

Interprofessional Teams: The Realities and Preferences of Four Health Professions in
Community Practice

A Thesis Submitted to the College of
Graduate Studies and Research
in Partial Fulfillment of the Requirements
for the Degree of Master of Nursing
in the College of Nursing
University of Saskatoon, Saskatchewan

By

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Abstract

Interprofessional collaboration is of interest to health care students, faculty, governments, health region employees and employers, and health care consumers across Canada. The shortage of health care professionals and the increase in the number of persons living with chronic illness and disability in Canada is an immediate and growing concern. An increase in caregivers in the community, increased expectations for health services and more readily available information all contribute to the need for health services and professionals in the community that support a good quality of life for Canadians. The health care professional shortage creates a further challenge for key stakeholders in academia, government, and health regions who hold a vested interest in the health of Canadians. Health care professionals are not able to address the complicated and complex health care needs of individuals single-handedly. A collaborative community-based delivery of primary health services is recognized around the world as the most effective way to deliver everyday health services. Health professions agree that interprofessional collaboration is beneficial to client care but often fail to maximize their potential to work collaboratively despite strong advocacy for the benefits of interdependence. Interprofessional collaboration is associated with improved holistic and comprehensive care for clients and a greater satisfaction for health care providers. The findings from this research will contribute to our understanding of the characteristics of primary care teams across Canada. We gain insight into these characteristics across the four professions, why some professionals are not participating on teams, and the preferred team characteristics of the four professions. Identifying these successes and gaps will support the development of more effective ways to participate in collaborative teams. The study examined existing data from participants who represented four health professions (medicine, nursing, nutrition, pharmacy) who work within primary health care as contained in the Health

Care Teams in Community Practice data base (Dobson, et al. 2004). The study employed a content analysis approach for the analysis of the open ended qualitative answers. Responses to the short answer questions were placed into categories, counted, and interpreted based on those categories. The findings from the study concluded that desired and actual team characteristics were dissimilar. These differences must be addressed in order for clients to benefit from community health care team work.

Acknowledgements

I would like to take the opportunity to thank my supervisors, Dr. Lynnette Stamler and Dr. Roy Dobson for their continued support and guidance on assisting me to complete this work. Thank you to my committee members, Dr. Shawna Berenbaum and Dr. Dorothy Forbes. I would also like to acknowledge and thank the Saskatchewan Institute of Applied Science and Technology, the Saskatoon Health Region, and Saskatchewan Health for their financial support. This research was funded by grants from the Canadian Institutes for Health Research, the Saskatchewan Health Research Foundation, and the College of Pharmacy & Nutrition, University of Saskatchewan. Additional assistance provided by Dietitians of Canada, the College of Registered Nurses of British Columbia, Saskatchewan Registered Nurses Association, College of Nurses of Ontario, Ordre des infirmières et infirmiers du Québec., College of Registered Nurses of Nova Scotia, and Nurses Association of New Brunswick. The completion of this thesis would not have been possible without the help and encouragement of family and friends. A special thanks to my parents, Dianne and Rod Kennard and Christine Begg, who have always supported me in my academic endeavors. Thank you to my brother Darren for reminding me to “keep at it”. Thanks to my colleagues, especially Noelle, Kelly, and Shelly. Thanks to my husband and best friend, Ryan, for his patience and persistence in encouraging me to complete this work. The arrival of our son Hayden came at the perfect time!

Dedication

This thesis is dedicated to my husband Ryan. When I did not believe in myself, he did!

TABLE OF CONTENTS

Permission for Use	i
Abstract	ii
Acknowledgements	iv
Dedication	v
Table of Contents	vi
List of Tables	ix
List of Appendices	x
1. CHAPTER ONE – INTRODUCTION	1
1.1 The Research Problem	1
1.2 Need for the Study (Relevance and Significance)	2
1.3 Purpose of the Study	3
1.4 Research Questions	4
2. CHAPTER TWO – LITERATURE REVIEW	6
2.1 Definition of Terms	7
2.2 Improved Client Outcomes and Care	9
2.3 Provider Satisfaction	16
2.4 Other Benefits to Interprofessional Collaboration	16
2.5 Perceptions of Health Care Teams Members towards Collaboration	18
2.6 Perceptions of Health Care Students towards Collaboration	20
2.7 Barriers to Interprofessional Collaboration	22
2.7.1 Gender, Social Class Differences, and Medical Dominance	22
2.7.2 Lack of Communication	24

2.7.3 Other Barriers to Interprofessional Collaboration	25
2.8 Strategies to Promote Interprofessional Collaboration	28
2.8.1 Interprofessional Education	28
2.8.2 Coordination of Care	34
2.8.3 Scopes of Practice and Other Strategies to Promote Collaboration	36
2.9 Primary Health Care Teams	37
2.10 Consistencies	38
2.11 Inconsistencies	39
2.12 Comparison of the current study with previous work	40
3. CHAPTER THREE – RESEARCH METHODOLOGY	43
3.1 Original Study	43
3.2 Research Questions for Current Study	44
3.3 Current Research Design	45
3.4 Ethical Considerations	46
3.5 Setting and Sample	46
3.6 Content Analysis	50
3.6.1 Strengths and Limitations of Content Analysis	52
4. CHAPTER FOUR – FINDINGS	54
4.1 Introduction	54
4.2 Participation in interprofessional teams	54
4.3 Not participating on teams	63
4.4 Preferred team characteristics	69
4.5 Desired and actual team characteristics	74

5. CHAPTER 5 – DISCUSSION	75
5.1 Overview	75
5.2 Participation in interprofessional teams	76
5.3 Not participating on teams	80
5.4 Preferred team characteristics	81
5.5 Desired and actual team characteristics	82
5.6 Limitations	83
5.7 Future Research	83
5.8 Conclusions and Implications	84
References	86
Appendices	96

LIST OF TABLES

Table 1: Language

Table 2: Gender

Table 3: Age

Table 4: Categories

Table 5: Participation in interprofessional teams

Table 6: Current purpose of the team

Table 7: Current size of the team

Table 8: Current professional designations

Table 9: Barriers to teamwork

Table 10: Reasons for not participating on a team

Table 11: Preferred purpose of the team

Table 12: Preferred size of the team

Table 13: Preferred professional designations

LIST OF APPENDICES

Appendix A: Questionnaire: Health Care Teams in Community Practice: Nurse

Appendix B: Questionnaire: Health Care Teams in Community Practice: Physician

Appendix C: Questionnaire: Health Care Teams in Community Practice: Pharmacist

Appendix D: Questionnaire: Health Care Teams in Community Practice: Dietitian

CHAPTER ONE

Introduction

This thesis presented a discussion regarding collaborative community-based delivery of health services. The research problem, need for the study, and purpose of the study are included in this chapter. A literature review encompassing the topics of definition of terms; outcomes of collaboration including improved client outcomes and care, provider satisfaction, perceptions of health care team members, perceptions of health care students; barriers to collaboration, strategies to promote collaboration, and primary health care team literature has been incorporated into Chapter Two. The research methodology, findings, and discussion of the findings make up Chapters Three, Four and Five.

1.1 The Research Problem

Since 1986 there has been an increasing emphasis on the provision of cost effective quality care, and the promotion of wellness and prevention strategies (Health Canada, 1986). Economic, political and social changes have affected health care delivery (Fagin, 1992). Demographic changes, an increase in the number of people of all ages with chronic health conditions that require a variety of health care interventions and maintenance, consumers' interest in self care, and cost restraints that affect the use of technology are some of the factors affecting our health care system (Fagin, 1992). In meeting these challenges, Canada is also faced with a shortage of health care professionals and long waits for specialists (Fyke, 2001). The increase in chronic illness and disability has led to an increase in the need for caregivers in the community. Primary health care teams appear to be the answer to providing clients with a good quality of life (Fyke, 2001).

Individual health professionals often are not able to address the complicated and complex health care needs of patients and clients (Bourgeault & Mulvale, 2006; Freeman, Miller, & Ross, 2000; Fyke, 2001; King, 1990; Parker Oliver, Wittenberg-Lyles, & Day, 2006; Patel, Cytryn, Shortliffe, & Safran, 2000; Ray, 1998; Stewart, Brown, Harris, & Reid, 2003; Yeager, 2005). To provide the best care possible for their patients and clients, it is often necessary for health care professionals to work as a team, sharing both their skills and knowledge (Patel et al., 2000; Wagner, 2000; Watters & Moran, 2006). A report to the Ontario family health network proceeded from the assumption that “no one health care professional can address the complex and multifaceted needs that clients currently present in the primary health care arena” (Stewart, et al., 2003, p. 1). The report discussed challenges and recommendations for the development and sustainability of collaborative health care teams. Health care students also agreed that single discipline approaches to client care are unfeasible (O’Neill & Wyness, 2005). This qualitative study examined students’ perceptions regarding an interprofessional component of an elective course offered to medicine, pharmacy, nursing, and social work students. The students recognized that “one profession alone cannot respond effectively to complex needs” (p. 437).

Although the health professions often differ in their views of collaboration there is general agreement that interprofessional collaboration is beneficial to client care (Baggs, Ryan, Phelps, Richeson & Johnson, 1992; Fyke, 2001; Leipzig, et al., 2002; Nowdbilski-Vasilios & Poole, 2001). However, health professionals often fail to maximize their potential to work collaboratively despite strong advocacy to do so (Fyke, 2001; Wagner, 2000).

1.2 Need for the Study (Relevance and Significance)

Interprofessional collaboration is “key to giving Canadians better access to the right professional, at the right time and in the right place” (Sharp, 2006, p. S4). The Canadian Nurses

Association (2005) publicized that “the people of Canada are entitled to a health system with the capacity to help them meet both their physical and their mental health needs, whether those needs are illness prevention, early detection, treatment, rehabilitation or recovery” (¶ 1). The Canadian Nurses Association added that health care can be supported through collaboration of professionals. Many authors agreed that reasons for engaging in collaborative practice included improved client outcomes and improved holistic client care (Arevian, 2005; Baggs, et al., 1992; Callahan, et al., 2006; Dieleman, et al., 2004; Erickson & Perkins, 1994; Feinsod, Capezuit, & Felix, 2005; Horak, Pauig, Keidan, & Kerns, 2004; Knaus, Draper, Wagner, & Zimmerman, 1986; Makaram, 1995; Nowdbilski-Vasilios & Poole, 2001; Proctor-Childs, Freeman, & Miller, 1998; Sharp, 2006; Stevenson, Baker, Farooqi, Sorrie, & Khunti, 2001; Wagner, 2000; Watters & Moran, 2006), along with improved provider satisfaction (Dieleman, et al., King, 1990; Proctor-Childs, Freeman, & Miller; Sharp; Yeager, 2005). Federal and provincial governments in Canada have publicized interest in collaborative practice, yet many health care professionals are not linked with health care teams. This thesis study uses qualitative data that were part of a larger study entitled *Health Care Teams in Community Practice* (Dobson, et.al, 2004), with respondents from health professions (nursing, medicine, pharmacy, and dietetics) working in community practice.

1.3 Purpose of the Study

The purpose of this study was to gain a greater understanding of the experiences and preferences of nurses, physicians, pharmacists, and dietitians regarding interprofessional health care teams. The study sought to identify similarities and differences among the four professions with regard to their team experiences and preferences. The study examined qualitative data from members of four health professions (medicine, nursing, dietetics, pharmacy) working in

community practice settings, as contained in the “Health Care Teams in Community Practice” data base collected by Dobson, et al. (2004). The data base, managed by the College of Pharmacy and Nutrition, is located in Saskatoon at the University of Saskatchewan. The data were captured through the administration of the questionnaires (Appendices A-D). Responses to the short answer questions from all of the questionnaires were the focus of this study. The research questions were answered through the analysis of the responses.

The findings from this research will contribute to our understanding of the characteristics of primary care teams across Canada. We gain insight into these characteristics across the four professions, why some professionals are not participating on teams, and the preferred team characteristics of the four professions. Identifying these successes and gaps will support the development of more effective ways to participate in collaborative teams.

The research questions for this thesis are relevant to: employers/employees in health regions, government, educators, students, and consumers/clients. The results have the potential to drive policy related to interprofessional collaboration and working within health care teams. It is anticipated that this research will add value leading to evidence-based policy in areas that will directly affect health care teams in this country.

1.4 Research Questions

The primary research questions for the analysis included:

- To what extent are the four community based professions participating in interprofessional teams?
 - What are the characteristics of these teams?
 - How are these teams and their characteristics similar across the four professions?

- How are these teams and their characteristics different across the four professions?
- Among those not participating on teams what are the specified reasons?
- What are the characteristics of the preferred teams identified by the respondents?
 - How are preferred teams and their characteristics similar across the four professions?
 - How are preferred teams and their characteristics different across the four professions?
- To what extent are the desired team characteristics similar to the actual team characteristics?

Chapter Two

Literature Review

The literature review began with reviewing sources that were accessed from the primary study, followed by a search of more recent articles relating to interprofessional health care teams. English language literature was searched using the terms interprofessional, interdisciplinary, multidisciplinary, collaboration, interdisciplinary collaboration, interprofessional collaboration, and health care teams. A search within the Cumulative Index to Nursing and Allied Health Literature (CINAHL) resulted in numerous articles. The combined search terms of interprofesisonal and collaboration resulted in 1049 articles. The combined search terms of interdisciplinary and collaboration resulted in 614 articles. The search term health care teams resulted in 249 articles. The combined search terms of interprofessional, collaboration and community resulted in 179 articles. Of the numerous articles available through CINAHL, 52 were utilized for this thesis proposal. The literature cited in this proposal represented studies and reviews primarily conducted in the last 10 years. The literature review is discussed in the following categories. Outcomes of interprofessional collaboration examined in the literature included: improved client outcomes and care, provider satisfaction, other benefits to interprofessional collaboration, perceptions of health care team members towards collaboration, and health care students' attitudes towards collaboration. Barriers to interprofessional collaboration examined in the literature included: gender, social class differences and medical dominance, lack of communication, and other barriers to interprofessional collaboration. Strategies to promote interprofessional collaboration examined in the literature included: interprofessional education, coordination of care, scopes of practice and other strategies to

promote collaboration, and primary health care teams. The literature review considered characteristics of interprofessional teams, and then the outcomes identified.

2.1 Definition of Terms

Before continuing it is worth clarifying some of the terminology relating to team work that was used in subsequent chapters. It has been noted by various authors that some confusion exists in the use of terms such as *interprofessional*, *collaboration*, and *interprofessional collaboration*. In an attempt to remove this ambiguity between terms, a definition of terms section was incorporated into this thesis. There were many ways in which Interprofessional, Collaboration, and Interprofessional Collaboration were defined in the literature.

Interprofessional care is the “provision of comprehensive health services to patients by multiple health caregivers who work collaboratively to deliver quality care within and across settings” (Health Force Ontario, 2007, p.7). Collaboration is defined as “working together with one or more members of the health care team who each make a unique contribution to achieving a common goal. Each individual contributes from within the limits of her/his scope of practice” (College of Nurses of Ontario, 2008, p.3). The College of Nurses of Ontario (2008) is working to “further refine the term collaboration, and to better incorporate into a definition the concepts of mutual respect, maximum use of collective resources, and awareness of individual accountabilities, and competence and capabilities within respective scopes of practice” (p. 3). Interprofessional collaboration “involves the positive interaction of two or more health professionals to bring their unique skills and knowledge to assist clients, families and communities with their health decisions” (Canadian Association of Occupational Therapists, 2006, p. 122).

There were many kinds of collaboration that exist within the literature. Collaboration occurs between individuals of the same profession (monoprofessional) or from different professions (multiprofessional) who work in isolation from each other with the same client. Multiprofessional team work is a sharing of information where team members work independently (MacIntosh & McCormack, 2001; Proctor-Childs, Freeman, & Miller, 1998). However, MacIntosh and McCormack (2001) explained that when individuals from different professions work together for the benefit of a client, interprofessional collaboration is present. The authors contended that where multiprofessional partnerships may result in referrals, interprofessional partnerships are more collaborative in nature as the partners' relationship is based on respect and interdependent work towards a common purpose. Ray (1998) suggested healthcare professionals probably spend much more time engaged in multiprofessional functions than interprofessional functions.

