioners with the necessary skill set for entry to practice as well as integrating team building skills into education and practice environments.

<div align="center">Relevant Studies</div>

The use of a questionnaire or survey methodology to examine the continuing education needs of rural health professionals has been previously reported. Dorsch and Pifalo (2000) conducted a review of studies that reported findings on the information needs of rural health professionals from 1975 to 2000 and found that nineteen of twenty-five reported utilizing a questionnaire type survey to collect data. Parkin et al. (2001) describes an action research approach to examining specific continuing education needs for a group of rural health professionals. The researchers utilized a survey design to identify needs, design their programs and to evaluate their effectiveness in meeting the

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identified needs. In planning an interprofessional mental health training and support

program for rural health care professionals, Cornish et al. (2003) used a needs assessment

that consisted of a survey as well as semi structured interviews with participants to seek

clarification on themes that emerged from the survey. This project studied the training

needs of health professionals providing mental health care to patients in the Central-East

portion of Newfoundland and Labrador. The needs assessment was administered to assess

confidence in dealing with specific mental health issues. Chauvin, Anderson and

Bowdish (2001) describe a needs assessment undertaken to ascertain the professional

development needs of public health professionals. The purpose of the study was to

provide a basis for guiding courses and curriculum development. The instrument was

designed based on the core competencies of professionals practicing in public health

including nurses, physicians, administrators and environmental professionals. The results

of the questionnaire provided information regarding self perceptions of specific

competencies, confidence in performing them and the perceived need for training. The

design can be duplicated to compare the professional development needs across groups

based on variants such as discipline, geographic region and educational background.

While there was much literature that discussed the continuing education needs of

rural health professionals, there was little research which has explored the continuing

education needs of rural primary health care providers, particularly with respect to needs

related to interprofessional teamwork. The needs assessment was used to develop

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resources to meet the identified needs. The void of literature supports the proposed

research at this time.

Chapter Three : Methodology

Introduction

This study was undertaken to explore the perceptions of primary health care

providers pertaining to interprofessional teamwork, professional development and

continuing education needs. In this chapter, the methodology employed in conducting the

research project will be described. This discussion will include rationale for the selection

of the research methods, the logistics of planning and implementing the data collection

process, the selection of participants as well as a description of how the data analysis was

conducted.

Research Design

The research questions for this study included:

1. What are primary health care providers' perceptions of the nature and characteristics of

the interprofessional teamwork process which may occur in their area?

2. What are primary health care providers' perceptions of possible barriers, challenges and

enablers to interprofessional teamwork in their area?

3. What are primary health care providers' perceptions of their clinical and non-clinical

professional development and continuing education needs.

The methodology chosen by the researcher has been primarily of a qualitative

nature, using semi structured interviews as the data collection method as well as

conducting secondary analysis on existing research in the form of quantitative data

collected by the Office of Primary Health Care, Government of Newfoundland and Labrador using a survey. Pope and Mays (1996) discusses qualitative research as an interpretive and subjective exercise where the researcher is ultimately involved with the process and not aloof from it, citing that qualitative methods are increasingly being used in health care research where they are seen to be able to reach parts that other types of research cannot.

The qualitative model for this research was based on principles and concepts of grounded theory, including constant comparison of data collected from participants to identify and develop themes that emerged. The Grounded Theory methodology was first developed by Glaser and Strauss in the 1960's, stemming from their work which examined the interactions between health care professionals and their dying patients. Hancock (1998) described the main feature of this approach as the development of new theory through the collection and analysis of data about a phenomenon. The explanations that emerge are genuinely new knowledge and are used to develop theories about a phenomenon. Lacey and Luff (2001) describe grounded theory as "an inductive method of qualitative research which allows social theory to be generated systematically from data. Theories are grounded in rigorous empirical research rather than produced in the abstract. Resulting theory emerges from the data through a process of rigored and structured analysis" (p.6). Strauss and Corbin (1998) describe grounded theory as consisting of plausible relationships among sets of concepts which are developed directly from data

analysis. Theory that is developed provides a set of testable propositions that help us to understand our social world more clearly.

In this study, the researcher utilized the constant comparison methodology from grounded theory to analyze the data from the interview. In this process, concepts or categories emerging from one stage of the data analysis are compared with concepts emerging from the next. The researcher looks for relationships between concepts or categories by constantly comparing them and continues this process until theoretical saturation is reached and no new categories emerge (Lacey and Luff, 2001).

The semi structured interview is an appropriate data collection tool in this case, as the interview process allows the researcher to ask a series of open ended questions based on the topics that are being studied. Crandall (1998) states "in an interview, one has the ability to solicit in - depth information that leads to deeper understanding, garner support for programs, get an inside view, and expand on viewpoints or clarify information received from other sources"(p.156). The researcher can revise the questions as well as provide cues or prompts to gather more information related to a particular theme.

Hancock (1998) states this process is particularly important if time is limited or key issues need to be covered. This type of interview allows the researcher to utilize the constant comparison approach, revising questions to build on categories from a previous interview to compare participant's responses. In this process, data are transcribed and examined for content immediately following data collection. Ideas that emerge from this

analysis are used in the next data collection session when the researcher re enters the field. Through this approach, the researcher gradually refines the semi structured interview to look very different from the original interview. Crandall (1998) describes interviews used in continuing education needs assessment as being typically semi-structured. That is, the interviewer has key questions and issues to address but is unconcerned with the order of the questions. Crandall suggests the researcher develop a list of questions and topics to be covered during the interview and that the interviewer probe for more information by asking follow up questions that amplify and clarify the data. In the data collection process for this project, the researcher began with a series of questions (Appendix C) but developed other questions as the various participants were interviewed which sought to verify perceptions cited by previous participants or compare and contrast responses. The researcher developed probes to facilitate the further exploration of themes that emerged as the interviews were conducted.

Quantitative data collected through a survey questionnaire of primary health care providers in the Connaigre region was also utilized to address the research questions. This survey was sent to all providers and included question items about their perceptions of the effectiveness of the team that currently exists in their primary health care project. This survey was part of the needs assessment completed through the Building a Better Tomorrow Initiatives Project and was used as secondary data for the purposes of this study.

This use of multiple methods of data collection or triangulation adds to the richness of the data collected (Cohen, Manion and Morrison, 2000), as well as provides a way to cross check information collected through the interviews, thus increasing the validity of the study. Mann's (1998) literature review of the use of questionnaires in continuing education cites several reports including that of Pereles and Russell(1996) which used interviews to follow up with community physicians whose patients had responded to a questionnaire on continuing medical education needs in the area of geriatrics. The review found questionnaires to be "usefully employed in a wide variety of needs assessments, with a variety of populations and in concert to other approaches" (p.144).

Data Collection Processes

For the purposes of this study, data was gathered in cooperation with the provincial Office of Primary Health Care and the Connaigre Peninsula Primary Health Care Project. The Primary Health Care Project on the Connaigre Peninsula began in October 2003 following a successful proposal put forward from the collaborative efforts of the Central West Health Care Corporation and the Central Regional Health and Community Services Board to the Provincial Office of Primary Health Care. This was done as a response to the request made to health care boards by the provincial government to develop a proposal that would allow primary health care to be the central

focus of the health care system in geographic areas of the province. The subsequent

funding will support the project until March 31, 2006.

The project is managed by a project management team consisting of senior

management representatives and others from both health care boards that operate in the

region. Several initiatives have been completed to date including presentations to staff

and communities promoting primary health care, newsletters distributed to all

households, the hiring of a project facilitator in September 2004 and a team development

day targeted to all service providers in September 2004.

Quantitative data was collected by the Office of Primary Health Care through the

Team Effectiveness Survey Tool (Appendix F), developed for the provincial primary

health care projects through the Primary Health Care Renewal Project. The purpose of

this survey was to assess primary health care providers' perceptions of key elements of

teamwork including team purpose and vision, communication, team support and

partnerships as well as scope of practice issues including team member roles and service

delivery, in an effort to identify baseline perceptions of primary health care providers in

the various project areas regarding team development. This survey was developed by an

independent consulting firm which also performed data analysis and provided feedback to

the provincial office as well as to individual projects. Data collected from the Connaigre

region was made available to the researcher of this thesis project for analysis.

The items were developed as statements to which participants were asked to indicate their level of agreement in relation to their perception of the primary health care team of which they were members. Participants rated each item using a Likert type scale of 1 = strongly disagree to 7 = strongly agree. The target population included all service providers identified by the project. Results for each question were supplied in a spreadsheet format by the Provincial Office of Primary Health Care. Responses were anonymous with no identifying information indicated in the returned surveys. Data was analyzed to determine the frequency of responses to the statements posed in the survey, as indicated on the Likert type scale.

Qualitative data was gathered by the researcher through a recruitment process which determined the voluntary participation in a semi structured interview by primary health care providers from the various disciplines identified in the directory of service providers for the region. All providers were sent a Participant Recruitment Letter (Appendix A) explaining the purpose of the research and requesting their participation. A postage paid return envelope and response card (Appendix B) were also included for participants to indicate their interest in participating. The Semi Structured Interview Guide contained open ended questions (Appendix C) designed by the researcher. Interviews were held in the project area in cooperation with the project management team. Seven of the eight interviews were conducted in person with one conducted at a later date by telephone due to the unavailability of the participant during the scheduled

time. Participants were sent a copy of the interview guide for their consideration prior to the interview. Prior to beginning the interview, informed consent was obtained from the participant (Appendix D). Interviews were either tape recorded with the participant's permission, or hand written notes were taken at the participant's request, due to discomfort with the audio taping process. Each interview was approximately one hour to in length. All interviews were conducted by the researcher.

Taped interviews were transcribed by a word processing professional who signed an Agreement to Maintain Confidentiality (Appendix E) Participants were made aware of all data collection procedures prior to giving their consent. Qualitative data collected through the interviews was analyzed utilizing the constant comparison method and analysis of the data followed the grounded theory approach whereby the researcher utilized an inductive process to search for themes and categories in data collected.

Specifically, Lacey and Luff (2001) describe constant comparison as the heart of grounded theory. They describe this method of data analysis as a process whereby concepts or categories emerging from one stage of data analysis are compared with those emerging from the next. The researcher looks for relationships between the concepts and categories by constantly comparing them, to form the basis of the emerging theory. To utilize this process in data analysis, the researcher audio taped or took hand written notes for each interview conducted with primary health care team members. Each interview was reviewed as it was completed and data collected was compared to that recorded from

the preceding participant. The researcher briefly identified common themes and framed

questions to pose in the next interview that would allow comparison and verification of

identified themes.

Selection of Participants

Participants for the quantitative survey included the entire population of service

providers in the primary health care project in the Connaigre region. Specifically, 58

surveys were sent out with 39 returned, a response rate of 60%. For the purpose of the

qualitative interviews, purposive sampling was used. In purposive sampling, the

researcher purposely selects cases thought to be rich sources of data and satisfactory to

the particular needs of the study (Cohen et al, 2000). In this case, participants who

indicated they were willing to participate were chosen by the researcher based on the need

to gather the perspectives of participants from various health disciplines that practice in

the area, as well as those that practice at different sites within the region. The purposive

sample included eight participants from the disciplines of medicine, pharmacy,

psychology, social work, institutional and community nursing as well as a nurse

practitioner. Participants practiced in the community of Harbour Breton as well as in

more remote communities in the project area and were all members of the primary health

care team in the project area, as identified by the project management team.