The prefix "inter" reflects a high level of communication and a partnership where team members from different professions work collaboratively toward a common goal for a client. (MacIntosh & McCormack, 2001; Proctor-Childs, Freeman, & Miller, 1998). The authors explained that there is equitable opportunity to contribute knowledge and information, by way of team members being aware of one another's expertise. Armitage (1983) outlined that partnerships involve those working together to deal with various client situations. Members share their knowledge and expertise in a respectful and trusting environment (MacIntosh & McCormack; Nowdbilski-Vasilios & Poole, 2001). Graham and Cates (1987) explained that team members must be respectful and understanding of one another, and must work towards the same intentions. Interprofessional collaboration requires team members to have equal status

amongst one another, sharing knowledge and responsibility, understanding the functions of each team member, and working towards a common goal (Hall, 2005).

The interprofessional team must be defined in terms of a specific client care context allowing the contributions of the team members to depend on the situation (Enhancing Interdisciplinary Collaboration in Primary Health Care (EICP), 2006; Ray, 1998). The EICP (2006) outlined that “at the simplest level, health professionals consult their patients/clients and, when appropriate, each other about services needed by their patient/clients” (p. 2). The EICP explained that “in more complex situations, primary health care professionals work more closely, identifying (together with their patients/clients) what services are needed, who will provide them and what adjustments need to be made to the health management plan” (p. 2). The EICP concluded that “the number and type of service health professionals depend on the nature of the health issue and the availability of resources” (p. 3). As team members consider insights and relationships from all professions they will be better able to view the client as a whole person. This interprofessional approach can be of considerably greater value when intervening to help clients reach their fullest potential health, be it physical, emotional or mental (Ray, 1998). Ray (1998) explained that decisions are made with each profession having an equal voice in decisions, and unless each profession participates in a decision, that decision could potentially be invalid. As a result, the approach considers the additive relationships among many variables from different professions within healthcare.

2.2 Improved client outcomes and care

Numerous authors suggested that interprofessional collaboration within healthcare can provide an environment that focuses on a holistic approach to client care, which in turn, may have positive consequences for a client’s health (Arevian, 2005; Baggs, et al., 1992; Callahan, et

al., 2006; Dieleman, et al., 2004; Erickson & Perkins, 1994; Feinsod, Capezuit, & Felix, 2005; Horak, et al., 2004; Horsburgh, Lamdin, & Williamson, 2001; Knaus, et al., 1986; Leipzig, et al., 2002; Makaram, 1995; Nowdbilski-Vasilios & Poole, 2001; Proctor-Childs, Freeman, & Miller, 1998; Sharp, 2006; Stevenson, et al., 2001; Tunstall-Pedoe, Rink, & Hilton, 2003; Wagner, 2000; Watters & Moran, 2006). For example, a secondary analysis and chart audit provided evidence that interprofessional collaboration contributed to improvement in care of diabetic clients (Arevian, 2005). The author explained that charts of clients diagnosed with diabetes mellitus type II (DM2) and who were involved in an intervention program were audited over a three year period in a non-for-profit health center in Beirut. The not for-profit health center, staffed with a group of general practitioners, specialists (e.g. ophthalmologists, cardiologists), social workers, nurses, a public health officer, and a dietitian accommodated a low-income inner city population. The intervention program included specific guidelines for treatment and education. The results of the audit showed an improvement in documentation, an increase in the recruitment of clients, enhanced continuity of care, improvement in glycemic control, and a reduction in the cost of diabetes care.

A second example is the multipractice audit of diabetes care that took place during 1994-1997 in 18 general practices in Leicestershire. Stevenson, et al. (2001) explained that primary health care teams taking place in the audit were to audit their practice, come up with areas of improvement and then audit the practice again 12 months after the improvements had been implemented. The outcome measurement included collecting data from client notes to assess how they had been complying with evidence-based criteria of care. Semi-structured interviews were carried out asking physicians and nurses which factors promoted or impeded improvement in their teams' care. The nurses and physicians found that the success of the teams was related to

the degree of personal involvement in the audit, the degree of teamwork in the practice, the development by the team of systematic plans to implement change, and having a positive attitude to the need to re-audit. The results “indicated that teamwork is associated with the effectiveness of quality improvement” (p. 25).

Collaboration was linked to positive client outcomes in two studies that included medical intensive care units (Baggs, et al., 1992; Knaus, et al., 1986). Both studies measured client outcomes using the Acute Physiology and Chronic Health Evaluation (APACHE), where scores were used to measure severity of illness. Negative outcomes were either readmission to the Medical Intensive Care Unit (MICU) or death during the same hospital admission. The results of each quantitative analysis showed that the involvement and interaction of nurses and physicians positively influenced client outcomes, as the amount of collaboration increased, the occurrence of negative outcomes decreased.

Clients with Alzheimers disease showed a significant improvement in the quality of care that was received following a collaborative community-based model of practice (Callahan, et al., 2006). Clients were randomly placed into either an experimental group (collaborative care management) or a control group (augmented usual care) for this controlled clinical trial. Intervention clients received a year of care by an interprofessional team including their primary care physician and a geriatric nurse practitioner. The Neuropsychiatric Inventory (NPI) was administered at baseline and at 6, 12 and 18 months. Intervention clients experienced significant improvements in behavioral and psychological symptoms of dementia as measured by the NPI scores compared with clients in the augmented usual care group.

Collaboration among community-based health care professionals improved client care in two studies (Dieleman, et al., 2004; Nowdbilski-Vasilios & Poole, 2001). Dieleman and

colleagues (2004) utilized a pre and post test design, along with content analysis of open ended questions. Questionnaires were administered containing questions related to role recognition and experience in the team, satisfaction with the collaborative process, care decisions and quality of care and perceptions of the team's impact on quality of client care. Dieleman explained that "the teams were divided into two groups based on qualitative analysis of team process meetings, one group consisted of the most successful and best functioning and the other group contained the remaining teams" (p. 76). The study found that pharmacists, physicians, and nurses working together in community-based teams agreed that increased communication led to improved client care. The better performing teams reported an enhanced understanding of team members, increased comfort level, better appreciation for other's roles, increased communication, and increased trust and respect for others. Communication was a key factor for many respondents. They felt that they were better able to access client information, thus improving client care. Nowdbilski-Vasilios and Poole (2001) measured perceptions of collaboration between nurses and pharmacists using a survey distributed throughout the United States, and the study ascertained that nurses and pharmacists agreed that "successful collaborations improve patient care" (p. 15).

Collaboration was necessary for improved outcomes in orthopedic clients following major surgery (Erickson & Perkins, 1993; Watters & Moran, 2006). Collaboration led to orthopedic clients being discharged home from the hospital earlier than expected (Erickson & Perkins, 1993). A team approach to treat hip and knee arthroplasty clients was undertaken at the orthopedic service at DeKalb Medical Center in Decatur, Georgia. The team consisted of an occupational therapist, occupational therapy assistant, physical therapist, a nurse educator and a nurse coordinator. The authors explained that the implementation of this case management

approach was designed to “decrease the length of stay for the client, while assuring maximal functional outcomes” (p. 439). Case management forms were completed by occupational therapists, which revealed the clients’ progress following a case management approach. The approach was implemented in 1990, and by 1993, the average length of stay had decreased by 3.95 days for clients with total knee replacements and 4.59 days for clients with total hip replacements. Similarly, a protocol was implemented to improve the care of clients with hip fractures in North Carolina (Watters & Moran, 2006). The protocol emphasized a coordinated approach to care based on client needs, using evidence-based practice, promoting client and family education, and focusing on outcome measures to improve the quality of care for clients. The study found that “collaboration and communication are enhanced with the interprofessional team approach to the care of hip fracture patients” (p. 164).

Acute care settings also benefited from collaborative approaches to care (Horak, et al., 2004; Proctor-Childs, Freeman, & Miller, 1998). Collaborative care amongst health professionals introduced on a medical unit at the George Washington University hospital in Washington, DC demonstrated improvement in client care (Horak, et al., 2004). The major issues identified through interviews, focus groups and observations on the medical unit included: communication between nursing and house staff, systems problems, organization and coordination of work, unit procedures, and administrative issues. Team building meetings were arranged in order for the staff to brainstorm solutions to the issues that they were facing. The results of the team building meetings were evaluated through a survey administered to all staff members. Positive results occurred for client care, nurse-physician communication and collaboration, problem solving, unit procedures, and nurse and physician morale. The results showed that “physician and nurse collaboration can contribute to improved client care” (p.10).

A qualitative case study approach was used to address the realities of interprofessional collaboration in two neurorehabilitation units (Proctor-Childs, et al., 1998). The two neurorehabilitation units had an integrated interprofessional approach to client care. Professionals who were interviewed agreed that the interprofessional commitment to care benefited the clients by providing an environment that focused on continuity, consistency, reduction of ambiguity, appropriate referrals, holistic information, and problem solving.

Health care students enrolled in an interprofessional education course were asked to complete a questionnaire in regards to attitudes towards the program (Tunstall-Pedoe, Rink, & Hilton, 2003). A quantitative analysis was carried out and the findings of the study concluded that over half of the nursing and medicine students felt that “learning together would lead to better patient care” (p. 164). Another study conducted by Horsburgh, Lamdin, and Williamson (2001) regarding health care students concurred that collaboration may lead to improved care for clients. The majority of the 180 respondents to the Readiness for Interprofessional Learning Scale (RIPLS) agreed or strongly agreed that “patients would ultimately benefit if health care students worked together” (p. 879). Further, students’ attitudes toward working on interprofessional health care teams were compared by profession (Leipzig, et al., 2002). This quantitative study found that all of the students expressed a positive attitude towards the quality of care provided by interprofessional teams and a high percentage of the students felt that the interprofessional team approach benefited patients.

In the theoretical literature, a few authors outlined the importance of interprofessional collaboration and its benefits towards improved client outcomes and care. Makaram (1995) discussed studies that supported the belief that collaborative relationships can lead to positive client outcomes. He discussed the relevance of collaboration to education, practice, and research,

and described some of the outcomes and barriers to collaboration. Feinsod, Capezuit, and Felix (2005) contended that interprofessional team care benefited clients through the prevention of falls among long-term care residents. Nurses, rehabilitation therapists and pharmacists all played a part in helping to reduce the fall risk for long term care residents. The authors explained that “there are multiple comorbid conditions, as well as comfort and environmental issues that contribute to fall risk, and when approached in a coordinated manner these conditions can be identified and interventions designed” (p. 24). Wagner’s (2000) article described that efficient teamwork allowed for the health care team to manage clients with chronic illness. Nurse case managers, medical specialists, clinical pharmacists, social workers, and other lay health workers should all take part in the management of clients with chronic illness. Population based care, treatment planning, evidence-based clinical management, self management support, more effective consultations, and sustained follow up can help to effectively manage chronic illness for many clients. Enhancing interdisciplinary collaboration in primary health care was an initiative that focused on health professionals working together to provide the most effective and efficient health care to produce the best possible client outcomes (Sharp, 2006). The author outlined many of the benefits of collaboration, including “better, more coordinated care for clients” (p. S4). The principles of the initiative included client engagement, a population health approach, best possible care and services, access, trust and respect, and effective communication. In summary, while several authors outlined both theoretical and empirical evidence of improved client outcomes and care, not all was equally weighted. Still, there is sufficient research to count this as an outcome of collaboration of health professionals.

2.3 Provider Satisfaction

Collaboration that occurred on two neurorehabilitation units led to enhanced professional development and increased job satisfaction amongst the professionals working on the unit according to a qualitative case study (Proctor-Childs, Freeman, & Miller, 1998). Further, collaborative models of practice were associated with improved satisfaction among health professionals (Dieleman, et al., 2004; Proctor-Childs, Freeman, & Miller). Job satisfaction improved as physicians, pharmacists, and nurses worked together in community-based teams to provide care to high-risk persons (Dieleman, et al., 2004). Team members identified “a better understanding of other team members, an increased comfort level when interacting with other professionals, an appreciation for other team members’ perspectives and roles in health care, and a preference to work in a team environment when providing care for high-risk individuals” (p. 77). Communication improved among team members, along with respect and appreciation of the roles of each team member.

In the theoretical literature, a few authors maintained that collaborative models of practice are associated with improved satisfaction among health professionals (Makaram, 1995; Sharp, 2006; Yeager, 2005). Sharp explained that a collaborated approach to client care can also lead to “more effective and efficient work by and improved satisfaction among health professionals” (2006, p. S4). Makaram and Yeager both outlined increased job satisfaction among health professionals as a favorable outcome of collaborative practice. Thus, while there is some evidence of the outcome of improved job satisfaction, it is limited in scope.

2.4 Other Benefits to Interprofessional Collaboration

Horak, Pauig, Keidan, and Kerns (2004) found that interprofessional rounds can lead to fewer errors in healthcare. Proctor-Childs, Freeman, and Miller (1998) outlined enhanced

professional development, benefits to clients (continuity, consistency, reduction of ambiguity, appropriate referrals, holistic information, and problem solving) as benefits to interprofessional collaboration.

Many other favorable outcomes to collaborative practice exist. While there may be little empirical evidence of these outcomes contributing to improved client care, theoretical links exist. Makaram (1995) outlined: improved understanding of collaboration; enhanced mutual trust and respect; improved understanding of the stages leading toward the development of collaborative relationships; change in attitudes toward collaboration among health professionals; increased productivity; increased effectiveness of interventions; working with colleagues who value, foster, and are committed to collaboration; enhanced professional development; optimal support and feedback.

Other benefits included: a heightened awareness and appreciation of one's own discipline (McKenzie, 1999); a broader understanding and enriched respect on the part of workers for other disciplines (Ray, 1998; Schofield & Amodeo, 1999); the opportunity for cooperative research ventures (McKenzie, 1999; Schofield & Amodeo, 1999); an increase in the use of different team members to meet a client's varied needs (Ray, 1998; Schofield & Amodeo, 1999); the offering of greater objectivity and the development of a mindset for working cooperatively with shared values and attitudes (Ray, 1998). An increased level of trust, a deeper level of understanding of each profession's role, and sharing of attitudes and values (Ray, 1998); fewer and shorter delays, improved morale, increased efficiency, lower staff stress, improved patient satisfaction, enhanced clinical effectiveness, and fewer errors (Yeager, 2005); and an increase in productivity by reducing competition for the same clientele (McKenzie, 1999) were additional benefits to interprofessional collaboration.

2.5 Perceptions of Health Care Team Members towards Collaboration

Health care professionals often differed in their views of collaboration although there was a general agreement that interprofessional collaboration is beneficial to client care (Arevian, 2005; Baggs, et al., 1992; Copnell, et al., 2004; Dieleman, et al., 2004; Nowdbilski-Vasilios & Poole, 2001; Parker Oliver, Wittenberg-Lyles, & Day, 2006). Nurses and physicians most often differed in their views towards collaboration (Baggs, et al., 1992; Copnell, et al., 2004). While Baggs and colleagues found that the occurrence of negative client outcomes decreased, they also discovered that in their sample collaboration was valued more by nurses than medical residents.

A study done by Copnell and colleagues (2004) explored doctors' and nurses' perceptions of interprofessional collaboration in three neonatal intensive care units in large teaching hospitals in Melbourne, Australia. A pre and post survey was used for this study, with the intervention being the introduction of nurse practitioners. The quantitative results found that "doctors reported a higher degree of collaboration than did nurses" (p.106). The nurses did not feel that there was a great deal of collaboration. They also suggested that the majority of staff perceived some degree of collaboration with no extremely dissatisfied respondents, and they all felt that there was potential for improvement.