Data Analysis Techniques

Analysis of the quantitative data obtained through The Team Effectiveness Survey Tool (Appendix F) was conducted with the use of the Statistical Package for the Social Sciences (SPSS). As the original survey contained a seven point Likert Scale design, the scale was collapsed for the purpose of analysis to include three variables with one to three denoting disagreement, four being neutral and five to seven indicating agreement with the statement posed in each question. SPSS was then used to calculate frequency of responses for each item. Pertinent data from the survey was used as secondary data when analyzing participant's responses to questions posed in the interview process to confirm and validate qualitative data.

Confirmation and validation of qualitative data collected is often achieved by triangulation. Defined by Cohen et al (2000) as "the use of two or more methods of data collection in the study of some aspect of human behavior"(p.112), triangulation is seen as an attempt to explain more fully the richness and complexity of human behavior by studying it from more than one standpoint. Fielding and Schreier (2001) states that integration of qualitative and quantitative research methods can be achieved through triangulation. Specifically, when combining methods such as survey questionnaires with non- standardized interviews, diverse kinds of data can support the same conclusion and confidence in the conclusions reached is increased (p.11).

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As previously discussed, data gathered in the qualitative interview process was analyzed utilizing the constant comparison methodology as per principles of grounded theory. As outlined by Lacey and Luff (2001) the data was transcribed and read from beginning to end. Notes were taken and major themes were extracted. Data was then reread to identify sub categories extracted from the major themes. Relationships between categories were examined and supporting comments from the interviews were noted and recorded. Themes and sub categories were grouped into sections to address the research questions posed. These sections are presented in topic areas including the context of the project area studied, nature and characteristics of collaborative practice that exists, perceived need for interprofessional collaboration, barriers, challenges and enablers to collaboration as well as perceptions of continuing education needs of participants. The Team Effectiveness Survey was reviewed and responses to questions pertinent to the research questions of the study were compared with the themes identified in the interview process, thus enabling triangulation of the data. Lockyer (1998) discusses triangulation of needs assessment data in continuing education methodology, stating this process is increasing as the use of multiple methods, data collection strategies and or data sources enables the practitioner to gain a more complete picture of what is going on and to cross check information (p.191).

Chapter Four : Results

Introduction

In this chapter, the quantitative data collected through the Team Effectiveness Survey will be presented. The data collected from the qualitative interviews will also be summarized according to the thematic categories which emerged. Specifically, these categories include: identifying the perceptions of participants regarding the nature and characteristics of the current level of interprofessional collaboration that occurs; discussing the perception of the opportunities for interprofessional collaboration in the project area; and outlining the perceived barriers, challenges and enablers to greater interprofessional collaboration. Finally, the chapter will describe participants' perceptions of their educational and professional development needs to enable them to participate as members of the interprofessional primary health care team.

Context

The data collection for this research project took place from October 2004 to February 2005. The Team Effectiveness Survey Tool was distributed in October 2004 and the recruitment process for participants occurred in December 2004, with interviews conducted in January and February 2005.

As previously described, respondents were selected from the primary health care team members who responded to the Participant Recruitment Letter (Appendix A), utilizing the purposive sampling technique. Specifically, the researcher chose

representatives from various disciplines who practiced in different geographic locations in the project area. Specifically, The Primary Health Care team in this area include nurse practitioners, registered nurses, licensed practical nurses, physicians, recreation therapy, dietician, physiotherapy, occupational therapy, dentist, dental hygienist, ultrasound technician, audiologist, social workers, child management specialist and behavior management specialist. Table 1 outlines the professional characteristics of the participants who were interviewed.

Table 1   Participant Profile

Discipline	Years Practicing	Years Practicing in Connaigre Area
Nurse Practitioner	5	0.5
Physician	4	1.5
Community Health Nurse	16	1.5
Acute Care Nurse	4	4
Social Worker	9	5
Licenced Practical Nurse	20	20
Pharmacist	29	29
Psychologist	14	14

Team Effectiveness Survey Results

The Team Effectiveness Survey was distributed to all identified primary health care team members in the project area (N = 58). As previously noted, 39 surveys were returned, a response rate of 60%. Table 2 summarizes the results, illustrating the number of participants who disagreed, were neutral or agreed with each statement as well as those who indicated the question was not applicable to them.

Table 2　　**A Summary of the Results of the Team Effectiveness Survey from the Connaigre Peninsula Primary Health Care Project**

Question	Disagree		Neutral		Agree		Not Applicable		Total	
	N		N	%	N	%	N	%	N	%
Our purpose is clearly understood by all members.	14	35.84	6	15.36	19	48.64	0	0	39	100
We meet regularly for planning.	16	40.96	5	12.82	14	35.84	3	7.68	38	97.44
Our goals and objectives are **not** set based on assessment of client's/ patient's / communities' need.	25	64.10	6	15.36	6	15.36	1	2.56	38	97.44

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We do **not** have shared common agreement about our strategies to achieve our goals and objectives.	20	51.28	8	20.48	8	20.48	1	2.56	37	94.87
Our goals and objectives are clear.	10	25.64	7	17.92	21	53.76	1	2.56	39	100
Our goals and objectives are measurable.	10	25.64	9	23.04	19	48.64	1	2.56	39	100
Our goals and objectives are realistic.	8	20.48	9	23.04	21	53.76	1	2.56	39	100
Our team reviews its current effectiveness.	14	35.84	8	20.48	11	28.16	2	5.13	35	89.74
We measure progress against specified goals and objectives.	12	30.72	7	17.92	14	35.84	2	5.13	35	89.74

Overall, there is a clearly understood purpose and vision.	11	28.16	8	20.48	15	38.46	1	2.56	35	89.74
Communication during our meetings is effective.	8	20.48	9	23.04	14	35.84	3	7.68	34	87.18
Communication between scheduled meetings is effective.	15	38.46	7	17.92	12	30.72	1	2.56	35	89.74
Relevant information is exchanged among team members.	12	30.72	6	15.36	16	40.96	1	2.56	35	89.74
Relevant information is exchanged in a timely fashion.	11	28.16	9	23.04	14	35.84	1	2.56	35	89.74

There is limited duplication of communication within our team.	10	25.64	10	25.64	13	33.33	1	2.56	34	87.18
We effectively use technology to maximize team communications.	10	25.64	9	23.04	16	40.96	0	0	35	89.74
Our team does **not** have an evidence based decision making process.	20	51.28	7	17.92	6	15.36	1	2.56	34	87.18
Decisions are **not** followed through to implementation.	18	46.15	11	28.16	5	12.82	2	5.13	36	92.31
Leadership is shared and effectively delegated in line with areas of competence.	15	38.46	9	23.04	11	28.16	1	2.56	36	92.31

Our team members are open and honest when communicating.	9	23.04	6	15.36	18	46.15	3	7.69	36	92.31
When differences occur, they are dealt with effectively.	16	40.96	8	20.48	10	25.64	2	5.13	36	92.31
Overall, I would say I "know" my Primary Health Care Team.	12	30.72	4	10.26	19	48.72	1	2.56	36	92.31
Overall, I am satisfied with Primary Health Care Team related communications.	12	30.72	8	20.48	15	38.46	1	2.56	36	92.31
There is a high level of trust and confidence amongst our team members.	10	25.64	7	17.92	17	43.59	2	5.13	36	92.31

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Our team works as a cohesive group.	12	30.72	8	20.48	14	35.84	2	5.13	36	92.31
Our team provides support to individual members through difficult situations.	9	23.04	6	15.36	17	43.59	4	10.26	36	92.31
We feel comfortable providing feedback to each other when expectations are met.	8	20.48	8	20.48	19	48.72	1	2.56	36	92.31
We feel comfortable providing feedback to each other when expectations are not met.	10	25.64	9	23.04	15	38.46	2	5.13	36	92.31

Our team members do **not** have the opportunity to develop their skills within the team.	17	43.59	7	17.92	11	28.16	1	2.56	36	92.31
Strategies are **not** in place to support team development.	16	40.96	11	28.16	8	20.48	1	2.56	36	92.31
We are individually accountable for our team's performance.	11	28.16	6	15.36	16	40.96	3	7.69	36	92.31
We are jointly accountable for our team's performance.	6	15.36	7	17.92	22	56.41	1	2.56	36	92.31

Our team has the support of the regional health boards(s) management.	6	15.36	6	15.36	24	61.54	0	0	36	92.31
Overall, I am satisfied with the support that team members provide.	9	23.04	5	12.82	21	53.76	1	2.56	36	92.31
Our team involves and supports the community in the planing and delivery of programs and services.	11	28.16	10	25.64	13	33.33	2	5.13	36	92.31
Our team responds to client/ patient and community input.	11	28.16	7	17.92	17	43.59	1	2.56	36	92.31

Our team does **not** effectively involve network providers.	16	40.96	10	25.64	8	20.48	2	5.13	36	92.31
Our team has developed partnerships with intersectoral groups to plan and deliver services (eg, education, youth, seniors, police, clergy).	9	23.04	7	17.92	20	51.28	2	5.13	38	97.44
Committees such as project planning committees or community advisory committees are supporting the team in improving the delivery of services.	6	15.36	14	35.84	17	43.59	2	5.13	39	100

In the past six months there has been increased participation by clients/ patients in decisions related to self, family and community programs.	15	38.46	9	23.04	9	23.04	3	7.69	36	92.31
In the past six months requests for health information by clients/ patients and community members has increased.	14	35.84	8	20.48	9	23.04	5	12.82	36	92.31
Overall, I am satisfied with the partnerships that the Primary Health Care Team has established.	9	23.04	11	28.16	15	38.46	1	2.56	36	92.31

Team meetings contribute to my ability to meet client/ patient needs.	13	33.33	5	12.82	15	38.46	3	7.69	36	92.31
I would encourage other health care service providers to work in this practice setting.	2	5.13	10	25.64	22	56.41	2	5.13	36	92.31
Overall, I'm satisfied with the functioning of my Primary health Care Team.	11	28.16	6	15.36	18	46.15	1	2.56	36	92.31

The Team Effectiveness Survey Tool examined team members' attitudes towards factors that contribute to team effectiveness including team purpose and vision, team communication, team support, and satisfaction with partnerships the primary health care team had established.

The results indicate that team purpose and vision are not clearly understood by all team members. Although approximately forty-nine percent (48.64) agreed that the purpose of the primary health care team was clearly understood by team members, 35.84% (N=14) disagreed with the statement and a further 15.36% (N=6) were neutral. Although 54% agreed that goals and objectives were clear, only 28% (N= 11) agreed that the team reviewed its effectiveness and 35% (N= 14) agreed that progress was measured against specific goals and objectives. Approximately thirty-eight percent (38.46%) agreed that there was an overall clearly understood purpose and vision.

With regards to team communication, approximately thirty - five percent (35.84%) agreed communication during meetings was effective, 41% (N=16) agreed relevant information was exchanged and 36% (N=14) agreed information exchange was performed in a timely fashion. With regards to the use of technology in information sharing, only 41% (N=16) agreed that technology was used to maximize team communication. Forty-nine percent (N=19) of participants indicated they "knew" their primary health care team and 38% (N= 15) agreed they were satisfied with team communications.