Nowdbilski-Vasilios and Poole (2001) illustrated that nurses and pharmacists also differed in their views towards collaboration. In their study, the majority of survey respondents agreed that collaboration is not difficult, and improves client care and cost efficiency. However, pharmacists reported that personality conflicts interfered with collaboration; the nurses did not report the same. Pharmacists felt that problems that arose were usually due to a lack of understanding towards the other profession's roles and agreed that respect and appreciation for another profession's roles may lead to a better collaborative environment.

In contrast, several authors found no difference in perceptions of collaboration among health care team members working within teams (Arevian, 2005; Dieleman, et al., 2004; Parker Oliver, Wittenberg-Lyles, & Day, 2006). Parker Oliver, Wittenberg-Lyles, and Day used the “modified index of interdisciplinary collaboration (MIIC) to assess the perceptions of collaboration of 95 staff from all professions on five different hospice teams” (p. 275). The study participants were asked if variances in perceptions of collaboration existed between hospice programs and if there were variances in perceptions between staff in different professions. The results of the quantitative analysis showed that there was no difference in perceptions of collaboration between nurses, social workers, chaplains, other clinicians, administrators, or unknown disciplines. Similarly, a study done by Dieleman and colleagues examined the perceptions of pharmacists, physicians and nurses who worked together in community-based teams. They found that all team members agreed that collaboration improved the working relationships among health care professionals.

A secondary analysis done by Arevian (2005) found that nurses, physicians and public health officers agreed that working as a team enhanced collaboration. The health care professionals involved in the study agreed that other team members were respectful, they had an equal say in patient care, the team process provided insight into the others’ contribution to patient care, they realized how each others’ roles were complementary, and their confidence increased. The evidence of perceptions of professionals towards collaboration is quite limited, and quite inconclusive. It is difficult to ascertain if there are specific factors that influence the perceptions of the professionals, or even if perceptions are common within a profession.

2.6 Perceptions of Health Care Students towards Collaboration

Many authors found that students' perceptions towards collaboration were dissimilar (Hawk, et al., 2002; Horsburgh, Lamdin, & Williamson, 2001; Kritikos, Watt, Krass, Sainsbury, & Bosnic-Anticevich, 2003; Leipzig, et al., 2002; Lindqvist, Duncan, Shepstone, Watts, & Pearce, 2005; Tunstall-Pedoe, Rink, & Hilton, 2003). A study done by Hawk and colleagues utilized the Interdisciplinary Education Perception Scale (IEPS) to measure the attitudes of health care students to each other's professions. The results of the quantitative analysis found that physician assistants scored the highest (most positive attitudes) and chiropractic students the lowest. The medical students scored significantly lower than physician assistant students and higher than chiropractic students, but did not differ significantly from osteopathy, physical therapy, nursing, podiatry, or social work students.

Kritikos and colleagues (2003) studied pharmacy students' perceptions of their profession relative to other professions including: community pharmacists, dentists, dietitians, general medical practitioners, hospital pharmacists, medical specialists, nurses, occupational therapists, physiotherapists, and social workers. The results of the questionnaires found that "students perceived the health care professions along three major dimensions, relating to empathy, potency, and expertise" (p. 121). In terms of empathy, community pharmacists were rated the highest and medical specialists the lowest. In terms of potency, medical specialists were rated the most powerful and nurses the lowest. In terms of expertise the students rated medical specialists the highest and dietitians the lowest.

A survey administered by Leipzig, et al. (2002) concluded that second year post graduate internal medicine and family practice residents consistently rated their agreement that interprofessional collaboration benefits client care lower than advanced nursing practice and

masters-level social work students. Medicine residents generally agreed that the role of social workers and nurse practitioners was to assist the physician and that the physician had the final say in client care, while nurse practitioner and social work students did not agree. Social work students were the most positive about collaborative relationships.

The Common Foundation Programme was developed for health care students to take part in an interprofessional education course (Tunstall-Pedoe, et al., 2003). Medical students along with diagnostic radiography, therapeutic radiography, physiotherapy and nursing students took part in the course. The students were all consistent in their belief that learning together would lead to better patient care, yet the overall attitude of the medical students towards the other professions was not positive. All of the other profession's attitudes towards medicine declined throughout the course as well, determined via a questionnaire.

The attitudes of medical, nursing, and pharmacy students were studied by Horsburgh and colleagues (2001). The Readiness for Interprofessional Learning Scale (RIPLS) was administered to first year students at the University of Auckland. Most of the students had positive attitudes towards shared learning, although "nursing and pharmacy students indicated more strongly that an outcome of learning together would be more effective teamworking" (p. 876).

The development and preliminary validation of the Attitudes to Health Professionals Questionnaire (AHPQ) found that first year nursing, medicine, occupational therapy, physiotherapy, midwifery and pharmacy students differed in their perceptions of one another's professions (Lindqvist, et al., 2005). One of the differences was that "pharmacists were viewed as significantly less caring than physicians, who in turn were seen as being significantly less caring than physiotherapists" (p. 277). There were no differences among occupational therapists,

nurses, and midwives, but they were all seen as more caring than physicians, pharmacists and physiotherapists. Another difference was that “nurses were seen as the most subservient and physicians the least” (p. 277). In conclusion, perceptions of health care students appear to begin early in the educational process. It is unclear if this occurs on a consistent basis, and it is also unclear as to whether the attitudes are being consciously taught by health care educators.

2.7 Barriers to Interprofessional Collaboration

2.7.1 Gender, social class differences, and medical dominance

There were many barriers impeding collaborative health care teams found in the literature. One of the greatest barriers to interprofessional collaboration stems from historical differences in gender and social class (Bourgeault & Mulvale, 2006; Fagin, 1992; Hall, 2005; King, 1990; Makaram, 1995; Ray, 1998). Bourgeault and Mulvale and Makaram agreed that medical dominance, nurse submission, and professional boundaries may impede collaboration among health care professionals, making collaboration complex but not unattainable. Fagin, Hall, King, and Makaram all agreed that tensions between physicians and nurses have existed for centuries. Alpert, et al. (1992) described that physician and nurse differences involved many aspects of life, including economic, social and professional issues. Sex-role stereotypes, social class differences, and role differences were a few of the issues that the authors outlined as contributors to the existing hierarchical relationship that exists between physicians and nurses.

A critical analysis of the factors promoting and impeding collaborative models of care was done by way of a multi method that included a qualitative approach, interviewing key professionals in the United States and Canada (Bourgeault & Mulvale, 2006). Medical dominance issues exist even in today’s health system (Bourgeault & Mulvale; Lindqvist, et al. 2005). Demonstrating medical dominance, the authors explained that the family health team

initiative policy in Ontario led by physicians requires that a physician must be on each team, and the Family Health Networks consisted of family physicians who freely decide to collaborate with one another and other health care professionals (Bourgeault & Mulvale). Lindqvist and colleagues developed the Attitudes to Health Professionals Questionnaire (AHPQ) to assess health care students' interprofessional attitudes. The six professions involved in validating the AHPQ were medicine, nursing, occupational therapy, physiotherapy, midwifery, and pharmacy. Nurses were perceived to be the most subservient and physicians were the least subservient. Subservient was defined by the authors as being dependent and vulnerable.

A literature review conducted by Hall (2005) revealed that each profession is educated and socialized differently. With contributing historical factors, health care professionals hold different values, or “culture”, which may challenge collaborative practice. Physicians are educated to be leaders and tend to take an authoritarian role in patient care, whereas social workers place more value on self determination. Professional values must be made apparent to all professionals involved in the collaborative process. An opinion article written by Fagin (1992) argued that physicians generally tend not to take on collaborative relationships, whereas nurses often seek out these relationships.

Ray's (1998) opinion article agreed that physicians are educated to recognize that they are in charge. Ray explained that differing status of members can lead to unequal benefits of team participation and varying levels of commitment among members. He also explained that physicians are educated on the basis of systems in the human body, not models oriented towards the total patient, whereas other professions educate to a holistic model. Differences amongst professions regarding goals of treatment, educational programs not teaching interprofessional

care, and the misunderstanding of the requirements for effective teamwork all are outlined by Ray as other barriers to collaboration.

Makaram (1995) identified other barriers to interprofessional collaboration in an opinion article, which included: limited knowledge of each profession and scope of each others' practice, unilateral relationship, power struggle, conflict, competition, distorted communication, religious affiliation and clinical setting, different habits, interests, or commitment, and lack of time. The literature suggests that many barriers exist, yet there is not great agreement on the strength of their influence concerning collaboration.

2.7.2 Lack of Communication

Lack of communication was another barrier to interprofessional collaboration (Freeman, Miller, & Ross, 2000; Hall, 2005; Makaram, 1995; Nowdbilski-Vasilios, & Poole, 2001; Ryan and McKenna, 1994; Watters & Moran, 2006; Yeager, 2005). Hall examined the literature and found that professional cultures exist as barriers to collaborative practice (2005). The author explained that the communication skills that are taught to health care students focus on interactions with client and their families, rather than with other professions. Unfamiliar vocabulary, different problem-solving viewpoints and a lack of common understanding of issues and values all contribute to the ineffectiveness of collaboration. Sharing of information, exchanging of ideas, discussion and efficient organization of tasks can all lead to effective teamwork.

Yeager (2005) discussed the lack of collaborative communication among health professionals. The author identified various factors that contribute to poor communication. High levels of stress, decreased availability of specialized health professionals, and a lack of awareness of the roles of each team member are all contributing factors. Physicians and nurses

can have a misunderstanding of roles and responsibilities, resulting in conflict. When resolving differences, physicians usually communicate using bargaining or negotiation, while nurses tend to lack assertiveness. All of these factors can result in medical errors and poor client care.

Some of the authors outlined that poor communication can be a barrier to collaborative practice, and that an improvement in communication can lead to better teamwork. Makaram (1995) noted that distorted communication amongst health professionals is a barrier to teamwork, and that collaboration could be achieved through improving communication. Collaboration is founded on trust, respect and ongoing communication (Nowdbilski-Vasilios, & Poole, 2001). Watters and Moran (2006) noted that “collaboration and communication are enhanced with the interprofessional team approach” (p. 164). In contrast, Ryan and McKenna (1994) focused on the point that negative attitudes and poor communication among health care professions can lead to poor client care. A qualitative study, incorporating a grounded theory analysis done by Freeman, Miller and Ross (2000), also found that health care professionals must communicate effectively and understand one another’s roles in order to provide effective client care. Many authors agree that communication is a key factor concerning collaboration.

2.7.3 Other barriers to Interprofessional Collaboration

Several authors have examined other barriers to interprofessional collaboration amongst health professionals. Attitudes towards working on interprofessional healthcare teams were studied by Leipzig, et al. (2002). Leipzig’s literature review identified several barriers towards collaboration for each profession studied. The results of the literature review found that social workers felt that barriers included: differing professional and personal perspectives, role competition, differing interprofessional perceptions of roles, variations in professional socialization processes, physician dominance of teams and decision making, and the perception

that physicians do not value collaboration with other groups. Nurses felt that barriers included: the need to maintain professional authority, differing interpretations of professional jargon, role stereotyping or uncertainty, and practical issues associated with teamwork, such as sharing personal space. Physicians felt that barriers included: overlapping skills and knowledge on the part of non physician team members. Nursing students felt that nurses' lack of confidence and perceived problems with the doctor/nurse professional relationship may prevent collaborative relationships.

Bourgeault and Mulvale (2006) initiated “a critical analysis of the factors both promoting and impeding collaborative care models of primary and mental health care in Canada and the United States” (p. 1). A multi-method qualitative approach was used for this study. Interviews with key professional and policy stakeholders exploring views on factors affecting collaborative practice were completed along with reviewing data from sources related to collaborative health care teams. The study outlined many regulatory, economic, and institutional factors that influence collaboration. They found that regulation of health care providers by exclusive scopes of practice is a regulatory factor that “eliminates the possibility of sharing tasks necessary for functional collaborative care” (p. 5). The authors explained that “coverage of services, funding and remunerative models are key economic factors influencing collaborative care” (p. 6). Further, some of the primary health care initiatives developed in Canada are still led by physicians who decide whether or not they will collaborate with other professions. This demonstrated “the institutionalization of medical dominance even with the newest models of primary care” (p. 7).

Some authors delineated additional barriers to collaborative partnerships, which included: funding (Bourgeault & Mulvale, 2006; MacIntosh & McCormack, 2001); differing status of

members leading to unequal benefits of team participation and varying levels of commitment among members (Schofield & Amodeo, 1999); and usage of dissimilar jargon and technologies, role confusion or blurring of roles, time commitment, either needed or expected (McKenzie, 1999; Schofield & Amodeo). Fears of intrusion and loss of control by members (McKenzie); racism, culture, language, and perceptions including attitudes to power and change (MacIntosh & McCormack); changing team structure, lack of time, divergent value systems, lack of skill sets, and variance in educational focus (Yeager, 2005); lack of supply of both medical and non-medical providers, educational requirements, and liability and accountability issues (Sharp, 2006); resource limitation, logistics of team implementation, and a lack of administrative support resulting in a more costly program (Ray, 1998) were additional barriers to collaborative partnerships.

Austin, Gregory, and Martin (2007) explained that health professions all have a distinctive sub culture, or set of values and beliefs. These sub cultures may actually help us learn how professions function with one another. The objective of the authors' study was to describe and compare the professional cultures of both pharmacy and medicine. The authors explained that the cultural differences between pharmacy and medicine are not all that different, due to the historical creation of the profession of pharmacy from the profession of medicine. The authors explicated that as we move towards working within interprofessional teams, we must also consider how to study, characterize and describe professional cultures. Study participants included pharmacists who had migrated to the profession of medicine. Major themes found in the study were related to "geographical or geopolitical metaphors to describe cultural differences in the professions to provide an understanding of differences in the way individuals working within professions view their world". These themes included the Canada-US effect, The Alberta-

Saskatchewan effect, The New York-Brooklyn effect, and the Chicago-Oak Park effect. The authors concluded that the cultural differences between pharmacy and medicine are considerable, and those involved with interprofessional teamwork and education must be aware of these differences in order to function with one another in a team environment. Many barriers to collaborative partnerships exist and need to be addressed in order for health care teams to succeed.

2.8 Strategies to Promote Interprofessional Collaboration

2.8.1 Interprofessional Education

Interprofessional education was seen as a strategy to promote professionals to deliver the desired goal of collaboration, yet the way in which health care professionals are educated is not ideal for interprofessional collaboration (Hall, 2005; MacIntosh & McCormack, 2001; Pringle, Levitt, Horsburgh, Wilson, & Whittaker, 2000; Ray, 1998). Many authors found that students begin university with stereotypical views of each profession (Hall; Lindqvist, et al., 2005; Tunstall-Pedoe, Rink, & Hilton, 2003; Reeves, 2000). Professional cultures contributed to the challenges of effective collaboration (Hall, 2005). Hall outlined each health profession as having a “different culture which includes values, beliefs, attitudes, customs and behaviors” (p. 188). These cultures have developed throughout history along with social and gender issues. Professional education and the socialization of students can reinforce these “cultures” which can contribute to some of the barriers to collaboration. Hall explained that complex client care and new knowledge that has lead to specialization in health care also leads to fragmentation of education for health care students. Separate faculties, schools, curriculum, and clinical experiences are not conducive for collaborative relationships. Faculty must be supported in providing collaborative education. The author explained that interprofessional collaboration

should be introduced at an early stage in students' education, before their professional "culture" changes their views towards teamwork with other professions.

Many authors agreed that educational learning strategies should be integrated at an early stage in a health care professional's education, using experiential and problem-based learning that allows for health care students to learn to work with one another and to understand the roles and competencies of their peers (Freeman, Miller, & Ross, 2000; Hall, 2005; Hind, et al., 2003; Horne & Medley, 2001; Kritikos, et al., 2003; Lindqvist, et al; O'Neill & Wyness, 2005; Pringle, et al., 2000; Tunstall-Pedoe, Rink, & Hilton, 2003; Ray, 1998; Reeves, 2000; Westberg, Adams, Thiede, Stratton, & Bumgardner, 2006).