Survey items examining team support indicated approximately forty - three percent (43.59%) of participants indicated a high level of trust and confidence amongst team members and 36% of participants agreed their team worked as a cohesive group. With regards to providing feedback to team members, 49% (N= 19) indicated they felt comfortable providing feedback when expectations were met and 38% (N= 15) agreed they felt comfortable providing feedback when expectations were not met. Respondents indicated a general perception that the primary health care team was supported by the health care organizations with 62% (N=24) agreeing that the team had the support of the regional health board(s) management.

Consideration was also given to participants' perception of how the primary health care team impacts their practice. With regards to partnering, 38% agreed they were satisfied with the partnerships the primary health care team had established. Responses indicated participants were generally satisfied with the primary health care team in their region with 56% agreeing they would encourage other health care service providers to work in the practice setting. However, only 38% agreed team meetings contributed to their ability to meet client / patient needs.

Nature and Characteristics of Interprofessional Teamwork

Utilizing the semi structured interview process, participants described the nature

and characteristics of collaborative practice that exists based on their experience working

in teams that are currently in place, the focus of collaborative practice and their

perceptions of current team processes. Table 3 presents a schematic view of the emerging

themes identified.

Table 3   A Summary of Nature and Characteristics of Current Collaboration

Themes	Components
Individual Clients	Identification and Planning Care Chronic Disease Management Services Delivery Communication
Population Focus	Needs Assessment Health Promotion Initiatives Team Development
Issues Identified	Geographic Limitations Informal Nature

Interprofessional teamwork currently exists among the various disciplines in the

provision of care for individual clients. There were several examples cited by participants

in which interprofessional teamwork was taking place that focused on specific patients

and meeting their health care needs. Health care providers from both the institutional and

community boards collaborate in discharge planning for inpatients who require care and

support upon discharge from the institution. As noted by one participant of this process:

> "if there is someone going home and needs discharge instructions or
> dressings it is a good opportunity to communicate. Or if there are supports
> that need to go into the home."

In this example, service providers meet to discuss patients' needs prior to discharge from

the institution, ensuring supports are in place for returning home or planning alternate

living arrangements such as long term care.

Health care providers currently collaborate in planning care for clients with

specific chronic diseases such as Diabetes, including secondary prevention of the

complications associated with the disease processes. This involves communicating with

each other about treatment such as medication and lifestyle change required, consulting

with each other to support client education. As noted by one participant:

> " In my profession, I would consult (most) heavily with a dietitian to try to
> educate patients to modify their lifestyles. From a medication factor, we
> will try to work with a patient and hopefully reduce the expense of
> medications that they require just by changing their diet and adapting to
> that lifestyle."

Service providers will often collaborate with each other to address client's concerns

regarding compliance with medication regimes. This will include consulting with the

appropriate provider when issues are identified. When asked if consultation occurs

regarding this, one participant replied:

" Very much so. We will isolate the patient if we see a non compliance factor.....If we isolate that (non-compliance) as a monetary problem, then knowing the seriousness of the medication ordered we will work together. This is done in a one on one situation."

In this example, the participant described consultation with the prescribing physician to ensure the medication was required by the patient and to explore other alternative treatments that may be less costly for the patient.

Service providers are currently collaborating to provide service to clients in programs such as the Lifestyle Clinic, a preventative program offered in the remote communities in which the Public Health Nurse, Continuing Care Nurse, Nurse Practitioner, Mental Health Services, Physician and Dietician, as available, offer a walk in clinic for clients. The clinic provides education and counseling regarding lifestyle issues such as healthy weight, active living, and nutrition as well as screening for diseases such as Hypertension and Diabetes. In this program, clients will see the various service providers as per their identified needs. Health care professionals collaborate in providing the clinic service and in referring clients to the appropriate service provider at the clinic. It was noted by one participant that this particular program was ongoing prior to the beginning of the primary health care project and was offered by health care professionals working within the community health board. There has been increased collaboration to deliver the program involving other service providers since the project has begun:

"With the primary health care we have probably been able to pull in a
couple of other people that we would not have had access to like the
dietician....Now we probably have more access to the doctors for our
Lifestyle Clinics.....I guess you feel like you (have) got more approval or
support from your manager to work together than kind of before."

Other client based programs which currently exist provide a collaborative

interprofessional team approach to the care of clients with special needs in the area. The

Individual Support Services Plan (ISSP) for children involves health care service

providers collaborating to meet the needs of clients.

"Well I guess at your ISSP teams are going to be where interprofessional
collaboration is going on with children. With children with disabilities we
do have a lot of team building."

In these programs, health care professionals meet with clients and their families to discuss

the client's needs and develop an integrated plan of care. Team members discuss their

contributions to the plan and collaborate to ensure care is delivered in the most

appropriate manner.

Collaborative efforts presently occur in the area that are population focused as

well. Several participants cited examples of collaborative partnerships formed to address

health issues which have been identified in the region. With the announced closure of the

fish processing plant in Harbour Breton, there is great concern for the health of the

population as the anticipated economic impact affects the lifestyle and mental health of

the population. In response to this, recent collaboration has occurred in addressing

preventative mental health strategies with the youth population.

> "We talked about how we as an interdisciplinary team are going to look at
> trying to fix that problem. Myself, the Mental Health Nurse and the Public
> Health Nurse went up to the Youth Center to talk to some of the kids..."

Other participants cited collaboration around issues that have been identified in the area

such as teenage pregnancy and suicide.

> "If we isolate that we have a high number of teenage pregnancies, we
> would try to get to the root of the problem. We would try to solicit as
> much information as possible from the professionals and we would bring
> that into play. We would find the person in the community who can be a
> good spokesperson and has the time to commit to having meetings with
> the young persons that are in the focal group. They would contact us for
> more information if they need us and we'd make attempts to come and
> give seminars."

This example describes the ongoing nature of informal collaboration which traditionally

exists in small rural communities. Trends and issues are identified in the community and

health professionals have come together as an ad hoc committee to plan interventions.

> "Eight years ago we had, within a 16 month period, three suicides, a thing
> that has not happened in this area. We were all concerned....we put the
> group together, brought in the professionals who could isolate and work
> with it and we organized a team of locals.....When we felt comfortable that
> these people could run the committee, we sort of stayed in the background,
> were there on a consultation basis."

Participants also described ongoing collaborative efforts aimed at planning health

promotion initiatives with specific population groups such as women and families with

young children.

"Yes, that was something we looked at in terms of Cervical Screening in October. We talked about who was doing what and what could the Continuing Care Nurse do more with her population group...of course she's not as active in health promotion as the Public Health Nurse. What could the Nurse Practitioner do, how could we do some clinics in Cervical Screening, that sort of thing."

Participants collaborate on an going basis in health promotion with young families through the Family Resource Center in the area. Health professionals who work with children and families plan health promotion programs aimed at this population and also collaborate to provide their professional support to the community led program, sitting on advisory committees and boards as needed.

Participants describe the development of an interprofessional team which meets in Harbour Breton bi-weekly, bringing together health care professionals from various disciplines from both the institutional and community sectors:

"The purpose of the meeting is not only to discuss particular patients or problems that have come up, whether it be something that Primary Health Care has recognized or whether it's something Public Health has recognized, like give an example, closure of the fish plant..... but also to discuss things like particular patients or if there is something happening on the acute care side that probably someone in the community side should know about. It's a good way to try and solve problems, communicate and make referrals as needed."

During these team meetings, members bring issues they have identified to the table, seeking perspectives from other service providers and planning ways to address the issues utilizing a collaborative approach. Time is also given to education regarding each other's

roles as well as informing the group of new developments in the respective disciplines each member represents including new treatments, medications and practices.

Another purpose of this team has been to facilitate team development as a goal of the primary health care project:

> "The purpose of the meeting is to facilitate us (working) better as a team and try to get us to work together."

One participant commented that this team has been successful in meeting this goal:

> "it's a very open thing, such a great cross section. Each meeting is mind boggling in terms of how easy the format works and how fast we get to know each other and find out that we can work so well together."

This interprofessional team has been implemented in Harbour Breton and has generally included service providers in the immediate area. The process has met with some criticism from primary health care team members outside this area. When speaking about the current level of collaboration, one participant reported:

> "It is probably a little less so on this end than in the Harbour Breton area."

Other participants expressed concern regarding the lack of representation of their discipline at the team meeting:

> "I know that neither one of us have been involved, invited or included on any of the smaller team projects that have been happening down there. I guess in a sense it is problematic because there is no one representing our program area....There is one social worker ...she has no concept of what our program is all about other than what we tell her, so with that then we question how it is she can represent our program area."

Participants described their perceptions of the level of teamwork that currently

exists in the region. It was identified that while current relationships exist, there is work

to be done to facilitate the development of an interprofessional team as defined in primary

health care literature. Specifically, the literature previously cited by Way et al (2000)

stated that health care professionals function as an interprofessional team when there is

communication amongst members to share knowledge and skills to synergistically

influence the care provided. To facilitate this process, the members need to not only know

who the care providers are in their region but have an understanding of the roles each

team member can play in the coordination of care in the primary health care model.

Participants noted that service providers in the geographic area generally know each other

personally and this has facilitated working together in the past:

> " because it's a small area, (a) small community and a lot of our health
> professionals have been from here, there hasn't been a lot of turn over ..so
> I think teams have been working together informally."

While participants state they know who team members are, there is a lack of

knowledge of the roles each member plays in the respective disciplines:

> "I know that people know generally what people do but I don't think they
> know the full scope of what everyone does and I think if that would
> improve, the teamwork would be much better.....Most of the time, say 90%
> of people aren't communicating openly about the different things that
> everyone is doing."

Other participants agreed there is a lack of knowledge but this is changing with the

primary health care project:

> "We did not know the full scope of each person's field. We assumed the
> pharmacist fills the prescriptions and a dietician works with a dietary plan.
> That is only the tip of the iceberg."

The primary health care project has begun to initiate team building activities such

as those previously discussed but participants have identified that this communication is

not formalized:

> "there is no doubt that there are some referrals and teamwork happening
> but still a lot of it is not formalized and there is not a formalized
> communication (process)so there is much room for improvement."

The current nature of collaborative practice appears to reflect a combination of what had

been done informally through the efforts of health care providers in the area in their past

practice as well as initiatives by the primary health care project in building on team

relationships that previously existed.

Need for Interprofessional Teamwork

Participants identified areas in which collaboration could be initiated or improved

within the primary health care project including health promotion and illness prevention

initiatives, coordination of the provision of direct patient services and in working

together to address the issue of accessability of services in the region. Table 4 illustrates

the emerging themes related to this discussion.

Table 4	A Summary of the Need for Interprofessional Teamwork
Themes	Components
Health Promotion	Primary prevention aimed at population groups Secondary prevention through Chronic Disease Management
Direct Patient Care	Collaborative Service Provision Consistency of Patient Information Increasing Accessability to Services

Participants identified populations for which primary and secondary prevention

can be initiated through health promotion activities. This included populations who are

being treated for specific chronic diseases such as Diabetes and mental illnesses as well

as identifying the health needs of groups such as seniors and families with young

children:

> " I mean, you need to do a lot (health promotion) on parenting and (the)
> importance of immunization....the dental piece, speech language pathology
> and the importance of going to a dentist. I don't think that some of your
> younger families know the importance of good health starting at a very
> young age and I think you could do with some programming,...I think it
> could be done sort of collaboratively with other professionals as well."

Initiatives identified included health professionals working with the community to set up

a senior's resource center, planning and implementing collaborative educational activities

to reduce the incidence of elevated cholesterol in the population as well as initiating

educational initiatives related to the prevention of heart disease. There was also a need

identified to collaborate in prevention services such as annual influenza vaccination

clinics, engaging service providers in the promotion and implementation of the program

which would utilize team members from both the institutional and community setting.

Participants identified several areas in which collaborating to provide direct

patient care is needed:

> "...chronic care, Diabetes, Hypertension. I would think we can improve
> and that is something we are looking at through the primary health care
> with Diabetes and how we are going to set up an interdisciplinary team to
> look at the Diabetes collaboration and how we can improve the Diabetes
> care."

In this discussion, the participant noted the need to plan chronic disease management

through collaboration of the various service providers that work with patients with

Diabetes, utilizing the interprofessional approach in planning care. Another participant

discussed the need for professionals to collaborate regarding how care is provided by

various service providers:

> "I will say one thing, the nurse will say something else, the doctor (will)
> say something else so I think that the process needs to come together to
> work as a team to offer services to children, especially children with
> disabilities or have medical needs."

Participants perceived reduced accessability to services in the project area as an

important issue that should be addressed through interprofessional teamwork. There are

communities in the project area that are accessible only by boat or air. Accessing

necessary health care services is very difficult for people who live in isolated areas.

Collaborating to plan services to these areas was perceived to be a priority:

> " isolated areas get scattered services and I don't know if there is some
> way we could pull that together to make it a little bit more convenient or
> accessible...Like, most times on Wednesdays when the helicopter goes it
> would be the nurse practitioner or the doctor....Well when we're all there
> at the same time, I find that nice. It would just be helpful if that could
> happen more often and probably include more people. It would be lovely
> to have a dietician or dental hygienist go over there because you can refer
> these people all you want. They don't have the access or the money to get
> out."

Another issue that impacts on accessability to services is the perceived

inappropriate utilization of the emergency services offered through the institution and

medical clinics in the project area. Participants identified the importance of collaborating

to provide education to the population regarding the use of the emergency services in the

area:

> "but you know, I think they need to be educated on what is considered to
> be an emergency clinic....I think just basically getting everyone together on
> it, getting everyone's opinion so that way you are including everyone to
> get the information out."

Participants identified opportunities in which the primary health care project could

facilitate greater collaboration to meet the health care needs of the population it serves. It

is important to consider how greater collaboration and team building can be achieved in

the project area.

Barriers, Challenges and Enablers to Collaboration

In this section, the perceptions of participants regarding the barriers, challenges and enablers to greater interprofessional teamwork are discussed. As well, participants' perceptions of how these barriers may be overcome in the project area are summarized. Table 5 describes the barriers to collaboration.

Table 5　　A Classification of the Major Categories and Sub-Categories of
　　　　　　　　Participant's Perceptions Relating to Barriers to Interprofessional Teamwork

Categories of Classification	Sub-Categories of Evaluative Thoughts relating to each category	Examples of Evaluative Thoughts from the data that give rise to the sub-category
Geography	(a) Travel	"We're in the catchment area, but then again, you're looking at distance. We can't always travel for all the meetings."
	(b) Limited access to team members	"Right now though for myself for this area we are just basically involved in the nursing part so we really don't have any access to the other disciplines or that is what I feel anyway cause when we meet it is just the nurse practitioner, Continuing Care and Public Health."
		" I don't think you're going to get a good collaboration of interprofessional service with one service provider being in Harbour Breton, one in Bay D'Espoir, one being in Grand Falls. Like, how do you get that good collaboration of service?"
	(c) Harbour Breton as regional center	" People work in their own little pockets... Unless you work in Harbour Breton right now, I think you have some negative comments about Primary Health Care because people are not aware of what is happening."

Communication	(a) no formal process	" There is no formal communication like I said before. We have been accepted for the Electronic Health Record and that was one of the things we talked about in our consultation with the different groups that we would like to be able to communicate formally better...even to see or know that if I see a client , if the Public health Nurse or the other nurse practitioner has seen her, like what things did they do or what did they find, so full line of communication would be helpful."
	(b) Limited representation and reporting	" It's not always possible for everyone to get together. I think ideally we are supposed to have a representative but I don't always think it is always getting communicated back to us what goes on at those meetings. We are supposed to be getting feedback but it is not always happening."
	(c) Organizational barriers	" I mean there is two hierarchy put in place, there is the institution side and the community health side. Often times it is hard to pull people together. Community health have got their own obligations."
	(d) Inconsistent	"I know very little about what is going on in primary health care. I know in other parts of the district people are working in teams. As of now we have not been invited to sit on any of these smaller teams, so we know very little about what is actually happening."

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Knowledge Deficits	(a) Primary Health Care	" I don't feel I am a member of the Primary Health Care team. I don't know where we stand. I don't know what the basic function of the Primary Health Care team is."
	(b) Roles	" But with this region with regards to Primary Health Care, I know very little about roles and responsibilities of a lot of people involved in Primary Health Care."
		" Right now I would say everybody kinda knows everybody but often times we don't know the full scope of practice or what everybody does. There is definitely some role confusion."
	(c) Team development	" When I finished university in 2002 they were just starting to pull together in interprofessional teams, just trying to get social work to work with med students or nursing students .So a lot of us really don't have a lot of training in that area. Sometimes we lack the skills, the knowledge, the resources to go about working together."

Geography has traditionally impacted on the provision of most services in the rural areas of Newfoundland and Labrador. In the Connaigre, region, the huge, rugged land mass and sparsely populated remote communities makes provision of services particularly difficult. The major service center in the area is in the community of Harbour Breton where the Connaigre Peninsula Health Care Centre is situated. Other service providers offer a limited array of services in other remote communities, often practicing quite independently with limited support.

As noted by some participants, the remote nature of the region has necessitated a reliance on other health care professionals and has fostered a strong traditional sense of teamwork in the immediate Harbour Breton area. This perception is not shared in the remote areas where participants expressed concern that the primary health care project was an initiative for health care providers in Harbour Breton only and was not inclusive of other members of the identified primary health care team. Contributing to this is the inability of professionals in outlying areas to attend regular meetings and the limited access to each other on a regular basis. A particular challenge to the establishment of the primary health care team will be facilitating inclusion for all members regardless of where they are housed. Indeed, the remoteness of the service site and subsequent inability to interact with other providers will make team development more difficult.

Participants noted ineffective communication to be a major barrier to establishing an interprofessional health care team in their region. It was noted that to date there is no

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formal process established that will enable team members of various professions to communicate effectively across organizational and professional boundaries.

The establishment of an effective system of communication within the project area is essential to team development. With the challenges of geography impacting on communication among service providers, it is important to develop mechanisms to keep all team members informed. Participants noted that representation at team meetings was limited and that information was not consistently reported back to all team members who were unable to physically attend. Participants perceived that this lack of representation of their discipline limited the communication among team members regarding the roles of each professional.

Inconsistencies were also noted in relation to the inclusion of all team members in the team development process regardless of where they practice. While some service providers are physically housed outside the immediate catchment area, they provide services throughout the south coast and are members of the primary health care team. It is important to consistently include these providers in all communication.

Participants also indicated knowledge deficits to be a major barrier to greater interprofessional collaboration. Specifically, there appeared to be a lack of knowledge regarding the primary health care team model, its purpose and function in the project area, a limited understanding of the roles individual health care professionals play and a general lack of knowledge and skill in working as an interprofessional team. Participants

noted there had been some education regarding primary health care offered since the beginning of the project but not all team members were in attendance.

Knowledge deficits were also identified regarding the team development process. Participants stated they lacked the skills needed to facilitate team development such as conflict resolution. It is important to provide education and training to ensure all health care providers can participate fully in the team development process to ensure its success.

Participants identified their perceptions of how identified barriers can be overcome. Table 6 outlines ways to overcome the perceived barriers to collaboration.

Table 6   **A Classification of the Major Categories and Sub-Categories of Participant's Perceptions Relating to overcoming Barriers to Interprofessional Teamwork**

Categories of Classification	Sub-Categories of Evaluative Thoughts relating to each category	Examples of Evaluative Thoughts from the data that give rise to the sub-categories
Communication	(a) frequent meetings	" If we could have meetings more often so we could have discussions about patients, somebody else will discuss the case."
	(b) scheduling	"..the other thing is to be included and given notice of what is happening so you can plan to attend, not being told today that something is happening tomorrow, so if there is something scheduled in advance you may be able to work around it."
	(c) formal system	" I know when we met in Harbour Breton the second time that did come up about geography and they talked about probably newsletters and some teleconferencing to keep people informed of what was happening."
		" There probably could be minutes to the meetings or even before a meeting ask us if we had any issues that we wanted brought to the meeting."

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Continuing Education	(a) Team member's roles	" I would like to know more about what it really means and how and what it would be like and how can I work at it as a professional. Like, what would my role be and how can I serve on this primary health care team. I think some of the roles and responsibilities need to be defined a little bit."
		" I think that there is a lot of education to be done about each other, what each other's roles are."
	(b) Primary Health Care	" You're probably going to have to do some workshops, in servicing to make people aware of what primary health care is. You know, I don't think that the people I talk with really know what primary health care is."
	(c) Team Development	" I have done things on conflict management and leadership. Anybody that hasn't, that would be helpful."
Inclusion	(a) Geographically	" ...just go beyond Harbour Breton...I think a lot of people have the impression that this is mostly a Harbour Breton project. There are meetings being held down there every week for different reasons. We have not been involved with them. We only hear of it second hand through different people."

Participants identified strategies that could be implemented to overcome geographic and communication challenges including working to address the quantity and quality of communication in the project area. Specifically, participants stated meetings should be more frequent and scheduled in advance to allow team members to fit traveling to meetings into their schedules. Technological resources need to be utilized to allow off site participation including teleconferencing. The primary health care project in the Connaigre region is currently seeking to acquire the technological capability to initiate videoconferencing in the area to enhance communication. As well, participants stated there should be mechanisms in place to keep members informed when they are unable to attend including minutes of meetings and newsletters.

Participants identified continuing education needs to address knowledge deficits. As one participant noted concerning lack of knowledge of the roles others play in patient care:

> "You want to understand, I want to know how the mental health nurse counsels the patient and what she is saying to them.....I want to learn from each other."

This illustrates a desire to collaborate in providing patient care and the need to facilitate the team development process through familiarization of the various roles health care providers play.

Other participants addressed the need to become more knowledgeable about primary health care:

" There definitely needs to be a big, big portion or a big chunk of information about primary health care teams and how we can work together. Even about primary health care, what it is really all about and how it differs from primary care."

As well, participants identified the need to learn more about team development:

" I think we need more knowledge on how to work together better as a team, like what qualifies as a team issue....Nobody really knows about how we're going facilitate this team work that we're talking about."

In these instances, participants perceived there were education needs that needed to be addressed to facilitate the development of a collaborative team.