MacIntosh and McCormack (2001) identified barriers and strategies associated with the development of partnerships in primary health care. The involvement of communities was recognized as one of the strategies to enhance collaboration. The other strategy involved the development of a common core curriculum across health professions.

The Ontario Chairs of Family Medicine and the Council of Ontario University Programs in Nursing discussed primary health care reform and collaboration in Canada (Pringle, et al., 2000). The authors felt that there were educational issues surrounding collaborative efforts. They felt that the current practice of educating health professionals is not conducive to collaborative models of practice. Faculties, schools, curriculum, educational content, clinical experiences, and approaches to supervising students' clinical experiences are all separate amongst the health professions. They argued that interprofessional education should be mandatory and "each student must become aware of the knowledge, skills, and attributes that colleagues of different professions bring with them, respecting and valuing the work of others" (p. 764). Educational recommendations to achieve the goals of interprofessional client care were outlined by Ray

(1998). He felt that students should not just be put together in a classroom, but should understand one another's roles and how they can collaborate to benefit the client.

A community-based interprofessional education course for medical, nursing and dental students found that students agreed that “this type of education had the potential for improving communication, enhancing cooperation, increasing understanding between health professionals, and reducing professional rivalry and hostility” (Reeves, 2000, p. 272). Focus group interviews, individual semi structured interviews, observational data, and tutor interviews took place during the data collection, which was then analyzed using thematic analysis. A major finding in the study was the importance of socialization processes. Students interacted well with one another and had no major conflicts; however there was a shared perception among medical and dental students that the course occupied a lower status than other courses. This was not present amongst the nursing students. The overall comments were positive, yet stereotypical ideas lingered, revealing the “strong grip professional socialisation has in shaping and maintaining conventional stereotypes” (p. 274), thus outlining the importance of implementing interprofessional education as early as possible.

Medical students along with allied health professional students (diagnostic radiography, therapeutic radiography, physiotherapy and nursing) agreed that the Common Foundation Programme (CFP), an interprofessional education course, would “enhance their own learning and would lead to better patient care” (Tunstall-Pedoe, Rink, & Hilton, 2003 p. 164). Questionnaires were analyzed using SPSS software. At the end of the term, the students felt that they were forced to learn irrelevant skills, and the overall attitude of the students towards the other professions was not positive. The authors found that students began the program with stereotypical views of each profession. Students whose parents are/were health care professionals

had an even greater stereotypical view of health professions. The course was mostly didactic large group teaching. The authors felt that the answer to introducing interprofessional education to health care students should be early in the students' education and involve "problem based learning groups, where students discuss clinical problems" (p. 170).

Interprofessional education should be implemented early in a health professional's education, allowing for positive attitudes towards other professions to develop (Lindqvist, et al., 2005). The authors suggested that the development of professional identity plays a major role in becoming a professional, and that these professional identities may begin to develop very early in a professional's education. The Attitudes to Health Professionals Questionnaire (AHPQ) was analyzed using SPSS software. Health professional programs included medicine, nursing, occupational therapy, physiotherapy, and midwifery. The results of the study concluded that "students hold clearly different attitudes to the range of professions and enter their health professional training with an idea of how caring and subservient their chosen profession is and how their profession compares to other health professions" (p. 278).

The importance of professional socialisation was outlined in a study done by Kritikos, et al. (2003). The authors explained that the socialisation process is "influenced by faculty, peers, and other health care professionals and shapes the students perceptions, attitudes and values" (p. 122). Professional socialisation may be "impeded by inconsistent messages being given and expectations not being fulfilled, which may result in dissatisfaction with the profession" (p. 122). The authors outlined the answer to implementing interprofessional education is to provide students with early practice experience, exposing students to role models, thus fostering the socialisation process.

O'Neill and Wyness studied student perceptions of an interprofessional course (2005). Students from medicine, pharmacy, nursing, and social work were involved in the study. The results of the qualitative study found that “practice-based interprofessional learning experiences deepened students’ understanding of the roles of other professions, and experiential learning in teams was perceived by students as critical in developing collaborative practice skills” (p. 437).

Freeman, Miller, and Ross (2000) also agreed that introducing collaborative education at an early stage is important in “detering professionals from becoming entrenched in the attitudes and behaviors inherent in their own professional socialization” (p. 246). One strategy identified was shared case based learning opportunities that allow students to discuss one another’s roles and to develop an understanding of each profession’s viewpoint and rationale of client care.

Interprofessional perceptions of health care students were examined in a study conducted by Hind, et al. (2003). Relationships between stereotypes, professional identity, and readiness for professional learning were tested with a questionnaire survey of 933 undergraduate health care students from medicine, nursing, dietetics, pharmacy, and physiotherapy within a United Kingdom university. They found that “teamwork is affected by attitudes of health professionals towards their own and other professional groups” (p. 21). Introducing interprofessional education with many collaborative opportunities at an early stage is essential as many students display a positive attitude towards their own and other professions and stereotypes may not have developed yet.

A community based interprofessional education strategy was developed by Horne and Medley (2001). Beginning students from the colleges of nursing and pharmacy participated in a clinical experience during the first semester of their professional educational programs. The students interviewed clients, took health histories, promoted healthy behavior, and assessed

physical characteristics. The experience also included an orientation seminar, a community survey, and four one-hour weekly visits to a community setting, interprofessional seminars, and group presentations. The evaluations of the course from both students and faculty were positive.

Another interprofessional patient experience involving pharmacy, medical and nursing students took place in Minnesota (Westberg, et al., 2006). The interprofessional teams were assigned complex patient cases. The teams completed an assessment of the patient, with each student interviewing the patient according to his/her own skills and patient care perspective. The team then collaborated to develop a patient care plan. The feedback from the course, via pre and post surveys, was positive and the students “expanded their perspective regarding roles of other health care professionals” (p. 4).

Patient Centered Interprofessional Team Experiences (P-CITE) was one of Saskatchewan’s federally funded projects under the Interprofessional Education for Collaborative Patient-Centered Practice initiative. The goal of the P-CITE was “to improve the health of communities, families and individuals across the province through engagement of communities and academic institutions in implementing and evaluating interprofessional teams for patient centered health care” (P-CITE, 2008, ¶ 1). One of the objectives of P-CITE was to “develop innovative interprofessional patient-centered education programs and settings and evaluate their benefits” (¶ 2), meaning that research is needed to assess the benefits of collaborative practice. The other objectives of P-Cite were to “stimulate the spread of best approaches to interprofessional patient-centered education, and to increase health professionals’ exposure to interprofessional patient-centered education” (¶ 2). It is too early to identify longitudinal results. In summary, there is much debate as to whether or not interprofessional education influences student stereotypes regarding health professions. There is however, much

evidence that supports interprofessional education having a positive influence on the health of clients in the community.

2.8.2 Coordination of Care

New knowledge, limited resources, recruitment and retention issues, an increase in chronic illness, and a rise in the number of older persons have created major challenges in Canada's health care system. Some authors explained that individual health professionals were often not able to address the complicated and complex health care needs of patients and clients (Freeman, Miller, & Ross, 2000; O'Neill & Wyness, 2005; Patel, et al., 2000; Stewart, et al., 2003). Communication and coordination of care amongst team members were very important when providing collaborative health care services to clients (Bourgeault & Mulvale, 2006; Carline, et al., 2003; Freeman, Miller, & Ross; Knaus, et al., 1986; Sharp, 2006).

Freeman, Miller, and Ross (2000) used a case study approach to explore health care team's philosophies towards collaboration. They found that those that held the integrative philosophy as fundamental to team working developed joint working practices. Attention to being a team player, collaborative care and therapy, recognition of roles, negotiated role boundaries, equal value for each professional's contribution, and good communication were the beliefs held by those professionals who felt that working collaboratively within a team was more efficient than working individually.

The main objective of a study done by Patel, et al. (2000) was "to examine collaboration in professional teamwork and its relation to efficient and effective delivery of health care" (p. 128). A primary health care unit at a major United States teaching hospital was monitored using field notes, hospital documents, and audio recordings of interviews and clinical interactions. The team members included primary care physicians, a psychiatrist, medical residents, nurse

practitioners, a clinical nurse, a social worker, an HIV case manager, a community resource specialist, and administrators. They found that “individual knowledge from various health care team members contributes to the accomplishment of team goals, and distributed responsibilities allow the team to process massive amounts of client information, reducing the cognitive load on individuals” (p. 117). The management of broad health issues and care for specific medical and psychosocial problems could be dealt with collaboratively, leading to efficient care as the expertise of all team members was taken into consideration.

A study done by Carline, et al. (2003) used focus groups and interviews to examine physician skills that could help to provide high quality care at the end of life. Content analysis of the data showed that team communication and coordination with all team members were two components that could help to provide good quality end of life care. Respect for other experts on the team, helping the client and family members to receive consistent information from the team, and making sure that the appropriate team member was available when needed were other suggestions. Similarly, Knaus and colleagues (1986) found that patient outcomes improved significantly when good communication and collaboration occurred amongst physicians and nurses in an intensive care unit. Bourgeault and Mulvale (2006) recommended resolutions to some of the factors influencing collaborative models of health care, including the collaboration of physicians with other professionals to provide comprehensive care to clients.

Freeman and colleague's (2000) study explored health care team's philosophies towards collaboration and found that team awareness, collaborative care and therapy, recognition of roles, negotiated role boundaries, equal value for each professional's contribution, and good communication, all contributed to high-quality teamwork. Finally, Sharp (2006) outlined principles for enhancing interprofessional collaboration in primary health care in Canada. These

principles included: patient and client engagement, a population health approach, the best possible care and services, trust and respect, and effective communication. The author outlined that resources, funding, liability, regulation, use of information and communications technology, management and leadership, and planning and evaluation must also occur in order for collaboration to occur. The literature outlined above is quite variable in terms of coordination of care and the health outcomes of clients.

2.8.3 Scopes of Practice and Other Strategies to Promote Collaboration

Overlapping scopes of practice can lead to effective teamwork (Bourgeault & Mulvale, 2006; Hall, 2005; Ray, 1998). In the study done by Bourgeault and Mulvale, factors both promoting and impeding collaborative care models were identified through interviewing professionals and reviewing data related to collaboration. Many institutional, regulatory and economic factors were outlined as barriers to interprofessional collaboration. To support the shift to interprofessional collaboration, adequate funding for non-physician providers, collaborative education, liability and accountability issues, and an overlapping of scopes of practice must transpire. They explained that specific professional scopes of practice can be a barrier towards getting professionals to collaborate. The idea of sharing tasks among professions is one strategy to promote collaboration.

Professional values, beliefs, attitudes, customs and behaviors affect collaborative teamwork (Hall, 2005). Hall outlined that professional team members can have competencies that overlap and they must share the responsibilities equally in order to provide a good quality of care to clients. The team members defined client goals and jointly developed actions to accomplish those goals. Sharing knowledge and fostering an equal status relationship are important factors involved with teamwork.

Ray (1998) suggested many recommendations to achieve the goals of interprofessional client care. For example, health professionals must be competent, understand what a team is, provide leadership, and be self confident. The team must join together in client care and team work must be shared by all members. They must understand the qualifications of each team member and respect one another's roles within the team. Collaboration must be applied in a cost effective manner. The author also introduced the topic of blurred professional boundaries. Blurred boundaries should be thought of as shared borders as professions share a common knowledge base and common professional interest.

2.9 Primary Health Care Teams

The World Health Organization adopted the primary health care approach as the basis for health care delivery in 1978 (MacIntosh & McCormack, 2001). The World Health Organization (1978) defined primary health care as “essential health care based on practical scientifically sound and socially acceptable methods and technology made universally accessible to individuals and their families in the community through their full participation and at a cost the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination” (p.1). Health care delivery that is team-based “has been recognized around the world as the most effective way to deliver everyday health services” (Fyke, 2001, p.11). Fyke (2001) explained that a broad range of services are accessible when health care professionals work within a team.

“The Challenges Ahead” study outlined Canada's federal government providing funding for new approaches to primary health care, with many provinces employing a team based approach to care within their community clinics (Fyke, 2001). The public respondents (n=50%) to the study's questionnaire felt that primary health care teams could have a positive effect on

health care. They felt that health care services were fragmented, information technologies along with other resources were not fully utilized and nurses', pharmacists', dietitians' and other professional care was not coordinated. With the shortage of family physicians, collaboration of doctors with other health care professionals is of extreme importance within the community.

2.10 Consistencies

Amongst the body of literature, several consistencies or themes can be found. Health care professionals often differed in their views of collaboration although there was agreement that interprofessional collaboration was beneficial to client care (Arevian, 2005; Baggs, et al., 1992; Copnell, et al., 2004; Dieleman, et al., 2004; Nowdbilski-Vasilios & Poole, 2001; Parker Oliver, Wittenberg-Lyles, & Day, 2006). There was agreement among authors that individual health professionals were often not able to address the complicated and complex health care needs of patients and clients (Bourgeault & Mulvale, 2006; Freeman, Miller, & Ross, 2000; O'Neill & Wyness, 2005; Patel, et al., 2000; Stewart, et al., 2003; Yeager, 2005). Collaborative teamwork can lead to an improvement in satisfaction among health professionals (Dieleman, et al., 2004; King, 1990; Proctor-Childs, Freeman, & Miller, 1998; Sharp, 2006; Yeager, 2005).

Some authors identified a major barrier to collaborative practice related to gender and social class differences (Bourgeault & Mulvale, 2006; Fagin, 1992; Hall, 2005; King, 1990; Makaram, 1995; Ray, 1998). Another consistent barrier to collaboration was the lack of communication among health care team members (Freeman, Miller, & Ross, 2000; Hall; Makaram; Nowdbilski-Vasilios, & Poole, 2001; Ryan and McKenna, 1994; Watters & Moran, 2006; Yeager, 2005).

Interprofessional education is seen as a strategy to promote professionals to deliver the desired goal of collaboration, yet the way in which health care professionals are educated does

not always promote interprofessional collaboration (Hall, 2005; MacIntosh & McCormack, 2001; Pringle, et al., 2000; Ray, 1998). Many authors found that students begin university with stereotypical views of each profession (Hall; Lindqvist, et al., 2005; Tunstall-Pedoe, Rink, & Hilton, 2003; Reeves, 2000).

Educational learning strategies should be integrated at an early stage in a health care professional's education, using experiential and problem-based learning that allows for health care students to learn to work with one another and understand the roles and competencies of their peers (Freeman, Miller, & Ross, 2000; Hall, 2005; Hind, et al., 2003; Horne & Medley, 2001; Kritikos, et al., 2003; Lindqvist, et al.; O'Neill & Wyness, 2005; Pringle, et al., (2000); Tunstall-Pedoe, et al., 2003; Ray, 1998; Reeves, 2000; Westberg, et al., 2006). Many authors found that student's perceptions towards collaboration were dissimilar among the professions (Hawk, et al., 2002; Horsburgh, Lamdin, & Williamson, 2001; Kritikos, et al., 2003; Leipzig, et al.; Lindqvist, et al., 2005; Reeves, 2005; Tunstall-Pedoe, Rink, & Hilton, 2003).

Communication and coordination of care amongst team members were identified as very important when providing collaborative health care services to clients (Carline, et al., 2003; Freeman, Miller, & Ross, 2000; Knaus, et al., 1986; Sharp, 2006). In addition, overlapping scopes of practice can lead to effective teamwork (Bourgeault & Mulvale, 2006; Hall, 2005; Ray, 1998).

2.11 Inconsistencies

While many authors agreed that interprofessional collaboration within healthcare can have positive consequences on patients' and clients' health, Leipzig and colleagues (2002) found that there was disagreement among second year post graduate internal medicine residents, family practice residents, advanced practice nursing students and masters level social work students.