It is important to address the perceptions of participants who practice outside the Harbour Breton area with respect to inclusion. This perception of not being a part of the team is prevalent in challenges related to geography and communication. Team members must be included in the process regardless of where they are geographically located in the project area. Ensuring equal representation and adequate communication is perceived to be essential to overcoming these challenges.

Participants also discussed their perceptions of factors that would enable collaborative practice in this region. Table 7 summarizes the major themes identified.

Table 7   **A Classification of the Major Categories and Sub-Categories of Participant's Perceptions Relating to Enablers to Interprofessional Teamwork**

Categories of Classification	Sub-Categories of Evaluative Thoughts relating to each category	Examples of Evaluative Thoughts from the data that give rise to the sub-categories
Human resources	(a) Familiarity	" The team members know who each other are, you know, a lot of them are from this area, grew up here and have known each other fro a very long time."
	(b) Commitment	" The biggest thing for me, what I see, you have a lot of hard working people down here that are eager to serve the people. I must say they are eager to serve the people and eager to help out the clients."
Location of Providers	(a) Shared Housing	" The fact that we're all housed in the same building kinda makes things a little better."
Service Delivery	(a) On Site	" We are getting regular based dietician visits now. We have a regular in house dentistry, dental hygienist. We have visiting consultants every two weeks from internal medicine."

Participants that practice in the community of Harbour Breton identified human resource factors which enable collaboration including being housed at one site. This has made informal team building easier and has increased familiarity among health care providers. Working in close proximity has fostered the development of the traditional sense of team that currently exists in that community among health care providers. Interestingly, those service providers who practice outside this site perceive the sense of communication in Harbour Breton as exclusive, pointing out they are not included in meetings and are not represented appropriately. It is important to recognize that perceptions differ and that team building activities need to be directed towards all members of the primary health care team.

Continuing Education Needs

As identified in the previous discussion, participants identified continuing education as essential to overcoming barriers to greater interprofessional collaboration. Table 8 illustrates themes which emerged as participants discussed their perceived needs.

Table 8   **Continuing Education Needs Identified**

Themes Identified	Components
Primary Health Care	Philosophy Implementation in region Implementation in professional practice
Interprofessional Team development	Education re roles of team members
Delivery Methods	Active learning Technology Interprofessional approach Accessability

Specifically, health care professionals noted they required continuing education related to the primary health care model and its implementation in the Connaigre region. As discussed, participants stated they did not feel they had enough information about how the model should work and how it would impact on their practice. In relation to working more effectively as a collaborative primary health care team, participants identified continuing education needs related to increasing their awareness of the roles other health care professionals play as well as how to function as an effective team.

Participants believed their learning needs related to interprofessional team building would be most effectively met utilizing a face to face, hands on approach:

> " I think the education needs to be delivered to a team, to a group of people. I don't think it is information that you can deliver to just one person. I think you need to do activities and those sorts of things and show examples....I think it would have to be with the group as a whole."

There was some consideration that this type of program may be possible utilizing

videoconferencing:

> " If you had videoconferencing, yes you probably could. We are supposed
> to be getting videoconferencing soon."

Another participant believed it was necessary that the facilitator deliver the program in

person to best facilitate their learning:

> " I find you need to have that person here presenting it rather than just
> being over the phone or anything like that. I don't find it as meaningful as
> face to face."

Participants also spoke to the importance of making the learning active and

meaningful for them:

> " Probably like having a little scenario and having the team work on that
> scenario and how they would do it rather than just research. Research is
> good but you have to have an actual situation put to it."

Participants identified that learning should be interprofessional in nature:

> " No, no, everyone like the social workers, the lab and the doctors. Even
> when it comes to medical records because they are seeing people too.
> Everyone getting together as a whole doing it. Not just the nurses or just
> the ones on the floor working but all of us who deal with patients."

This interprofessional approach was perceived to increase the networking among service

providers and facilitate increased collaboration:

> " I like learning as a group. There are going to be certain discussions for
> which this may be my strong point or it may be my weak point. That could
> be another member of that team's strong point so between all of us when
> we get together after such a meeting the collaboration can strengthen each
> other.....I know who I can fall back on. I know who is available to me

when I need that resource. I know who I can direct patients to and am comfortable with (their) qualifications."

This discussion emphasizes the importance of team development through effective education. Participants identified learning together as paramount to effective team building.

A final consideration is the importance of delivering education to rural health care professionals where they live. Travel from their positions in less than ideal conditions will deter professionals from being involved:

" We get Continuing Medical Education from Grand Falls-Windsor sometimes. They send me to Grand Falls-Windsor at 6 o'clock in the evening. For me to travel two hours for one hour and a half and come back to work is very hard depending on weather. Even in the summer it is very hard."

It is crucial to the success of continuing educational initiatives that educational activities are developed based on learner's identified needs and delivered utilizing methodologies that are appropriate and accessible to the learner.

Chapter Five : Discussion

Introduction

This final chapter will discuss the context in which the research was conducted. It will discuss interpretation of the findings of the research and will summarize implications for continuing education of primary health care teams in rural and remote regions as it impacts on the development of the interprofessional primary health care team. It will discuss implications of the research on the continued implementation of the primary health care project in the Connaigre region. It will also outline implications for further continuing education initiatives aimed at meeting the needs of the health care professionals who practice in rural and remote areas. Finally, it will also discuss implications for further research in this field.

Context of the Research

There are several factors which may have influenced the perceptions of service providers in the Connaigre region at this time. Historically, services have been provided by two distinct health care boards in the region, each with a separate mandate to provide institutional or community based care to the population, with the provision of services managed independently by each board. In 2004, the provincial government announced a restructuring of health care services in the province which includes a merger of the three health care boards in the Central Newfoundland area. Transition to this structure has begun in the region, however little was known at the time of the research as to how this

would impact the provision of care in the Connaigre region, leaving service providers to speculate as to how their roles may change in the new system and what partnerships may be developed, whether through the new organization or the primary health care project implementation itself.

As noted in the literature, Henneman et al.(1995) found successful collaboration requires a shift from the traditional hierarchical model to a more horizontal reporting structure, the organization's philosophy must support collaboration and organizational leaders must be able to convey the organization's vision of collaborative practice to team members. As noted in the data collected, participants indicated a perception that their management supported team development. This perception that management supports the interprofessional collaboration occurring through the Primary Health Care team has also been evident through the Team Effectiveness Survey. When asked the question: *"Our team has the support of the regional health board(s) management"*, 62% responded they agreed with the statement. It is vital that the new regional integrated health authority support the implementation of the interprofessional model and that this vision is realized through policies that are developed during the integration process.

The geography of the project area creates challenges and may impact on service provider's perceptions depending on where they practice in the area. The Connaigre region is a large geographic area with communities isolated from each other, some accessible only by ferry services. Service providers practice in many of these

communities in which access to team members is difficult, especially in the winter months. Perceptions of service providers regarding collaboration and continuing education may be impacted by their degree of isolation and accessability to other team members.

As noted, this research was conducted approximately one year following the implementation of the project in this area. Participants have already began involvement with activities designed to raise awareness of the purposes and processes of a primary health care model and have participated in activities aimed at team development. As well, the project management team has implemented team structures that have not existed prior to the primary health care model being implemented in this region. Thus, participants' perceptions may be influenced by their experiences to date with this process.

Participants' description of the nature of collaborative practice which currently exists is influenced by what had been the level of collaboration prior to the project beginning as well as the initiatives that have been implemented since. As outlined in the results, participants who practiced in the community of Harbour Breton reported a pre existing perception of teamwork and collaboration in the area but stated this was not formalized. Participants felt their familiarity with team members facilitated this. The perception that a group of participants believed they know the primary health care team was also demonstrated in the Team Effectiveness Survey.

When asked the question: *"Overall, I would say I "know" my Primary health Care Team"*, 49% agreed with this statement.

Interpretation of Findings

This research process has enabled the author to identify several opportunities and challenges that impact on the development of a collaborative approach in the Connaigre region as well as recommendations on how to address these challenges. The rural nature of the Connaigre region presents both opportunities and challenges. There exists a great sense of interdependence in the Harbour Breton area, created through years of isolation in which health care professionals have had to rely on each other for support. This has led to a general willingness to collaborate, with many health care professionals identifying and exploiting opportunities in which the primary health care team could work together to address both patient and population focused issues. Mariano (1998) identifies that space is an essential issue in the development of interprofessional collaboration, citing proximity as an asset to establishing this approach. It is important to ensure professionals have the opportunity to work in close proximity where possible to assist in team development, exploring opportunities to be co located where possible in the project area.

The geography also presents challenges. While a reported degree of collaboration exists in the immediate Harbour Breton area, this is not the case with other team members who feel excluded from the process and do not share the sense of inclusion in the traditional team or the primary health care team being created. For these isolated care

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givers, difficult travel has reduced their opportunities to build relationships with other health care providers, thus impacting the team building process and essential communication with others to enable collaboration. The Team Effectiveness Survey asked respondents to reply to the statement: " *We meet regularly for planning* ". In this question, 41% disagreed with the statement and an additional 13% were neutral. The response to this statement may be partially reflective of the inability of team members to meet regularly due to travel challenges resulting from geographical location.

Increased communication has been identified as crucial to greater collaboration in the entire project area and must be addressed to ensure its success. The current health boards have different communication systems that are unable to interface with each other at present, making information sharing across documentation systems impossible. As noted, there is an identified goal to establish an electronic health record for the project area which will enable the sharing of information across professions to increase collaboration regarding patient care. Although participants noted informal collaboration regarding patients occurs on an ad hoc basis at the medical center in Harbour Breton, many service providers do not practice at this location and are therefore unable to meet informally with each other. In the Team Effectiveness Survey, although 38% agreed with the statement " *Overall, there is a clearly understood purpose and vision* ", 28% disagreed and a further 20% were neutral. This is understandable when formal communication is not established throughout the project area.

Perhaps the greatest opportunity to address the challenges of the geographic area is by increasing communication capabilities through exploration of the capacity of information and communication technologies. Manske et al. (2000) stated Information and Communication Technologies (ICT's) are useful tools for health professionals as they provide greater access to clinical and health information, continuing health professional education and online services to increase communication that would otherwise not be available to them. To increase the utilization of ICT's, Health Canada's report "Canada Health Infoway : Paths to Better Health" (1999) recommended education and development opportunities for health care providers to acquire skills needed to make optimal use of health information and communication systems, and for organizations to support training for professionals to fully exploit the potential of telehealth. This is particularly pertinent in remote areas.

The sense of dissatisfaction with the communication system was expressed in the Team Effectiveness Survey. Although 36% indicated agreement with the statement " *Communication during meetings is effective* " 23% were neutral and a further 20% disagreed. Interestingly, 8% stated this was not applicable to them, indicating some service providers have not participated in team meetings at all. As well, 38% of respondents indicated they disagreed with the statement " *Communication between scheduled meetings is effective* " 18% remained neutral and only 31% agreed. It is crucial to increase communication by ensuring adequate representation at team meetings and

reporting of all information to all team members through effective communication methods. The Team Effectiveness Survey included the statement: *"Overall, I am satisfied with Primary Health Care Team related communications".* Although 49% agreed with this statement, 31% disagreed and a further 20% were neutral. This result indicates a need to further improve communication within the project area. Molyneux (2001) cites communication within the team as being critical to its establishment, identifying team members working from one base, regular and frequent meetings and agreement on communication between team members as factors to consider. It is critical that teams establish channels of communication that are appropriate and that communication is frequent, meeting the needs of all its members.

One of the greatest issues identified which impacts on the successful implementation of an interprofessional primary health care team approach in this region is the recognition of education needs that exist and addressing them. Primary health care providers indicated that learning needs related to the primary health care model, the roles of the various team members and how to function as an interprofessional team were important. Education is necessary and must be implemented to provide professionals with the knowledge and skills to work together in this capacity.

As previously noted in the literature review, health care professionals have not traditionally been educated utilizing an interprofessional approach and most professionals would have limited exposure to the philosophical models of other professions and the

roles that are defined in their respective scopes of practice. This lack of understanding

makes collaboration and team building more difficult among service providers. The Team

Effectiveness Survey presented the statement: *"Strategies are **not** in place to support*

team development". Response indicated that although 41% disagreed, 20% agreed with

this statement and a further 28% were neutral. It is vital that the primary health care

project continue to implement strategies which will facilitate team development among

it's team members.

With regards to the development of interprofessional teams in health care, Curran

(2003) synthesizes research that has been conducted concerning interprofessional

education for patient- centred collaborative practice, discussing Heinemann and

Zeiss'(2002) model of factors which influence interprofessional team performance. The

model outlines a framework of domains, dimensions and elements which must be

addressed to ensure effective interprofessional teamwork . The model speaks to the

domains of team performance including the structure, context and process of an

interprofessional team. Each domain is further broken into dimensions of the domain and

the elements of each dimension as summarized in Table 9.

Table 9   Heinemann and Zeiss Model of Team Performance

Domains				
Structure		**Context**		**Process**
Organizational Dimension	Team Dimension	Organizational Dimension	Team Dimension	Interdependence Dimension
Elements	Elements:	Elements:	Elements:	Elements:
Missions, goals and objectives	Mission, purpose and direction	Managerial modeling of and support for team	Attitudes towards teams and teamwork	Utilization of resources and team members
Performance standards	Goals, objectives and priorities	Change, flexibility and innovation	Cautious, tentative, overly polite climate	Participation and workload sharing
Norms, values and expectations	Fit between organizational, team and individual goals	Issues about time and cost restraint	Congenial, social climate	Communication
Team fit within organization	Consistency between purposes, goals and processes/ activities	Trust, confidence, respect and value	Caring, warm accepting climate	Giving and receiving feedback

Allocation of authority/ responsibility of teams	Roles and responsibilities	Commitment, cohesion and loyalty	Climate permits free expression	Collaboration
Assignment of competent employees and leaders	Norms, values, expectations and standards	Motivation	Feeling pressure and stress	Cooperation, coordination and efficiency
Provision of education and training	Order, rules and procedures	Relations across teams and stakeholders	Support and encouragement	Power and leadership sharing
Mechanisms for communication and decision making	Boundaries and permeability	Team's reputation within organization	Commitment to team, members and teamwork	Utilization of leadership skills
Reporting system/ channels of accountability	Organization of space	Satisfaction / security with job and working relationships	Cohesion, unity and team identity	Decision making
		Organizational impact on field / marketplace	Team spirit, morale energy and enthusiasm	Problem solving
			Work viewed as interesting, challenging and important	Conflict management

Satisfaction with colleagues, team and teamwork

Utilization of appropriate team processes

Task orientation and effective task implementation

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The structural domain includes organizational and team dimensions. The structure of an organization or a team refers to its organizing framework or how its various parts fit together and are expected to function. For an effective interprofessional team to function, the team approach must be understood, appreciated and utilized throughout the organization. Organizational elements such as clear missions, goals and direction; a sense of team fit within the organization; availability and adequacy of resources; appropriate mechanisms for communication and decision making; as well as provision of education and training are essential.

Organizational boundaries were cited as a barrier to effective team building in the research as community versus institutional expectations were perceived to be in conflict at times, referring to the obligations of each team members to address the mandate of their own program. As the new regional health authority begins its operations within the Central Newfoundland region, it will be vital that the primary health care project is understood and valued by management and that resources are allocated to enable the interprofessional primary health care team to continue its development through regional support and continuing education.

Within the Heinemann and Zeiss Model (2002) under the context of team dimension, specific elements include the team's mission being clear to all its members; roles and responsibilities being well defined; a clear fit between organizational, team and individual care provider's goals; and organization of space for the team to function.

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Knowledge deficits related to the purpose of the primary healthcare team as well as the roles of its members was cited as a barrier to collaboration. It is essential to continue with efforts already ongoing to ensure that all team members are educated about primary health care, interprofessional teamwork and the role of team members. Participants identified further education and discussion of clarification of the roles and responsibilities of team members as a strategy to overcome barriers to greater collaboration. As noted in the team Effectiveness Survey, only 38% agreed that team meetings contributed to their ability to meet client's / patient's needs, indicating that some team members do not see a clear fit between the team's goals and their goals for clients as care providers. Organization of space is important to enable increased communication, thus enhancing team performance. As noted by some participants, being housed together has increased opportunities to collaborate but is not possible for many care providers who practice in more remote settings. Enhancing effective communication through the utilization of technology is essential to team development outside the immediate area.

The context of the team refers to the social-psychological atmosphere, milieu, environment or climate of the organization and the team which influences the quality of the processes and tasks that are carried out. Team context is influenced by how well members know each other, how comfortable they feel being themselves in the team and the quality of their relationships with each other. Essential elements of organizational context include a level of trust, confidence, respect and value for the team; commitment,

cohesion and loyalty to the team; motivation; and relations across the team and with

stakeholders. Team development involves the provision of opportunities for team

building among team members, enabling them to become more knowledgeable regarding

each other's roles and the primary health care team. As noted in this research, the

perception of team context has impacted on team development. Members who work in

the immediate area report knowing each other as positive to team development, whereas

members who practice in more remote areas perceive they are not part of the primary

health care team as they feel they have limited representation at team meetings and there

exists a general perception that they are left out of the process. For these team members,

there has been limited opportunities for relationship building and therefore a lack of

perception of unity and team identity.

Essential elements of team context refer to the climate within the team and is

influenced by attitudes toward teams, how well members know each other, how

comfortable they feel being themselves within the team and the quality of their

relationships with each other. In the Team Effectiveness Survey, 49% agreed they felt

comfortable providing feedback to each other when expectations were met and only 38%

felt they were comfortable providing feedback when expectations were not met. As well,

only 49% agreed they "knew" their primary health care team. Team building activities

must continue to enable team development.

The domain of team process refers to a series of progressive and increasingly integrative activities used by teams to accomplish tasks and achieve goals. Its dimensions include increased interdependence of team members and growth and development of team members as well as the team itself in relation to skills, abilities and team functioning. Members learn to work interdependently with each other, increasing productivity by collaboratively setting goals for the team and reviewing accomplishments. Essential element of this domain include utilization of resources and team members, participation and workload sharing and skill development of team members enhancing communication, collaboration, decision making, problem solving and conflict management.

Participants in this research study reported knowledge and skill deficits related to how to function as a primary health care team, roles of the respective team members as well functioning as an interprofessional team utilizing such skills as conflict management to be barriers to team development. Continuing education utilizing an interprofessional, active learning approach has been identified as paramount to enabling team members to gain the skills needed to foster interdependence and work as an effective interprofessional team. It is important to address these issues to achieve effective team performance as per the Heinemann and Zeiss (2002) model.

Implications for Primary Health Care Teams

These findings may impact on decisions made by primary health care projects in rural areas to address the identified needs. It is recommended that projects continue efforts in supporting the development of the primary health care model by further assessing the learning needs of service providers related to primary health care. As noted, team members need to understand the purpose and vision of primary health care and the team approach involved. When team members understand the philosophy of primary health care and its benefits to the population, motivation to be involved will be increased.

The findings of this research project suggest that increased communication through the utilization of currently available technology may be an important part of strategic planning for rural primary health care teams as well as continuing lobbying efforts to increase technological capacity, such as through videoconferencing and a common electronic health record. In the example provided by the project, as one of the two sites selected in the province as reference sites for the establishment of an electronic health record, it is anticipated communication between the electronic programs Client Referral Management System, utilized by the former Health and Community Services board and Meditech, utilized by the institutions board will be possible, resulting in greater communication amongst team members. The project continues to be cognizant of the reduced technological capabilities in the more remote communities and the impact this has on the ability of service providers to participate. The project has taken steps to

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improve communication by contributing financially to establish broadband technological capacity which will improve telecommunications.

The findings also suggest that rural primary health care teams may benefit from strategies to improve existing communication amongst service providers such as ensuring adequate representation at team meetings, ensuring inclusion of all team members by allowing adequate opportunity to travel, communicating with all team members through media such as newsletters and minutes of meetings and also exploring avenues in which team members can connect to meetings via telecommunications. Strategies aimed at improving communication may increase the effectiveness of the team itself, facilitating teamwork to establish a clear purpose and vision for the primary health care team as well as setting goals and objectives and measuring progress through effective feedback mechanisms.

Rural primary health care teams may also capitalize on opportunities for collaboration in the area including patient focused activities such as chronic disease management and Lifestyle Clinic, as well as increasing collaboration regarding health promotion initiatives to address health issues identified in population groups such as women, seniors or youth.

As noted, the Lifestyle Clinic provides an opportunity for health care professionals to collaborate for effective service delivery to the adult population regarding primary and secondary prevention. Clients attend the clinic on a voluntary basis

to receive services including screening for disease such as Diabetes, Hypertension and Cervical Cancer, education regarding lifestyle issues such as nutrition, healthy activity and smoking cessation as well as support to make changes in lifestyle which will create positive outcomes for their health. Through the Chronic Disease Management Diabetes Collaborative project, an interprofessional team has been established to confirm the project's Diabetes aims, provide direction for implementation of interventions and facilitate regular meetings to discuss achievement and adjustment of aims.

Rural primary health care teams may also benefit by enabling team building by including opportunities for health care professionals to learn more about each other's roles and scope of practice. This can be achieved by building time into team meetings to educate each other, utilizing communication media such as newsletters to inform both professionals and public of the roles which different providers play and creating more opportunities for disciplines to work together in initiatives such as the Lifestyle Clinic. Implementation of strategies aimed at increasing communication may increase the collaboration opportunities for all members of rural primary health care teams.

Implications for Continuing Education

As noted, the Provincial Office of Primary Health Care, in cooperation with the individual primary health care projects in the province, is working to address the continuing education needs of primary health care team members through the Building a Better Tomorrow Initiative, developed in consultation with the four Atlantic provinces of

Canada. This initiative will address health professionals' education needs as identified through such assessment processes as the Team Effectiveness Survey Tool. Findings of this research project suggest the following issues be considered in providing continuing education to rural primary health care teams.

It is recommended that educational opportunities be accessible to all team members. This includes supporting staff attendance by planning sessions in advance to allow for scheduling and travel, offering sessions at alternate times so that essential staff can coordinate their attendance and by considering budgetary opportunities to replace staff and release them from duties so that they are able to attend team meetings and educational sessions. It is also important to consider technological media that can provide accessability to those who practice in remote communities where this approach is appropriate to the learning needs.