The second year post graduate internal medicine residents consistently rated their agreement lower than the other students in regards to an interprofessional approach benefiting patients.

An inconsistency found in the literature related to interprofessional education. Some authors found that students responded positively towards interprofessional learning (Horne & Medley, 2001; Horsburgh, Lamdin, & Williamson, 2001; O'Neill, & Wyness, 2005; Reeves, 2000; Westberg, et al., 2006). In comparison, other authors found that students did not consistently respond positively towards collaborative learning (Pollard, Miers, & Gilchrist, 2005; Tunstall-Pedoe, Rink, & Hilton, 2003). Further, Reeves (2000) found that collaborative learning had very little impact on diluting students' stereotypical views of the professions involved in the study.

Finally, an inconsistent finding in the literature related to perceptions of collaboration amongst professionals. Arevian (2005), Dieleman, et al. (2004), and Parker Oliver, Wittenberg-Lyles, and Day (2006) all found similar perceptions regarding collaboration amongst professionals, while Baggs, et al. (1992), Copnell, et al. (2004), and Nowdbilski-Vasilios & Poole (2001) found that health care professionals most often differed in their views towards collaboration.

2.12 Comparison of the current study with previous work

Among the literature relating to health care teams and collaboration, there was little research comparing the experiences and preferences of individual health professions with regard to community team-based models of primary care. There were even fewer studies that had examined the perceptions of health care professionals working in collaborative teams.

A study done by Dieleman, et al. (2004) examined the perceptions of pharmacists, physicians and nurses who worked together in community-based teams and found that

collaboration is in fact beneficial to client care and improved the working relationships among health care professionals. The Canadian study focused on community health care teams' perceptions regarding the collaborative process. The study involved pharmacists, physicians and nurses employed in community practice who provided care to high risk individuals. Twenty two providers were placed into six primary health care teams. A pre and post design was used to evaluate the impact of team care on providers' attitudes. The questionnaires were given out at the beginning, twice during the study and at the end of the study. The questions related to job satisfaction, role recognition, experience in the team, satisfaction with collaborative practice, care decisions, quality of care, and perceptions of the teams' impact on the quality of patient care. The teams were divided into two groups consisting of the best functioning teams and the other group contained all of the remaining teams. The results of the study found that collaboration is in fact beneficial to client care and job satisfaction. A better understanding of other team members, an increase in comfort level when interacting with other professionals, and a preference to work in a team environment when providing care to high risk individuals were further findings identified in the study.

Dieleman and colleagues' study (2004) was similar to the current study in that perceptions of collaboration were studied. Content analysis was utilized in the study. It was also similar in regards to the professions that were involved in the study, including physicians, pharmacists and nurses.

The focus of the current study was different from Dieleman and colleagues' study (2004) in that it was not attempting to determine the benefits of collaborative practice on client care or working relationships among health professionals. The focus was analyzing the preferences and experiences of health professions working on health care teams in a community setting.

Dietitians are not represented in Dieleman and colleagues' study. The findings from the study will give a more comprehensive picture of community health care teams in Canada. The research will optimistically support the development of more effective ways to participate in collaborative teams.

CHAPTER THREE

Research Methodology

This chapter will discuss the original study, the open-ended questions that were included in the original study, research questions for the current study, the current research design, ethical considerations, setting and sample, and a discussion concerning content analysis.

3.1 Original Study

The original research had three main objectives. First, to measure support for interprofessional teams among different health care providers working in the community and their attitudes towards interprofessional teams; second, to assess the extent that community-based practitioners are participating in and moving toward an interdisciplinary model of practice over time; and third, to determine whether health care professionals perceive a need for greater interprofessional collaboration based on gaps between the actual and desired level of interaction between various community-based health care professionals.

The questionnaire included survey (fixed choice) questions and open ended questions resulting in both quantitative and qualitative data. There were five open ended questions included in the questionnaire. The five questions were:

1. Please indicate other barriers to participating as a member of a team that you are aware of in your community practice;
2. Are you a member of a health care team;
3. If you indicated yes, briefly describe the purpose of the team(s), the size of the team(s) (number of participants), the professional designations of its members, how often you meet (e.g. in person) and where you meet;

4. If you indicated no, identify any specific reasons why you are not a member of a team; and
5. If you indicated yes or no, briefly describe the type of health care team you might like to be part of (e.g. describe its purpose, size, membership, how often, and where it should meet).

The original research design was a three year study of community-based health care professionals consisting of a baseline questionnaire in year 0 and a follow up questionnaire in year 2. Subsequently the study was modified to a one-time cross section only design. Health care professionals surveyed included family physicians/general practitioners, pharmacists, dietitians, and nurses working in community-based practice and licensed to practice by their respective provincial regulatory bodies. The objectives were modified to reflect the change in design from a longitudinal to a cross-sectional design. This study examined the answers to the short answer questions outlined above.

3.2 Research Questions for Current Study

The primary research questions for the analysis included:

- To what extent are the four community based professions participating in interprofessional teams?
 - What are the characteristics of these teams?
 - How are these teams and their characteristics similar across the four professions?
 - How are these teams and their characteristics different across the four professions?
- Among those not participating on teams what are the specified reasons?
- What are the characteristics of the preferred teams identified by the respondents?

- How are preferred teams and their characteristics similar across the four professions?
- How are preferred teams and their characteristics different across the four professions?
- To what extent are the desired team characteristics similar to the actual team characteristics?

3.3 Current Research Design

This study examined the qualitative data from members of four health professions (medicine, nursing, dietetics, pharmacy) working in community practice settings, as contained in the “Health Care Teams in Community Practice” data base collected by Dobson, et al., 2004. The data base, managed by the College of Pharmacy and Nutrition, is located in Saskatoon at the University of Saskatchewan. The existing data included the “Health Care Teams in Community Practice” questionnaires (Appendices A to D) from 2006. Responses to the short answer questions from all of the questionnaires were the focus of the current study. The research questions were answered through the analysis of the questions. The study employed a content analysis approach for the analysis of the open ended qualitative answers. A traditional content analysis approach was intended for this study, however, the nature of the data actually determined the analysis. There was a huge variety of answers which ranged from one word to lengthy paragraphs. Due to the massive amount of data that existed, a traditional content analysis approach was not feasible. Responses to the short answer questions were placed into categories and themes and then counted based on those categories. The qualitative data was subjected to descriptive statistics, and enhanced using examples. Representative quotes were chosen to

illustrate the meaning of the categories. Additional information on the analysis is found in the following sections.

3.4 Ethical Considerations

Ethics approval for the original data was obtained from the University of Saskatchewan Behavioural Research Ethics Board (BREB) in 2005. The term of approval was five years. Participation was voluntary and participants could withdraw at any time. Consent was assumed based upon return of the completed questionnaire.

The data were kept in a locked office at the College of Pharmacy and Nutrition. As the current study was a later analysis of the original data set, a letter requesting behavioral ethics exemption was sent to the University of Saskatchewan Behavioural Research Ethics Board for approval of this study. A contract between the College of Pharmacy and Nutrition and the researcher for the release of data was developed. The researcher agreed to receive the data for specifically requested qualitative short answer data only. The data does not contain respondents' identifying information. The researcher agreed to safeguard the data when not in use by locking it back in the office at the College of Pharmacy and Nutrition. Upon completion of the analysis, the data were returned to the College of Pharmacy and Nutrition for storage.

3.5 Setting and Sample

To ensure a broad representation of practice experiences and conditions, stratified random sampling was used for pharmacists, nurses, and physicians to increase representation of smaller centers. Due to their smaller numbers, a census sample was used to survey dietitians. Stratification by region (Atlantic Canada, Quebec, Ontario, the Prairies, and British Columbia) was intended to reflect jurisdictional, linguistic, cultural, and economic differences across the country. Failure to stratify would have made it more difficult to properly represent these

differences in smaller jurisdictions. Stratification was not done by province (except in British Columbia, Ontario and Quebec) due to the smaller number of professionals present in some provinces (e.g. Prince Edward Island). Due to logistics and economic factors, the nursing sample from the prairies was limited to Saskatchewan, and the nursing sample from the Atlantic provinces was limited to Nova Scotia and New Brunswick.

Questionnaires were sent to all dietitians, regardless of whether they were employed in a community setting. Those that were involved in community practice were retained for this analysis and those that were not involved in community practice (N=4) were identified and removed from the analysis.

A response rate of approximately 40 percent for the mail in survey was anticipated. A target of 400 completed questionnaires each was proposed for physicians and pharmacists, and 600 for nurses. Questionnaires were sent to 1500 general practitioners, 1500 community pharmacists, 400 dietitians, and 2350 community nurses.

The overall response rate for the study was 37.6 percent (1982/5274). Of these, there were: 172 dietitians (43% response rate); 1196 nurses (51%); 366 pharmacists (24%); and 248 physicians (17%). Four dietitian respondents self-identified as not actually working in a community setting, and were therefore not included in the analysis of the data.

Research participants were asked what language they spoke. Responses included English or French. The percentage of respondents who self-identified as English speaking were: 192 physicians (82.8%); 304 pharmacists (83.3%); 884 nurses (74.9%); and 144 dietitians (94.7%). The percentage of respondents who self-identified as French speaking were: 40 physicians (17.2%); 61 pharmacists (16.7%); 296 nurses (25.1%); and 8 dietitians (5.3%). Not all

respondents answered this question. French questionnaires were translated to English and were included in the analysis.

Table 1 Language

Language spoken		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
English	Count	192	304	884	144	1524
	% within Profession	82.8%	83.3%	74.9%	94.7%	79.0%
French	Count	40	61	296	8	405
	% within Profession	17.2%	16.7%	25.1%	5.3%	21.0%
Total number of respondents	Count	232	365	1180	152	1929
	% within Profession	100%	100%	100%	100%	100%

Research participants were asked their gender. Responses included female or male. The percentage of respondents who self-identified as female: 81 physicians (36.5%); 182 pharmacists (50.3%); 1131 nurses (96.4%); and 148 dietitians (97.4%). The percentage of respondents who self-identified as male were: 141 physicians (63.5%); 180 pharmacists (49.7%); 42 nurses (3.6%); and 4 dietitians (2.6%). Not all respondents answered this question. The statistics from this study are similar to those outlined by the Canadian Institute for Health Information (CIHI). The Canadian Institute for Health Information (2006) outlined that females represented 94.4% of Registered Nurses in Canada. The Canadian Institute for Health Information (2005) outlined that females represented 32% of physicians in Canada. The Canadian Institute for Health Information (2010) concluded that females represented 59.2% of pharmacists in Canada. The Canadian Institute for Health Information (2006) concluded that females represented 98% of dietitians in Canada.

Table 2 Gender

Gender		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Female	Count	81	182	1131	148	1542
	% within Profession	36.5%	50.3%	96.4%	97.4%	80.8%
Male	Count	141	180	42	4	367
	% within Profession	63.5%	49.7%	3.6%	2.6%	19.2%
Total number of respondents	Count	222	362	1173	152	1909
	% within Profession	100%	100%	100%	100%	100%

Research participants were asked their age. Table 3 gives the average ages according to profession, Medicine had the highest average age, and Dietetics the lowest. The overall average age of all respondents was 46.31. The statistics from this study are similar to those outlined by the Canadian Institute for Health Information (CIHI). The Canadian Institute for Health Information (2006) outlined that the average age of Registered Nurses in Canada was 44.7 years in 2005. The Canadian Institute for Health Information (2005) outlined that the average age of physicians in Canada was 48.6 years in 2004. The Canadian Institute for Health Information (2010) concluded that the average age of pharmacists in Canada was 43.6 years in 2009. The Canadian Institute for Health Information (2006) concluded that the average age of dietitians in Canada was 40 years in 2001.

Table 3 Age

Age		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Count		222	354	1158	149	1883
Mean		50.57	45.40	46.46	40.97	46.31

3.6 Content Analysis

Content analysis is “a process for systematically analyzing messages in any type of communication” (Kondracki, Wellman, & Amundson, 2002, p. 224). The authors outlined that “textual information from interviews, focus groups, and open-ended survey questions can be evaluated using content analysis” (2002, p. 224). Watzl, Strickland, and Lenz (2005) explained that “the choice of analysis must match the purpose of the study, the methods chosen, and the type of data collected” (p. 226). The authors described that content analysis is suitable to use if every participant is asked and responds to the same questions. In this study the qualitative data were categorized according to the research questions and quantified. Exemplars were selected to illustrate the results of this study. The content analysis process involves coding information (e.g. textual material) according to a classification scheme (Kondracki, Wellman, & Amundson 2002). This process organizes the information in such a way that allows for easy identification, indexing and retrieval of content relevant to the research questions. Hsieh and Shannon (2005) explained that organizing data into categories can provide a better understanding of the phenomena under study.

Kondracki, Wellman, and Amundson (2002) explained that an inductive approach to content analysis begins with examining the data without preconceived ideas regarding the phenomena under study. The authors outlined that key words, themes, and/or categories are noted, and text is frequently reanalyzed to find any categories that provide new insight. An inductive approach was used for this study where possible, for example, when answers were lengthy.

Categories must be created when using content analysis (Graneheim & Lundman, 2003). Categories must share content that is similar and content must not fall into two different

categories (Krippendorff, 2004). Graneheim and Lundman (2003) explained that categories deal with the descriptive level of content, which includes the manifest content. Because of the high variability of the answers provided, I focused on analyzing manifest content, or content that is “visible at the surface level or literally present in the text” (Kondracki, Wellman, and Amundson, 2002, p. 225). Graneheim and Lundman explained that sub-categories can be sorted and abstracted into a category, or a category can be divided into sub-categories. Text was placed into categories for this study and then counted based on those categories. The following are examples of how the text was categorized for actual purpose of team:

Table 4 Categories

Text	Condensed text	Category
To provide community based care to members of a first nation community and supervise all community nursing care including maternal child, well women’s, diabetes, chronic care	First Nation community including maternal child, well women’s, diabetes, chronic care	First Nations
Resident Reviews/Assessment-Long Term Care	Resident-long term care	Older adult care
Better care for disease management for frail elderly	Disease management for frail elderly	Older adult care
To improve the quality of care for client.	Improve the quality of care	Better quality of care
Facilitate groups in rural communities for pregnant/postnatal women (baby up to 1 yr.) Healthy Baby Program.	Pregnant/postnatal women (baby up to 1 year). Healthy baby program.	Family health

The text was checked for accuracy by reading the questionnaires. I read, discussed and reread participants’ responses to extract and reflect on essential categories. Essential categories emerged that characterized the phenomenon. Statements or phrases that seemed to be essential were extracted from the questionnaires and I then did a summary of the categories. The essential categories were discussed and the variations of the categories for each questionnaire were described as unique essential categories. After identifying and categorizing all of the data,

responses were read again in order to gain a deeper understanding of the categories and to determine whether the categories needed to be combined or further refined. Representative quotes were chosen to illustrate the meaning of the categories. The quotes that were chosen for the thesis were longer in length. One or two word answers were not included in the written thesis. The quotes included a variety of descriptive answers from each profession involved in the study. Categories were then counted to determine explicit categories, and the relevant emphasis on certain categories. After categorical saturation was reached, the final categories, ideas and concepts were then crafted into a written document, my thesis. The literature was re-reviewed in light of the categories of the analysis. The findings were then placed within the context of other research and helped to clarify emerging ideas. In addition to quotes, some of my field notes and memos were included so that the reader could ascertain how categories were created for this thesis.

3.6.1 Strengths and Limitations of Content Analysis

The strengths of content analysis include the “abilities to use retrospective data, track changes over time, and detect trends” (Kondracki, Wellman, & Amundson, 2002, p. 227). Retrospective data were used for this study. This study did not track changes over time or detect trends. The authors explained that content analysis was also seen as unobtrusive and can be done at a lower cost than most research designs. The limitations to content analysis included “limits to the inferences drawn, the inability to assess causality, and the sometimes labor-intensive nature of the research” (Kondracki, Wellman, & Amundson, p. 227). The authors also outlined that the conclusions drawn from a study may only be generalizable to the data from that study.