Educational opportunities should be implemented utilizing an interprofessional approach. Service providers need to learn together so that team building and education regarding each other's roles is enhanced by modeling this approach. Communication is enhanced when professionals have the opportunity to learn together and practice team building skills.

Educational activities should be designed utilizing the media most appropriate to meet the learning needs. While teleconferencing, videoconferencing, written media and Web based learning have been successful in meeting educational needs, it has been

identified that face to face learning approaches may be most appropriate in facilitating team development and increased collaboration amongst team members.

Implications for Further Research

The purpose of this study was to examine the perceptions of rural primary health care providers pertaining to collaborative practice and continuing education needs. The study has identified education needs and has recommended methods to address the barriers to increased collaboration through continuing education methods.

Implications for further research include conducting an evaluation of educational interventions to measure the perceptions of health care providers related to collaboration and their continuing education experiences. Research could be conducted to determine the level of collaborative practice that exists in the project area as well as the focus of the collaboration after educational interventions are implemented. Further research could be conducted with other rural primary health care teams utilizing the same methodology to determine the prevalence of the issues identified in the region. As an example, it would be interesting to determine if the perception of remote health care professionals related to the alienation of team members outside the main service center is experienced in other rural areas as well. It would also be interesting to determine if the perceptions of health care professionals in urban areas differ from their rural colleagues with reference to the collaborative practice and their continuing education needs.

Summary

This study has been conducted to determine the perceptions of health care providers in a rural primary health care team project site relating to collaborative practice that may occur in their area, barriers and enablers to achieving collaborative practice as well as continuing education needs that exist related to functioning as a collaborative primary health care team.

The study has identified ways in which health care providers in this area have traditionally collaborated in the past as well as opportunities for further development of the collaborative approach to care. The study has identified barriers to increasing collaboration including geographic challenges, insufficient communication and knowledge deficits. It has also identified enablers including familiarity amongst health care providers and the opportunities for collaboration that exist in the new integrated health board structure. The challenge is to capitalize on the willingness of health care professionals to prescribe to the primary health care approach by providing them with the educational opportunities which will equip them with the knowledge and skills to function as a primary health care team, as well as supporting team development through organizational policies that continue to facilitate the development of a collaborative approach.

It is important to consider the identified education needs of health care professionals in the region. Opportunities should be provided to learn about primary

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health care, become familiar with each other's roles and to explore how professionals from different disciplines can work together in their roles to increase collaboration. Team development education should be provided to facilitate this process. The primary health care project should be cognizant of these learning needs as well as the challenges that learners experience in accessing education when planning learning initiatives. Becoming familiar with the issues related to collaborative practice in the rural setting and working to meet the continued education needs identified by the participants may assist in the establishment of collaborative practice utilizing an interprofessional approach in the primary health care project area.

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Appendix A

Participant Letter

Dear Health Care Professional,

I am a graduate student in the Faculty of Education at Memorial University of Newfoundland. I am a Public Health Nurse who is employed with the Central Regional Health and Community Services Board at Grand Falls Windsor, NL. I am currently completing my Masters of Education degree and one of the criteria is to complete a research project.

I am undertaking a study of the continuing education needs of rural health care professionals as pertaining to the implementation of the Primary Health Care Model on the Cannaigre Peninsula. In cooperation with the Provincial Office of Primary Health Care and the Connaigre Peninsula Primary Health Care Project Management Team, I am interested in speaking with health professionals from the various disciplines that practice in the area, to hear your views concerning your professional development needs, specifically related to the development of an interdisciplinary team approach to health care. You are under no obligation to participate in this study and the decision on whether to participate or not, is yours.

If you agree to be a part of this study, you will be agreeing to participate in an interview with myself which will take approximately one hour to complete. This interview will take place in person or over the telephone and will occur at a location that is mutually agreed on by the researcher and yourself. Before we begin the interview, I will review the procedure and process, including the confidentiality guidelines of the study and a consent form will be signed. I will also advise you of your right to terminate the interview at any time. The design of the interview questions is to determine your views concerning continuing education needs which, if successfully met, will aid in the implementation of the interdisciplinary team approach. There will be no personal questions asked in the interview guide. Your feedback will provide information on what continuing needs exist and how they can be met.

With your permission and for the purpose of hearing all of your feedback, I will use a tape recorder and/ or take notes during the interview. The audio tape and/ or notes will be stored in a locked filing cabinet accessible only to myself and selectively to the transcribing secretary who has signed an "Agreement to Maintain Confidentiality". Dr. Vernon Curran, professor at the Faculties of Medicine and Education and my research supervisor, may have access to the transcribed interviews if necessary, to help me with the data analysis. No identifying information, such as your name or discipline, will be

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contained on the transcriptions. The audio tapes, notes and transcriptions will be kept in a locked cabinet until the study is completed, at which time they will be destroyed by myself. As a participant, you can be assured that all information shared will be confidential. At the completion of the study, a summary report will be sent to all participants. If you have any questions, please feel free to contact me at 489-8184 or leave a message on my confidential message manager.

If you agree to participate in this study, please return the enclosed agreement card as soon as possible. I have enclosed a stamped self-addressed envelope for your convenience. If you agree to participate, I will contact you to schedule a suitable time and place for your interview. If you have decided not to participate I thank you for your time and consideration.

Sincerely,

_____

Heather M. Brown B.N. R.N.

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University of Newfoundland. If you have ethical concerns about this research you may contact the Chairperson of ICEHR at icehr@mun.ca or by telephone at 737-8368.

Appendix B

Willing to Participate card

Willing To Participate

I give my consent to participate in the research study known as "**An Assessment of the Continuing Education Needs of Health Professionals Practicing in Rural Areas of Newfoundland and Labrador**".

Signature : _____

Health Profession : _____

Date : _____

Telephone : _____

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Appendix C

Semi Structured Interview Guide

Definitions

Interprofessional Team : a functioning unit composed of individuals with varied and

specialized training who coordinate their activities to provide services to a client or group

of clients (Duncanis and Golin, 1979: p.3 in Lowe and Herranen, 1981).

Primary Health Care :the first level contact with people taking action to improve health in

a community. Primary health care is essential health care made accessible at a cost which

the country and community can afford, with methods that are practical, scientifically

sound and socially acceptable (World Health Organization, 1998).

Research Questions

1. What are primary health care providers' perceptions of the nature and

characteristics of the interprofessional teamwork process which may occur in their

area?

2. What are primary health care providers' perceptions of possible barriers,

challenges and enablers to interprofessional teamwork in their area?

3. What are primary health care providers' perceptions of their clinical and non-

clinical professional development and continuing education needs?

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Interview Guide

1. Please describe your past experience with working as part of an interprofessional primary health care team.

2. What were the types of patients or population groups with whom your primary health care team collaborated in providing patient centered care?

3. How would you describe the level and nature of interprofessional primary health care teamwork which currently exists in the Connaigre region?

4. Can you provide examples of particular patient or population groups for whom interprofessional collaboration currently occurs in the region?

5. What is the nature of the interprofessional collaboration for these patient or population groups?

6. What professions are involved and who does what?

7. In what service areas or for which patient or population groups do you believe interprofessional collaboration could be improved for this region?

8. What do you see as the main barriers or challenges to greater interprofessional collaboration amongst different primary health care providers in this region?

9. How can these barriers or challenges be overcome to increase interprofessional collaboration?

10. What are the key enablers or strengths in this region which would support the facilitation of greater interprofessional collaboration amongst primary health care providers?

11. What do you believe are some of your continuing education/professional development needs as they relate to your participation as a member of an interprofessional primary health care team?

Probe: Please consider your clinical and non-clinical needs?

12. If continuing education/professional development opportunities were offered to address these needs, what delivery methods would best facilitate your learning? (e.g. face-to-face workshops, presentations, distance education, self study, Web-based learning, etc).

Appendix D

Consent

Consent For Participation

1.   I understand that the purpose of this study is to allow primary health care providers on the Connaigre Peninsula the opportunity to express their views pertaining to collaborative practice in their area and to identify continuing education needs concerning the establishment of such practice.

2.   I understand that for the purpose of recording all information shared, the interview will be tape recorded and/ or notes will be taken. I understand that should I refuse to have the interview tape recorded that hand written notes will be taken. I understand that I can request that the tape recorder be turned off for a part of the interview and at that time written notes will be taken to highlight points relevant to the study. I understand that only Heather Brown and the transcribing secretary, who has signed an "Agreement to Maintain Confidentiality", will have access to these audio tapes. The tapes, notes and transcriptions will be placed in a locked cabinet until the study and report is complete, at which time all data will be destroyed by Heather Brown. Dr. Vernon Curran, a professor at the Faculty of Medicine and the research supervisor, may have access to the transcribed interviews if necessary to assist in the data analysis. No identifying information regarding myself will be contained on these transcripts.

3.   I understand that the interview will last approximately one hour at a place and time mutually agreed upon.

4.   I understand that participation in this study is purely voluntary and I do so freely without promise of benefits from the researcher.

5.   I understand that this research study is one criteria for obtaining the Masters of Education degree for the researcher.

6.   I understand that a summary report will be sent to me at the end of the project.

7.   I understand that the Faculty of Education, the Provincial Office of Primary Health Care and the Connaigre Peninsula Primary Health Care Project Management Team will receive the final report of this study.

8.   I understand that the research report may be reduced for purpose of publication without reference to participants.

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I hereby consent to participation in this research study and understand its implications

Signature: _____

Witness: _____

Date: _____

To the best of my ability I have fully explained the nature of this research study. I have provided the participant with a copy of the "Consent For Participation" form and I have invited questions and provided answers. I believe that the participant fully understands the implications and voluntary nature of their participation in this study.

Signature of Researcher: _____

Date: _____

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at:

icehr@mun.ca or by telephone at 737-8368.

Appendix E

Agreement To Maintain Confidentiality

Agreement to Maintain Confidentiality

I, _____ of _____ in the province of
Newfoundland and Labrador, having been contracted to transcribe audiotapes of

research interviews, agree to maintain confidentiality with respect to any
  respondents

whose voices I may recognize and with respect to the content of responses given
by research participants. I will also properly safeguard the audiotapes   and
transcribed material by storing them in a locked filing cabinet.

Signature: _____

Witness: _____

Date: _____

Appendix F

Team Effectiveness Survey Tool

Newfoundland and Labrador Primary Health Care Renewal Initiative

PHC Team Survey: Team Effectiveness/Scope of Practice

As part of the Primary Health Care (PHC) Renewal Initiative, the Office of Primary Health Care is working with local PHC Project representatives to conduct an evaluation of the project. Harry Cummings and Associates (HCA), an evaluation consulting firm, is acting as a neutral third party in providing technical support and assisting with data analysis.

The Office of Primary Health Care is asking team members involved with the Primary Health Care Project to participate in the assessment by completing this questionnaire. **Part A** of this questionnaire will assess key elements of Teamwork including team purpose and vision, communication, team support, and partnerships. **Part B** of this questionnaire will assess Scope of Practice issues including team member roles, and service delivery.

Team member participation is voluntary. Once the questionnaire is completed it should be forwarded to Harry Cummings and Associates using the enclosed self-addressed envelope. HCA will compile the information into an electronic data base for analysis. Information received by HCA will be kept confidential. Data will be aggregated and information will be used in a nameless, summarized form. Under no circumstances will information about an individual respondent be shared with the Department of Health and Community Services.

The information you provide will help to track the progress of the project and its impact on service providers and the wider community. Summary information from the data analysis will be shared with the PHC Team through the Project Coordinator.

For the purposes of completing this questionnaire, the following definitions are to be used:

Primary Health Care Team: Full Time, Part Time, and Casual professionals who provide service for the population of the region.

Primary Health Care Network: All health board and private professionals who provide service to the population in the region on an intermittent bases.

Physician Network: Family Practice Physicians providing medical services to the service population in the region.

When responding to 'team' related questions, please use the attached membership list as your reference point - this will help to ensure that there is a consistent understanding of the team composition across all team members.

If you have any questions related to the survey, please contact Harry Cummings or Don
Murray at (519) 823-1647 (collect).

Using a scale of 1 to 7 where 1 = strongly disagree and 7 = strongly agree, please indicate the extent to which you disagree or agree with each of the following opinion statements as they relate to your PHC Team. Please note, the questionnaire is designed to be scanned electronically for data entry and it is important that you clearly mark your response in the appropriate box.

If you feel that a statement is not applicable, please check 'N/A'. Check only one box per statement.

	Strongly Disagree					Strongly Agree	
	1	2	3	4	5	6	7

A. TEAM PURPOSE AND VISION

Q1

| Our purpose is clearly understood by all members. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q2

| We meet regularly for planning. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q3

| Our goals and objectives are *not* set based on assessment of clients'/ patients'/communities' need. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q4

| We do *not* have shared common agreement about our strategies to achieve our goals and objectives. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q5

Our goals and objectives are clear.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

	Strongly Disagree					**Strongly Agree**	
	1	**2**	**3**	**4**	**5**	**6**	**7**

Q6

Our goals and objectives are measurable.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q7

Our goals and objectives are realistic.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q8

Our team reviews its current effectiveness.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q9

We measure progress against specified goals and objectives.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q10
Overall, there is a clearly understood purpose and vision.   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*

B. COMMUNICATION

Q11

Communication during our meetings is effective.	1	2	3	4	5	6	7 N/A

Q12

Communication between scheduled meetings is effective.	1	2	3	4	5	6	7 N/A

Q13

Relevant information is exchanged among team members	1	2	3	4	5	6	7 N/A

	Strongly Disagree					**Strongly Agree**	
	1	**2**	**3**	**4**	**5**	**6**	**7**

Q14

Relevant information is exchanged in a timely fashion.	1	2	3	4	5	6	7 N/A

Q15

There is limited duplication of communication within our team.	1	2	3	4	5	6	7 N/A

Q16

We effectively use technology to maximize team communications.	1	2	3	4	5	6	7 N/A

Q17

Our team does *not* have an evidence based decision-making process.	1	2	3	4	5	6	7 N/A

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Q18

Decisions are *not* followed through to implementation.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q19

Leadership is shared and effectively delegated in line with areas of competence.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q20

Our team members are open and honest when communicating.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q21

When differences occur, they are dealt with effectively.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

	Strongly Disagree					**Strongly Agree**	
	1	**2**	**3**	**4**	**5**	**6**	**7**

Q22

Overall, I would say I "know" my Primary Health Care Team.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q23

Overall, I am satisfied with Primary Health Care Team related communications.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

C. TEAM SUPPORT

Q24

There is a high level of trust and confidence amongst our team members.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q25

Our team works as a cohesive group.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q26

Our team provides support to individual members through difficult situations.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q27

We feel comfortable providing feedback to each other when expectations are met.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q28

We feel comfortable providing feedback to each other when expectations are not met.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Strongly Disagree					**Strongly Agree**	
1	**2**	**3**	**4**	**5**	**6**	**7**

Q29

Our team members do *not* have the opportunity to develop their skills within the team.

1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q30

Strategies are *not* in place to support team development.

	1	2	3	4	5	6 7 N/A

Q31

We are individually accountable for our team's performance.

	1	2	3	4	5	6	7 N/A

Q32

We are jointly accountable for our team's performance.

	1	2	3	4	5	6	7 N/A

Q33

Our team has the support of the regional health board(s) management.

	1	2	3	4	5	6	7 N/A

Q34

Overall, I am satisfied with the support that team members provide.

	1	2	3	4	5	6	7 N/A

D. PARTNERSHIPS

Q35

Our team involves and supports the community in the planning and delivery of programs and services.

	1	2	3	4	5	6	7 N/A

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	Strongly Disagree					Strongly Agree	
	1	2	3	4	5	6	7

Q36
Our team responds to client/patient and community input.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q37
Our team does *not* effectively involve network providers.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q38

Our team has developed partnerships with intersectoral groups to plan and deliver services (e.g., education, youth, seniors, police, clergy).

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q39

Committees such as project planning committees or community advisory committees are supporting the team in improving the delivery of services.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q40

In the past six months there has been increased participation by clients/patients in decisions related to self, family and community programs.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q41

In the past six months requests for

| 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

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health information by clients/patients and community members has increased.

Q42

| Overall, I am satisfied with the partnerships that the Primary Health Care Team has established. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

E. PERSONAL SATISFACTION
Please indicate the extent to which you disagree or agree with each of the following opinion statements as they relate to your personal experience.

Q43

| Team meetings contribute to my ability to meet client/patient needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q44

| I would encourage other health care service providers to work in this practice setting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 N/A |

Q45

| Overall, I'm satisfied with the functioning of my Primary Health Care Team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N/A |

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Part B: Scope of Practice

Please indicate the extent to which you disagree or agree with each of the following opinion statements as they relate to your PHC Team.
If you feel that a statement is not applicable, please check 'N/A'. Check only one box per statement..

	Strongly Disagree					**Strongly Agree**	
	1	2	3	4	5	6	7

A. ROLES

Q46

Members of our team are clear on what is expected of them.	1	2	3	4	5	6	7 N/A

Q47

Members of our team understand their role within the team.	1	2	3	4	5	6	7 N/A

Q48

Each member of our team respects the insights, knowledge and perspectives brought by members of professions other than his/her own.	1	2	3	4	5	6	7 N/A

Q49

Each member's abilities, knowledge and experience are fully utilized by the team.	1	2	3	4	5	6	7 N/A

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Q50

Our team does *not* have the support
of the regional health board(s)
management

1	2	3	4	5	6	7 N/A

Q51

Service is being delivered through the
appropriate providers (i.e. there is a
good match between client/patient
needs and provider skills).

1	2	3	4	5	6	7 N/A

Strongly Disagree					Strongly Agree	
1	2	3	4	5	6	7

Q52

Team-based functions are shared
across professional boundaries.

1	2	3	4	5	6	7 N/A

B. SERVICE DELIVERY

Q53

Our team covers the continuum of
services from prevention to
rehabilitation.

1	2	3	4	5	6	7 N/A

Q54

Our team spends an appropriate
amount of time planning and
delivering preventative programs.

1	2	3	4	5	6	7 N/A

Q55

Our team does *not* do community
outreach.

1	2	3	4	5	6	7 N/A

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Q56

Our team has membership from all relevant groups or professions needed to maximize our ability to function effectively.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q57

Our team is innovative in its service delivery approach.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q58

Our team is clear on how it provides its services.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

	Strongly Disagree					**Strongly Agree**	
	1	**2**	**3**	**4**	**5**	**6**	**7**

Q59

Practice protocols are in place for key conditions (e.g., diabetes, child development), mapping client/patient flow, provider tasks, information capture and check points.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q60

We use common client/patient records/charts where possible.

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

Q61

We efficiently screen/triage

   1   *2*   *3*   *4*   *5*   *6*   *7 N/A*

clients/patients at the point of entry
to service.

Q62

Practice information is ***not*** reviewed   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
at our team meetings to improve
indicators of service quality.

Q63

Working as a team has resulted in   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
service delivery being more
integrated and co-ordinated.

Q64

Distinct new programs emerge from   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
the collective work of colleagues
from different disciplines.

Q65

Working with colleagues from other   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
disciplines leads to outcomes that we
could not achieve alone.

	Strongly Disagree					**Strongly Agree**	
	1	**2**	**3**	**4**	**5**	**6**	**7**

Q66

Organizational protocols reflect the   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
existence of cooperation between
professionals from different disciplines.

Q67

Overall, I am satisfied with the level of   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
co-ordination between team members
and network service providers.

C. PERSONAL SATISFACTION
Please indicate the extent to which you disagree or agree with each of the following opinion statements as they relate to your personal experience.

Q68
Other professionals in my practice   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
setting utilize my professional
expertise for a range of tasks.

Q69

My colleagues from other disciplines   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
believe that they could not do their
jobs as well without my assistance.

Q70
Incorporating the views of treatment   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
held by my colleagues from other
disciplines improves my ability to
meet client/patient needs.

Q71

My scope of practice is being fully   *1*   *2*   *3*   *4*   *5*   *6*   *7 N/A*
utilized within my practice setting.

Q72

Do you have any comments that you would like to provide in relation to the effectiveness of your Primary Health Care Team? (Please attach a separate page if more space is required)

Q73

Do you have any additional comments that you would like to provide in relation to the local Primary Health Care initiative? (Please attach a separate page if more space is required)

The following questions are intended to assist the evaluators in developing a general profile of the Primary Health Care Team. Feel free to omit any questions that you are uncomfortable answering.

Q74 What is the name of the Primary Health Care Project that you are involved with?

Bonavista ....
Bonne Bay Region ....
Connaigre Peninsula ....
Labrador East...
St. John's Region ....
Twillingate/New World Island ....

Q75 Grenfell Region
Ferdie...
Redaction ....
Flower's Cove...
St. Anthony...

Q76

Today's date: (yy/mm/dd)

Q77

Which of the following roles best describes your position with the Primary Health Care Project?
(Check one response only): I'm a member of the...
Primary Health Care Team..................................
Physician Network...
Primary Health Care Network...............................
Don't know..

Q78

During the last 6 months...
(a) How many meetings were conducted by the Primary Health Care Team?
(Please indicate the actual number) ....
Don't know ....
and (b) How many of these meetings did you attend in person or by Tele or video-conference?
(Please indicate the actual number)

Q79

Number of times attended in person ....

Q80

Number of times attended by tele-conference ....

Q81

Number of times attended by video-conference.....

Q82

Total number of meetings that you attended..........

Q83

What is the highest level of education that you completed? (Check one response only)

Less than high school ....
Secondary (high) school graduation ....
Some non-university trades certificate or
diploma ....
Completed non-university trades certificate or
diploma...
Some university..
Completed Bachelor's degree(s) (e.g. B.A.,
B.C., B.S.A.) ....
Completed Master's degree or Doctoral
degree (e.g. M.A., M.C., Ph.D., M.D., D.D.S.) ....

Q84

What is your current health related profession? (e.g. Family Doctor, Dentist, Physiotherapist, Nurse Practitioner, Social Worker, Administration. etc)

Q85

In what year were you born?

Thank you for taking the time to complete this questionnaire.
Before mailing the questionnaire to Harry Cummings and Associates please take a moment to ensure that you have completed each page of the questionnaire.

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