The writer was not involved with the original study, which lessened the possibility of preconceived ideas influencing the analysis of the data. The original study was not developed

along theoretical lines. The purpose of the original study was not to generate theory but rather to gain a greater understanding of interprofessional health care teams in community practice.

Content analysis is not a theory generating approach to qualitative research.

CHAPTER FOUR

Findings

4.1 Introduction

This chapter presents an analysis of the data collected using the procedures described in the methods chapter. Original questionnaire data were utilized to gain a greater understanding of the experiences and preferences of nurses, physicians, pharmacists, and dietitians regarding community interprofessional health care teams. The study sought to identify similarities and differences among the four professions with regard to their team experiences and preferences.

The four research questions were:

1. To what extent are the four community based professions participating in interprofessional teams?
2. Among those not participating on teams what are the specified reasons?
3. What are the characteristics of the preferred teams identified by the respondents?
4. To what extent are the desired team characteristics similar to the actual team characteristics?

The remainder of the chapter will address the findings under each of the research questions. Results will be presented in text and tabular format, followed by examples of responses that illustrate the text and tables. Responses were chosen to illustrate the breadth of responses, and to highlight the similarities and differences among the professions.

4.2 Participation in interprofessional teams

Research participants were asked if they were a member of a health care team. Responses included yes, no, yes and no, or did not respond. Four dietitian respondents self-identified as not actually working in a community setting, and were therefore not included in the analysis of the

data. The percentage of respondents who self-identified as members of a team was 57%. The percentage of respondents who self-identified as not working on primary care teams was 40%.

Table 5 Participation in interprofessional teams

Participation in interprofessional teams		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Yes	Count	104	57	861	111	1133
	% within Profession	42%	16%	72%	65%	57%
No	Count	136	302	292	58	788
	% within Profession	55%	83%	24%	34%	40%
Yes and No	Count	3	1	9	2	15
	% within Profession	1%	0.5%	1%	0.5%	1%
No Answer	Count	5	6	34	1	46
	% within Profession	2%	0.5%	3%	0.5%	2%
Total number of respondents	Count	248	366	1196	172	1982
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“I was surprised to find that participants responded with a yes and no answer. I was looking forward to further discussion surrounding this. Some participants responded that yes, they were on a team, but they did not feel it was a formal team”.

“The number of participants that were not on a team surprised me, as I thought there would be many community health professionals involved with team work”.

Actual team characteristics included purpose of the team, size of the team, and professional designations (members) on the team. Crosstabulations were conducted using the variables that coded for profession and current purpose of the team. Respondents to the questionnaires were involved with many kinds of community health care teams. Differences were observed between the four professions (see Table 6). Each profession's top five responses for purpose of the team were represented on the table. Physician respondents were most often involved with providing a better quality of care for clients; acute care; mental health; family, women, and children's health; home care; and diabetes and chronic health. Pharmacist respondents were most often involved

with care of older adults; medication care; providing a better quality of care for clients; diabetes and chronic health; acute care; and home care. Nursing respondents were most often involved with providing a better quality of care for clients; home care; family, women and children's health; community health; and public health. Dietitian respondents were most often involved with providing a better quality of care for clients; acute care; diabetes and chronic health; older adult care; nutrition; and family, women and children's health. The top responses for each profession have been indicated on the chart with a star (*). The most common purpose across the professions was a better quality of care. With the exception of nursing, acute care and diabetic care were common purposes of primary care teams. With the exception of pharmacy, family health was also one of the most common purposes of primary care teams.

Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 6 Current purpose of the team

Current purpose of the team		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Acute care	Count	*14	*3	39	*16	72
	% within Profession	13.5%	4.8%	4.2%	12.7%	5.9%
Diabetic care/Chronic health	Count	*9	*5	29	*15	58
	% within Profession	8.7%	7.9%	3.1%	11.9%	4.7%
Better quality of care	Count	*30	*14	*265	*24	333
	% within Profession	28.8%	22.2%	28.4%	19.0%	27.2%
Older adult care	Count	8	*18	25	*15	66
	% within Profession	7.7%	28.6%	2.7%	11.9%	5.4%
Family health	Count	*12	0	*116	*10	138
	% within Profession	11.5%	0%	12.4%	7.9%	11.3%
Nutrition	Count	1	1	3	*13	18
	% within Profession	1.0%	1.6%	0.3%	10.3%	1.5%
Home care	Count	*9	*3	*143	9	164
	% within Profession	8.7%	4.8%	15.3%	7.1%	13.4%
Community	Count	3	2	*114	6	125
	% within Profession	2.9%	3.2%	12.2%	4.8%	10.2%
Medication care	Count	0	*16	1	0	17
	% within Profession	0%	25.4%	0.1%	0%	1.4%
Mental health	Count	*12	0	22	3	37
	% within Profession	11.5%	0%	2.4%	2.4%	3.0%
Public health	Count	0	0	*49	1	50
	% within Profession	0%	0%	5.3%	0.8%	4.1%
Total number of	Count	104	63	932	126	1225
respondents	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

Initially I did separate tables for each profession, but ultimately put them all together”.

“There were a lot of participants that answered that they worked on community health teams that worked in acute care. My understanding was that this survey was sent to community health professionals. I am interested in why respondents answered that they worked in acute care”.

“Any response that included the word hospital was placed into the acute care category”.

“Placing content into the better quality of care category was very difficult, as there were many different responses. Responses included holistic care, best possible care, comprehensive client care, enhanced client care, continuity of care, etc”.

“Older adult care also included elderly persons in long term care facilities. Any response that included seniors, older adult, elderly, frail elderly, etc. was placed into the older adult care category”.

“Family health included responses that discussed women’s health, children’s health, and adolescent health. Any response that included women, children, babies, and adolescents was positioned in the family health category”.

“There are many different definitions of community and public health. Deciding whether content fell into the community category or the public health category was a very time consuming effort. I also had to decide whether to leave community and public health as two separate categories, or place them together. Ultimately I separated them”.

“Any response that had the words home care was placed into the home care category. Any response that included community was placed into the community category”.

“Any response that included immunization, infectious disease, communicable disease, and public health were placed into the public health category”.

Examples of the purpose of the team are illustrated by the following comments:

Nurse responses

“To better meet the needs of complex clients, sharing expertise of each discipline.”

“The multidisciplinary team works to support women and her children with a variety of services and disciplines.”

“To provide holistic care for our clients in the community and to maintain their independence through provision of services as they require and will permit.”

“Primary health care and multidisciplinary approach to care along with the client’s involvement will, I believe, result in a higher quality of coordinated care and result in better health outcomes for the client which will increase their quality of life and cost the health system less overtime.”

Physician responses

“I practice in a hospital setting so the team approach is extremely useful in discharge planning.”

“Primary health care to designated underserviced community.”

“Provide community care for people with chronic mental illness.”

“CLSC (centre local de services communautaires) – maintenance at home for aging people losing their autonomy. It's essential to be on a team.”

Pharmacist responses

“Health care team in an elderly persons' centre.”

“Hospital discharge planning for affected client so that the client gets home and recovers with adequate care and preparation to prevent mishaps.”

“To work towards a common goal resulting in improved patient care, yet less expensive health care due to efficiency; fewer misdiagnoses; fewer incorrect or overlapping therapeutics; fewer drugs; fewer drug and food allergies, etc.”

“Diabetes monitoring – educate diabetic clients to gain better control of the disease.”

“Methadone maintenance program. To provide patients with methadone from beginning to stabilization and discharge, at the same time giving them better skills to cope and perhaps move to more productive lifestyle.”

Dietitian responses

“To provide patient focused care in a team centered approach in an acute care setting.”

“Intervention for diabetes in community based settings.”

“To provide holistic health care to clients and their families (the whole body).”

“Orthopedic Enhancement Team strives to improve patient satisfaction through increased knowledge regarding joint replacement surgery. We aim to lessen anxiety regarding upcoming joint surgery and to provide information that will be helpful for their surgery and recovery. The team also improves cooperation and teamwork among health care members.”

“To provide nutrition support in the community, in a safe quality and cost effective manner. To ensure optional standards of care in nutrition support are provided to the client.”

Crosstabulations were conducted using the variables that coded for profession and current size of the team. Each profession's top five responses for size of the team are represented on the table. No substantive differences were observed among the four professions (see Table 7).

Respondents that were involved with health care teams most often worked with small health care teams, involving two to six health care providers. Professional designations were those respondents that did not include the size of the health care team that they worked on, and dependent or varies without professional designations were those respondents that stated that the size of the team varied, or was dependent on certain factors.

Table 7 Current size of team

Current Size		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
2-6	Count	45	38	220	49	352
	% within Profession	43.6%	64.4%	26.4%	38.0%	31.3%
7-12	Count	24	11	209	44	288
	% within Profession	23.3%	18.6%	25.1%	34.1%	25.6%
13-20	Count	7	2	109	11	129
	% within Profession	6.8%	3.4%	13.1%	8.5%	11.5%
Professional designations only	Count	22	7	215	15	259
	% within Profession	21.4%	11.9%	25.8%	11.6%	23.0%
Greater than 20	Count	5	1	71	9	86
	% within Profession	4.9%	1.7%	8.5%	7.0%	7.7%
Depends/varies without prof des	Count	0	0	9	1	10
	% within Profession	0%	0%	1.1%	0.8%	0.9%
Total number of respondents	Count	103	59	833	129	1124
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“I was not surprised by the findings for actual size of team. There is a shortage of health professionals in Canada, and there are many health professionals that work in rural areas where there is a lack of professionals”.

Questionnaire respondents who were involved with health care teams varied in the professions with whom they most often worked. Each profession's top five responses for professional designations are represented on the table. Differences were observed between the

four professions (see Table 8). Physicians most often worked with nurses, other physicians, social workers, dietitians, and physiotherapists. Pharmacists most often worked with other pharmacists, nurses, physicians, dietitians, and social workers. Nurses most often worked with other nurses, social workers, physicians, dietitians, physiotherapists. Dietitians most often worked with nurses, other dietitians, physicians, social workers, and physiotherapists. The top responses for each profession have been indicated on the chart with a star (*). The most common profession involved with team care across the professions was nursing. The professional designations chart differs from the other charts in that professional designations were manually analyzed. The numbers that appear in the chart for count and percentage are the numbers that correspond with the representation of that profession on teams. Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 8 Current professional designations

Professional Designations		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Medicine	Count	*68	*40	*313	*73	
	% within Profession	76%	78%	41%	60%	
Pharmacy	Count	19	*46	78	29	
	% within Profession	21%	90%	10%	24%	
Nursing	Count	*70	*42	*707	*111	
	% within Profession	79%	82%	93%	90%	
Dietetics	Count	*24	*18	*286	*106	
	% within Profession	27%	35%	38%	86%	
Social work	Count	*40	*9	*340	*51	
	% within Profession	45%	18%	45%	41%	
Physiotherapy	Count	*21	8	*269	*42	
	% within Profession	24%	16%	36%	34%	
Total number of respondents	Count	89	51	757	123	1020
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“There were many different professions that were included in the responses from participants. I limited the number of categories to those that were most often named, including medicine, pharmacy, nursing, dietetics, social work and physiotherapy. Other popular responses included psychologist, mental health, occupational health, dental health, respiratory therapist, and various aides”.

“This was a very difficult task to achieve. I literally counted when a profession appeared in a participant's response. Once I had counted the profession, if it was named again, I did not count it again, as many responses had different types of a certain profession (e.g. family practitioner, general practitioner, physician specialist)”.

Crosstabulations were conducted using the variables that coded for profession and how often teams actually met, along with how often teams preferred to meet. With the exception of pharmacy, each profession's top response was either weekly or monthly for both actual and preferred. Monthly and weekly were the most common responses across professions.

Crosstabulations were conducted using the variables that coded for profession and where teams

actually met, along with where teams preferred to meet. The top response for where teams actually met was at the office, with the exception of physicians who most often met at the hospital. Respondents preferred to meet at the office across the professions. Crosstabulations were conducted using the variables that coded for profession and how teams actually met, along with how teams preferred to meet. Respondents most often did not include an explanation of how they met, but rather where they met. The top response for how teams actually met was during meetings, with the exception of pharmacists who most often utilized the phone. Respondents preferred to hold meetings across the professions.

4.3 Not participating on teams

There were many barriers included as to why respondents were not participating on teams. Crosstabulations were conducted using the variables that coded for profession and barriers to team work. Each profession's top five rationales for barriers are represented on the table. Differences were observed between the four professions (see Table 9). Physician respondents stated that barriers to team work most often included workload, finances, attitudes, locations, and lack of health professionals. Pharmacist respondents most often declared workload, finances, attitudes, lack of health professionals, and locations. Nursing respondents most often included workload, attitudes, locations, lack of health professionals, and finances. Dietitians included attitudes, workload, locations, finances, and lack of managerial support. The most common barriers across the professions were workload and attitudes.

Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 9 Barriers to teamwork

Barriers to Teamwork		Profession				Total
		Medicine	Pharm	Nursing	Dietetics	
Attitudes	Count	17	38	267	33	355
	% within Profession	11.0%	12.3%	23.2%	25.6%	20.4%
Workload	Count	49	93	304	33	479
	% within Profession	31.8%	30.0%	26.4%	25.6%	27.5%
Locations	Count	10	24	139	19	192
	% within Profession	6.5%	7.7%	12.1%	14.7%	11.0%
Financing	Count	42	45	114	15	216
	% within Profession	27.3%	14.5%	9.9%	11.6%	12.4%
Lack of other professions	Count	13	36	126	6	181
	% within Profession	8.4%	11.6%	10.9%	4.7%	10.4%
Lack of managerial support	Count	7	12	48	10	77
	% within Profession	4.5%	3.9%	4.2%	7.8%	4.4%
Total number of respondents	Count	154	310	1151	129	1744
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“There were a vast amount of answers for barriers to teamwork. The professions were kept separate at first, and then placed together into one table”.

“Attitudes was a huge category with many different answers, including: resistance from other professionals; lack of effort to join team; lack of interest; do not see the benefit; turf issues; lack of commitment; silo approach of members; willingness; power struggles, etc”.

Questionnaire respondents also included why they personally were not involved with health care teams. Crosstabulations were conducted using the variables that coded for profession and why you're not on a team. Each profession's top five rationales for why you're not on a team were represented on the tables. Differences were observed between the four professions (see Table 10). Physician respondents affirmed no opportunity, not on a formal team, financing, workload, and not needed for all clients. Pharmacist respondents most often responded that there

was no opportunity, workload, not on a formal team, not asked, and lack of health care providers. Nursing respondents included not on a formal team, not enough health providers, not needed for all clients, lack of health care providers, and workload. Dietitians most often included not on a formal team; not enough health care providers; workload; do not see individual clients; restricted work hours; no opportunity; and financing. The top responses for each profession have been indicated on the chart with a star (*). The most common response across the professions as to why the respondents personally were not involved with health care teams was that they were not on a formal team. Workload was another common response.

Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 10 Why you're not on a team

Why you're not on a team		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Not on a formal team	Count	*25	*40	*45	*12	122
	% within Profession	20.2%	11.2%	19.9%	32.4%	16.4%
Not enough team members	Count	1	10	*40	*4	55
	% within Profession	0.8%	2.8%	17.7%	10.8%	7.4%
Do not see individual clients	Count	0	1	3	*4	8
	% within Profession	0%	0.3%	1.3%	10.8%	1.1%
Restricted work hours	Count	5	3	19	*3	30
	% within Profession	4.0%	0.8%	8.4%	8.1%	4.0%
No opportunity	Count	*26	*98	12	*3	139
	% within Profession	21.0%	27.5%	5.3%	8.1%	18.7%
Financing	Count	*22	29	8	*3	62
	% within Profession	17.7%	8.1%	3.5%	8.1%	8.3%
Not needed for all clients	Count	*9	6	*32	2	49
	% within Profession	7.3%	1.7%	14.2%	5.4%	6.6%
Workload	Count	*15	*69	*20	*4	108
	% within Profession	12.1%	19.4%	8.8%	10.8%	14.5%
Lack of health professionals	Count	6	*34	*21	0	61
	% within Profession	4.8%	9.6%	9.3%	0%	8.2%
Attitudes	Count	0	12	14	2	28
	% within Profession	0%	3.4%	6.2%	5.4%	3.8%
Not asked	Count	4	*35	3	0	42
	% within Profession	3.2%	9.8%	1.3%	0%	5.7%
Total number of respondents	Count	124	356	226	37	743
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

"The professions were ultimately put into one table, rather than four separate tables".

"Many of the responses for barriers and why you're not on a team were similar, but as they were two separate questions, I kept them separate".

"Not currently employed in such a setting; on a team, but not a health care team; involve ourselves when needed; other health professions consulted when needed, were included in the not on a formal team category".

“The lack of health professionals category included responses such as: work with nurses or only one other profession; very small community; rural; only consult with one other professional; not enough contact with other professions; lack of interested professionals; isolated; remote”.

Examples of why respondents were not participating on teams are illustrated by the following comments:

Nurse responses

“As a public health nurse I work independently unless I involve other professionals, i.e. nutritionist, audiologist, SLP, infant development, etc. Most of the clients I see are straight forward and do not have complex care needs. When I have had such clients I have appreciated working with other professionals and getting different perspectives.”

“I believe creation of functional interdisciplinary teams would require funding of time by administrators, a shared commitment among agencies and an ongoing coordinator dedicated to bringing the team together.”

“Very difficult to provide similar care over varying populations. Cannot treat the small communities the same due to resources and time constraints. Small communities do not have access to professionals or technology, as readily as the large communities.”

“I am a client care coordinator in a rural health region. Although I am an employee of home care, my role is to coordinate services for all residents of the region. I work closely with other health team members to ensure the client receives the appropriate care by the appropriate team members at the appropriate time. I was the first person to work in this role, and at first it was difficult to get other team members to cooperate with the concept. Many were resistant until they learned the value of each member of the team, that each member has specific valuable contributions to make to the client’s well-being.”

Physician responses

“Too time consuming, resulting in longer work hours and interfering with the care i.e. diagnosis and treatment of other many patients that don’t need a team approach. Considerable interruptions during the day from other health professions, i.e. nurses, social workers, pharmacists, physiotherapists, etc. and interfering with the care of patients that took the time and effort to attend my clinic.”

“I will never be a team member. The fee is so low that I am unable to maintain my office. Besides, I do not think that the patient’s conditions can be helped by a team; it is a waste of manpower and funding.”

“I work in a rural region; we are in need of a doctor. We also lack other interventionists. Team work is limited when it comes to cases with severe problems.”

“I feel they have an important role primarily for the socio-economically disadvantaged. For those in the upper echelon of the social state, the investment is likely for too much, the length of time for patient far too long and the results don’t reflect the investment.”

“We as physicians are not encouraged to belong to any team until there is a problem.”

Pharmacist responses

“Can not spend much time on phone or in meetings because we are too busy. If we spend too much time on one client, the rest have to wait too long, and then you are rushed.”

“No one asked me to be a member of a specific team.”

“I am a pharmacist practicing in a rural setting. The closest physician is 30 miles away, although we have a clinic one or two days per week. Other professions are physically not here. We do conference call or communicate with other professionals from time to time to resolve patient issues.”

“I am a part time pharmacist at a very busy chain store. However just because I am not a member of a health care team does not mean that I have no contact with other health care professions regularly. I talk over the phone with physicians, nurses, dentists and other health care professionals regularly about our patients.”

Dietitian responses

“In private practice networking is not compensated for.”

“In order for a team to function, there needs to be a desire to be a part of a team by all members involved. In my experiences, if a team member does not value and respect other professions and team members, the team is not functional. I do not believe some other professions have had a knowledge base or teachings of effective communication and how to work as a team. Also, have not had experience or discussion about importance of a team. I do not feel team work is valued in some professions.”

Several respondents stated that they were not on a formal health care team, and answered no when asked if they were a member of a health care team. A number of respondents answered yes, that they were a member of a health care team, but replied that it was not a formal team. Perhaps some participants did not understand the concept of a team as understood by the original researchers, or their definition of a formal team differed from the original researchers. Not all

respondents included further discussion regarding why they answered that the team that they were involved with was not considered a formal team.

Dietitian responses

“Ours is not a formal team, but I feel we work as such. We are all in the same building/office”.

Physician responses

“I’m not a member of a formal team. I work in the same building as other healthcare professionals and walk along the corridor to talk to them. It is an informal team with dietitians at the hospital, nurses at the hospital, community pharmacists, hospital pharmacists, VON, PCWs”.

“No formal meetings but discuss individual cases and conditions frequently”.

Nurse responses

“Not a formal team. Members and purpose would change according to individual client”.

“Usually informal team meetings with other RNs who have different specialties. Usually consult with other professionals on a need basis (nutritionist, pharmacists, MHO)”.

“I am unsure if we are called a team or not. We plan, coordinate all nursing care for our clients and involve other agencies on a “needs” assessment”.

“Most often it is a telephone conference and often it is difficult to get them all together, so often it is me calling each team member separately to determine what their needs are and how best to access them”.

Pharmacist responses

“We have an informal team. Doctor, community nurses (home care), and pharmacist”.

4.4 Preferred team characteristics

The question related to preferred team characteristics included purpose of the team, size of the team, and professional designations. Crosstabulations were conducted using the variables that coded for profession and preferred purpose of the team. Each profession’s top five preferences for purpose of the team are represented on the table. Differences were observed

between the four professions (see Table 11). Respondents to the questionnaires preferred to be involved with many different kinds of community health care teams. Physician respondents replied that they would like to be involved with providing a better quality of care for clients; diabetes and chronic health; family, women, and children's health; older adult health; home care; and mental health. Pharmacist respondents included providing a better quality of care for clients; diabetes and chronic health; medication care; older adult care; and home care. Nursing respondents included providing a better quality of care for clients; family, women and children's health; community health; home care; palliative care; and health promotion. Dietitian respondents included providing a better quality of care for clients; diabetes and chronic health; nutrition health; older adult care; family health; and community. The top responses for each profession have been indicated on the chart with a star (*). The most common purpose across the professions was a better quality of care. With the exception of nursing, diabetic care was also a common purpose.

Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 11 Preferred purpose of the team

Preferred purpose of the team		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Acute care	Count	3	8	18	3	32
	% within Profession	2.4%	3.0%	3.1%	3.8%	3.0%
Diabetic care/Chronic health	Count	*28	*44	20	*11	103
	% within Profession	22.6%	16.5%	3.4%	14.1%	9.8%
Better quality of care	Count	*57	*105	*290	*28	480
	% within Profession	46.0%	39.3%	49.6%	35.9%	45.5%
Older adult care	Count	*5	*30	12	*6	53
	% within Profession	4.0%	11.2%	2.1%	7.7%	5.0%
Family health	Count	*8	2	*59	*6	75
	% within Profession	6.5%	0.7%	10.1%	7.7%	7.1%
Nutrition	Count	2	2	1	*10	15
	% within Profession	1.6%	0.7%	0.2%	12.8%	1.4%
Home care	Count	*5	*10	*39	3	57
	% within Profession	4.0%	3.7%	6.7%	3.8%	5.4%
Community	Count	3	9	*54	*5	71
	% within Profession	2.4%	3.4%	9.2%	6.4%	6.7%
Health promotion	Count	1	3	*21	4	29
	% within Profession	0.8%	1.1%	3.6%	5.1%	2.8%
Medication care	Count	0	*38	2	0	40
	% within Profession	0%	14.2%	0.3%	0%	3.8%
Palliative	Count	4	3	*23	1	31
	% within Profession	3.2%	1.1%	3.9%	1.3%	2.9%
Mental health	Count	*5	1	4	0	10
	% within Profession	4.0%	0.4%	0.7%	0%	0.9%
Total number of respondents	Count	124	267	585	78	1054
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“I was not surprised to see that better quality of care was the most common preferred purpose for all of the respondents. It is my belief that all health professionals strive towards a better quality of care for our clients”.

Crosstabulations were conducted using the variables that coded for profession and preferred size of the team. Each profession's top five preferences for size of the team were represented on the table. No substantive differences were observed between the four professions (see Table 12). Respondents replied that they would most often prefer to work with small health care teams, involving two to six health care providers.

Table 12 Preferred size of the team

Preferred size		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
2-6	Count	60	162	143	44	409
	% within Profession	55.5%	76.8%	32.5%	57.9%	49.0%
7-12	Count	18	14	117	18	167
	% within Profession	16.7%	6.6%	26.6%	23.7%	20.0%
13-20	Count	8	0	40	2	50
	% within Profession	7.4%	0%	9.1%	2.6%	6.0%
Professional designations only	Count	20	34	111	10	175
	% within Profession	18.5%	16.1%	25.2%	13.2%	21.0%
Greater than 20	Count	2	0	7	1	10
	% within Profession	1.9%	0%	1.6%	1.3%	1.2%
Depends or varies without prof des	Count	0	1	22	1	24
	% within Profession	0%	0.5%	5.0%	1.3%	2.8%
Total number of respondents	Count	108	211	440	76	835
	% within Profession	100%	100%	100%	100%	100%

Questionnaire respondents who were involved with health care teams varied in the professions that they would prefer to work with. Each profession's top five responses for professional designations are represented on the table. Differences were observed between the four professions (see Table 13). Physicians would most often prefer to work with nurses, other physicians, social workers, dietitians, and physiotherapists. Pharmacists would most often prefer to work with physicians, other pharmacists, nurses, dietitians, and physiotherapists. Nurses would most often prefer to work with other nurses, physicians, social workers, physiotherapists

and dietitians. Dietitians would most often prefer to work with nurses, other dietitians, physicians, physiotherapists, and social workers. The top responses for each profession have been indicated on the chart with a star (*). The most common professions preferred were nursing and medicine. The professional designations chart differs from the other charts in that professional designations were manually analyzed. The numbers that appear in the chart for count and percentage are the numbers that correspond with the representation of that profession on teams. Not all categories that were created were included in the table. Categories were left out due to the low number counts for some professions. Only the categories with the highest number counts were included. For that reason, the total number of respondents for a profession listed in the table will not equal the sum of the category counts for that profession.

Table 13 Preferred professional designations

Preferred professional designations		Profession				Total
		Medicine	Pharmacy	Nursing	Dietetics	
Medicine	Count	*30	*14	*141	*23	
	% within Profession	78%	82%	59%	72%	
Pharmacy	Count	10	*11	34	12	
	% within Profession	26%	65%	14%	38%	
Nursing	Count	*34	*11	*182	*27	
	% within Profession	87%	65%	77%	84%	
Dietetics	Count	*18	*8	*83	*24	
	% within Profession	46%	47%	35%	75%	
Social work	Count	*20	3	*102	*14	
	% within Profession	51%	18%	43%	44%	
Physiotherapy	Count	*11	*5	*84	*15	
	% within Profession	28%	29%	35%	47%	
Total number of respondents	Count	39	17	237	32	325
	% within Profession	100%	100%	100%	100%	100%

Writer's field notes/memos

“It is my belief that many health professionals view the physician as the leader of the team. This could be why so many of the respondents included that they would like a physician on the team”.

4.5 Desired and actual team characteristics

The most common preferred purpose across the professions was to provide a better quality of care for clients. Physician respondents were most often involved with acute care, but would prefer to work on diabetes and chronic health teams. Pharmacist respondents were most often involved with older adult care, but similar to physician respondents, would prefer to work on diabetes and chronic health teams. Nursing respondents were most often involved with providing a better quality of care for clients and home care teams, but would prefer to work on family, women and children's health teams. Dietitian respondents were most often involved with acute care teams, but again, similar to physician and pharmacist respondents would prefer to work on diabetes and chronic health teams. The actual and preferred size of the team was one to six health care professionals. The most common profession involved with team care across the professions was nursing, while the most preferred professions were nursing and medicine. The respondents answered that they met on a weekly or monthly basis, and preferred to do so across the professions. With the exception of physician respondents who most often met at the hospital, respondents met at the office, and preferred to do so across the professions. The other exception was pharmacist respondents who most often utilized the phone, respondents met during meetings, and preferred to do so across the professions.

CHAPTER FIVE

Discussion

5.1 Overview

The purpose of this study was to gain a greater understanding of the experiences and preferences of nurses, physicians, pharmacists, and dietitians regarding interprofessional health care teams. The study sought to identify similarities and differences among the four professions with regard to their team experiences and preferences. The four research questions were:

1. To what extent are the four community based professions participating in interprofessional teams?
2. Among those not participating on teams what are the specified reasons?
3. What are the characteristics of the preferred teams identified by the respondents?
4. To what extent are the desired team characteristics similar to the actual team characteristics?

Study results indicated that community based health professionals were working on a variety of health care teams, with differing agendas, professions, size, meeting times, locations, and preferences. There were also many reasons included as to why professionals were not working on teams, along with barriers to teamwork. The results of this analysis raise a variety of questions related to differences amongst professionals in terms of community based health care teams.

In this chapter the results of this study will be discussed with attention paid to participation on primary care teams; specified reasons as to why professionals were not participating on teams; preferred team characteristics; and the extent to which desired and

current team characteristics were similar. The limitations of the present study will be outlined, along with suggestions for future research, conclusions and implications.

5.2 Participation in interprofessional teams

The percentage of respondents who self-identified as working on interprofessional teams were physicians (42%), pharmacists (16%), nurses (72%), and dietitians (65%). As stated in the literature review section, to provide the best care possible for their patients and clients, it is often necessary for health care professionals to work as a team, sharing both their skills and knowledge (Patel et al., 2000; Wagner, 2000; Watters & Moran, 2006).

Many respondents indicated that they worked on and would like to work on teams that strive towards providing a holistic, better quality of care for clients. McCallin and McCallin (2009) described similar characteristics in that collaborative teamwork can only occur when professionals work together to optimize care for the patient through coordinated and patient centered efforts. The World Health Organization (2010) has recommended collaborative practice as unmet health needs and complex health issues become increasingly apparent. The World Health Organization (WHO) has acknowledged that collaborative efforts will lead to improved health outcomes for patients.

There could be many reasons as to why health professionals are working on certain health care teams and not others. Physicians responded that they frequently were involved with acute care teams. Many physician respondents may have also been employed in acute care settings, or working in rural areas with small hospitals and health care centers. Physician respondents may have been employed in private practice and only worked with other health care professionals in acute care settings. Pharmacist respondents were most often involved with medication care teams and older adult care teams. Medication care is very relevant for pharmacists, along with older

adult care, as many seniors may perhaps take multiple medications. Increasing severity of chronic illness and the aging population could be major factors related to medication and older adult care. Nursing respondents were most often involved with home care. The questionnaires were sent to community health professionals, many of whom were employed as nurses working in home care settings. The dietitian respondents were most often involved with acute care.

Respondents agreed that professionals must share their knowledge and expertise, involving the client in the care decisions. Effective communication and a willingness to participate are of utmost importance when working on a team. Several authors reported that professionals collaborate well together when communication is clear and they understand one another's roles (Makowsky, et al., 2009; Molyneux, 2001; Sargeant, Loney, and Murphy, 2008; Zillich, McDonough, Carter, and Doucette, 2004). Makowsky, et al. found that pharmacists felt that they were contributing to the team and were involved in collaborative efforts when the professions that they were working with understood the role that they had within the health care team. Difficulties in team work arose when roles were not clearly understood or respected. Team members must communicate effectively and work towards the same goal in order to collaborate and provide excellent patient care. Makowsky, et al. outlined that placing several people in the same room and telling them to work together to create a team is not sufficient. Continued education, team training and leadership are important key factors in collaborative success amongst health care professionals (Makowsky, et al.). Molyneux concurred that communication is a very important factor when collaborating with other professions. The author remarked that professionals must feel comfortable with their own roles when collaborating with others. When the professionals are comfortable with their own roles, they must learn to be flexible within their roles and be understanding of one another. Pharmacists and physicians collaborated well with

one another when there was a mutual understanding of one another's roles, along with trustworthiness and relationship initiation (Zillich, McDonough, Carter, & Doucette).

Respondents acknowledged that the size of the team should vary based on the objective of the team or the needs of the client; however, all respondents agreed that a small team of two to six health care professionals would be ideal. Poulton and West (1999) found no significant correlation between team size and team effectiveness. The authors did however find a significant relationship between team effectiveness and team processes (shared objectives, participation, quality emphasis, and support for innovation). They also found that shared objectives were the greatest indicators of team effectiveness.

Respondents had a variety of answers as to the professionals who they worked with; however, nurses were the most common response. The diversity may be because each profession has a distinct culture, as was discussed in the literature review section. Examination of the transcribed answers indicated that some physicians do not share a view of other professionals as equals – but as subordinates or helpers. Other respondents clearly felt a lack of equality. Whether this was dependent on the personality of the professionals involved, or the culture of the communities in which they work is not clear. However, it is clear that barriers exist and must be addressed if interprofessional community teams are to succeed.

Community health care team members must understand one another's roles, and learn how to participate together, support one another, and share objectives in order to be effective. As described in the literature review, health professionals must be competent in their own roles, but yet understand the unique contributions that each team members possesses. Health professionals must share knowledge, expertise, respect, and decision making in order to better care for the client. Ongoing support of collaborative efforts is also imperative for community teams to

success. Fewster-Thuente and Velsor-Friedrich (2008) explained that collaboration may be achieved when physicians, nurses, dietitians, pharmacists, and social workers collaborate on a daily basis, engaging in interdisciplinary rounds and using care plans that work for everyone. Professional collaboration is a conscious effort that takes time. Professionals must gain understanding, purpose and trust in order to expand the possibility of interprofessional collaboration (Gerardi & Fontaine, 2007). The authors described reflective practice; creating opportunities for interprofessional education; assessing the culture and attitudes towards teamwork; creating opportunities for collaboration and inviting participation; sharing information by engaging in productive conversations; building trust; accountability; informal relationship building; managing conflict; and not making excuses as key illustrations of how to collaborate with other professionals.

As stated in the literature review section, interprofessional education was seen as a strategy to promote professionals to deliver the desired goal of collaboration, yet the way in which health care professionals are educated is not ideal for interprofessional collaboration (Hall, 2005; MacIntosh & McCormack, 2001; Pringle, et al., 2000; Ray, 1998). D'amour, Ferrada-Videla, San Martin Rodriguez, and Beaulieu (2005) outlined that professionals have a limited view of working collaboratively, and are educated to understand their own professional role regarding client care and not those of other health professions. D'amour, et al. explained health professionals must work collaboratively and not compete over client care. The authors described that health care professionals would benefit greatly from education that is collaboration oriented, rather than discipline specific. D'amour, et al. outlined that professionals should focus on working collaboratively for the client, and not focus their time on discipline specific care and purposes of health care teams. The World Health Organization (2010) recognized that

collaboration and interprofessional teams are integral in providing quality care to clients. The WHO outlined that “interprofessional education is integral to preparing collaborative ready healthcare professionals that can better respond to today’s local health needs” (p.7).

5.3 Not participating on teams

There were many respondents who replied that they did not work on interprofessional teams. The percentage of respondents who self-identified as not working on teams were physicians (55%), pharmacists (83%), nurses (24%), and dietitians (34%). Health care professionals agreed that interprofessional collaboration is beneficial for the client, and some of the respondents were content with the health care teams that they were involved with, yet results of this study highlighted many barriers and reasons why community health care professionals are not collaborating. These barriers need to be overcome so that the most optimal care is available and provided to the Canadian public.

Many respondents replied that they were not on formal health care teams. Some of the reasons for answering that they were not on a formal health care team included: they only met for certain clients, the team work was not supported by management, acute care health professionals did not understand the work that the community health professionals were doing, a lot of communication was done over the phone and not face to face, and there were differing definitions of team than what the survey defined. This may also be related to the fact that the teams did not have financing, as this was also a concern for many of the respondents. Financing concerns could be related to the fact that physicians were self employed and paid by fee for service, while others were employed by health authorities, etc. and salaried. A lack of managerial support was a concern expressed by respondents. It could also be related to the fact that the work that they were involved with was not formally recognized. The economy may have been a

contributing factor. Many respondents replied that there was no opportunity, not enough team members, or a lack of health care professionals. This may be linked to the response that many respondents were from rural areas. Respondents also included that there were not a lot of health care professionals employed in the rural areas where they were working. Workload was another frequent response. The shortage of health care professionals in Canada and increased acuity of clients may be contributing factors related to the workload demands of community health care professionals.

The data from this study were from 2006, and many changes have occurred. There has been an increase in the number of nurse practitioners employed in rural health care settings. Nurse practitioners were not included in the study. Many technological advances have taken place, including access to the internet; the use of video conferencing via the world wide web; telehealth; the use of personal device assistants; and increased cellular coverage in remote or rural locations. Thus the data may have looked different if collected in 2011.

5.4 Preferred team characteristics

Health professionals preferred to work on varying types of teams, with various sizes and professions involved. How often, where and how the teams preferred to meet also varied. All professions were consistent in that they preferred to work on teams that strived to provide a better quality of care for the client. Many respondents answered that they would prefer to be involved with chronic illness and diabetes health care teams. Chronic illness and diabetes are very prevalent health care issues in Canada, which could be contributing factors as to why respondents chose these health issues. Respondents agreed that a small team size of two to six was preferable. We cannot answer why they would prefer to be involved with smaller teams, but it might be due to the issues outlined by respondents, such as workload, financing, lack of health

professionals, etc. Respondents preferred to work most often with nursing and medicine. There are many nurses involved with primary care teams, and physicians are still viewed as the leaders of care for clients.

5.5. Desired and current team characteristics

The findings from the study concluded that desired and current team characteristics were dissimilar. These differences must be addressed in order for clients to benefit from community health care team work. The findings suggest that all professionals must demonstrate a willingness to be part of the health care team (especially physicians), and that they are working towards the same client goals. Involvement of the client is also essential. Team members must learn to communicate effectively, and consistently, keeping in mind one another's roles within the health care teams. Understanding each team members' role is of utmost importance, along with competency in their own individual role. Team members must share expertise, respect, decision making, and objectives. Participation and support of one another must occur in order for quality teamwork to exist. The findings call attention to the need for administrative and managerial support of teams, including resources. Health care teams need to have funding in place, time to work with one another, and enough health care professionals available. Interprofessional education must take place that is collaboration oriented, and not discipline specific. Continued education, training, and leadership must occur in order for community health care teams to be successful.

The lack of equality felt by many respondents, along with additional reasons as to the lack of participation on community health care teams such as: not being involved with formal teams, no opportunities, not enough team members, financing, workload, and lack of health care professionals is concerning. It is clear that barriers exist and must be addressed if

interprofessional community teams are to succeed. The findings also suggest that community health professionals work on varying types of teams. Reasons why some health professionals are involved with certain community health care teams and not others must also be addressed.

5.6 Limitations

The dietitian sample was a limitation of the study. Questionnaires were sent to all dietitians, regardless of whether they were employed in a community setting. Those that were not involved in community practice were identified and removed from the analysis. This resulted in a smaller sample size.

There are many different ways in which health care providers define themselves. There are also many different ways in which health care providers define community and primary health care. This may be seen as a limitation, in that definitions may differ at any one time. Underwood, et al. (2009) explained that community health nurses assume many roles and responsibilities in Canada, and may be categorized as working in community health; public health; home care; and outpost or clinical settings. Included in this study were nurses that were employed in physician's offices and occupational health settings. Clinical nurse specialists, nurse midwives, and nurse practitioners did not participate in this study. As outlined in this study, community health nurses work in a variety of settings and are employed in a variety of different roles, resulting in several definitions for community health nurse.

5.7 Future Research

There is opportunity for future research related to specific gender and professional culture issues. Future research should extend the current research by further examining demographics. There is also an opportunity for exploration regarding the type of team that community health professionals want to work in, along with why health professionals are working on certain teams

and not others. Future research must support the development of more effective ways to participate in collaborative teams to provide the best care possible for the Canadian population. The patient's experience of interprofessional care is also of interest for future research. Patient satisfaction surveys have been conducted, but there is not a great understanding of the experiences of patients and interprofessional care in a community health setting.

Interprofessional education research must continue as health care professionals learn to collaborate with one another at a very early stage in their career. This specific knowledge base will in turn provide a strong basis for implementation of research findings into undergraduate health sciences education policies to influence positive student outcomes. We cannot answer how interprofessional education will be delivered from the results of this study. We also cannot predict if interprofessional education will result in health care professionals wanting to work on health care teams. These are both very important questions to continue researching. Simulation learning in undergraduate programs across the country is taking on a very important role within interprofessional learning. Health professional students learn together through interprofessional education, and learning in real life scenarios may lead to efficient teamwork and communication. Research is needed to understand the contribution of simulation to improving patient outcomes through interprofessional collaboration.

5.8 Conclusions and Implications

A greater understanding of successful health care teams is needed. Further exploration of the implications of funding on actual health care team initiatives is also needed. The shortage of health care professionals in Canada poses a concern in terms of client care and teamwork. The lack of actual and perceived support from management and administration is also concerning.

This study provides information regarding characteristics of community health care teams; differences between four professions in terms of team characteristics; differences between members and non members of teams; differences between actual and preferred characteristics of teams; and barriers and reasons why professionals are not involved with teamwork. There continues to be limited research related to barriers to teamwork. Particular attention needs to be given to barriers regarding funding; time and workload; poor communication; lack of health care professionals; lack of understanding regarding roles; resistance from professionals; lack of interest; accessibility; and lack of leadership.

In conclusion, the results of this study support the need for continued research of interprofessional teamwork. The findings have implications for students, faculty, government, and health care professionals as stakeholders in meeting the demands of the health care client. The intended outcome is that stakeholders will have a strong basis of information regarding community health care teams which may inform future research findings.

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Appendix A:
Health Care Teams in Community Practice: Nurse

Health Care Teams in Community Practice

**Interdisciplinary Collaboration in Community Practice: Assessing Attitudes and
Participation in Team-Based Health Care**



Revised: March 2006
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For this study, a **health care team** is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

A **community practice** is defined as the majority of patient care services provided by you, the health care professional, occurring in non-institutional health care settings (i.e. not in hospitals or long-term care facilities).

Please refer to these definitions of a health care team and community practice as you fill out this questionnaire.

Part I – Attitudes about teams in community practice

Please indicate your level of agreement or disagreement with the following statements about health care teams, where a health care team is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

1. Compared to other ways of working, the team approach better meets the needs of patients/clients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Compared to other ways of working, the team approach better supports family caregivers

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Patients/clients receiving care from a team are more likely to be treated as whole persons

Strong Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The difficulties of providing team care outweigh its benefits for patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Patients are less likely to be satisfied with their care when it is provided by a team

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Patients with a chronic condition would benefit from team-based care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Working with a team would make most health professionals more enthusiastic about their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Working with a team would keep most health professionals more interested in their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. By working as a member of a team, most health professionals would be more responsive to the emotional needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Health professionals working on teams are more aware of the financial needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Regular face-to-face contact fosters better ongoing communication among team members

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Profession-specific jargon makes effective communication between health professions difficult

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The team approach makes the delivery of patient/client care more efficient

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Developing a patient care plan with other team members avoids errors in the delivery of care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. The team approach improves the quality of care that can be provided to patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Developing inter-professional patient care plans is too time consuming for the benefit gained

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. In the long run, the team approach increases the cost of patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Working in teams unnecessarily complicates patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. My profession needs to make more of an effort to understand the contributions of other professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. My profession needs to cooperate more with other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. The quality of patient care my profession provides greatly depends on other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. The quality of the relationship between other health professions and my profession is very good

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. As health care professionals we should be accountable to other health professions for our clinical decisions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Other health professions do not greatly value the contribution of my profession to patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Members of my profession, as a rule, are team players

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement or disagreement with the following statements.

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Part III: You and the Health Care Team

34. Are you of a member of a health care team? ☐ Yes ☐ No

35. If you indicated YES, briefly describe the purpose of the team(s), the size of the team(s) (number of participants), the professional designation of its members, how often you meet, how you meet (e.g. in person) and where you meet **(please add pages if necessary)**

a. Purpose of the team:

b. Size of team and Professional designation of members:

c. How often do you meet?

d. How/where do you meet?

36. If you indicated NO, identify any specific reasons why you are not a member of a team

37. If you indicated YES or NO, briefly describe the type of health care team you might like to be part of (i.e. describe its purpose, size, membership, how often, and where it should meet).

a. Purpose of the team:

b. Size of the team and Professional designation of members:

c. How often would you meet?

d. How/where would you meet?

Part IV: Actual interaction between YOU and other professions in your practice

The purpose of the next two pages is to determine the extent to which you actually discuss the care of your patient/clients with other health care and support professions, as well as how often you would like to discuss the care of your patients/clients with others.

38. How often do you ACTUALLY discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professional (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other:	[]	[]	[]	[]	[]	[]	[]

Part V: The need for greater interaction between YOU and other health professions

39. How often would you LIKE to discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professionals (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other: _____	[]	[]	[]	[]	[]	[]	[]

Part VI: Roles and the Health Care Team

40. As part of a health care team, how important would it be for you or someone in your profession to have a substantial role in carrying out the following activities?

Please indicate your opinion, even if you are not now a member of a team.

Activity	Exclusive role for my profession	Mostly role for my profession	Role to be shared with other professions	Mostly role for another profession	Exclusive role for another profession
a. Patient education	[]	[]	[]	[]	[]
b. Home visits	[]	[]	[]	[]	[]
c. Provide disease specific clinics	[]	[]	[]	[]	[]
d. Dispensing prescriptions	[]	[]	[]	[]	[]
e. Prescribing medications	[]	[]	[]	[]	[]
f. Diagnosing disease	[]	[]	[]	[]	[]
g. Monitoring symptoms	[]	[]	[]	[]	[]
h. Ordering routine blood work	[]	[]	[]	[]	[]
i. Evaluating lab/test results	[]	[]	[]	[]	[]
j. Evaluating the performance of team members	[]	[]	[]	[]	[]
k. Co-ordinating team activities	[]	[]	[]	[]	[]
l. Nutritional assessment	[]	[]	[]	[]	[]
m. Diet/menu planning	[]	[]	[]	[]	[]
n. Nutrition counseling	[]	[]	[]	[]	[]
o. Providing inservices to other health care professions	[]	[]	[]	[]	[]
p. Assessing the health status of a patient	[]	[]	[]	[]	[]
q. Evaluating the patient's response to treatment	[]	[]	[]	[]	[]
r. Assuming legal responsibility for the actions of the team	[]	[]	[]	[]	[]

Part VII – The Respondent

Gender: Female () Male ()

Your Age (years): _____

Year of Graduation: _____ Diploma

Year of Graduation: _____ Degree

Year of Graduation: _____ Post graduate Masters/PhD

Employment Status:

Which of the following best describes your current employment status (please check only one):

- ☐ Full time with one employer
- ☐ Part-time with one employer
- ☐ Part-time with more than one employer
- ☐ Casual
- ☐ Other: _____

How Many Years in Your Current Employment Status? _____

Your Main Community Practice Location:

Area:	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input type="checkbox"/> Rural
Place of work:			
<input type="checkbox"/> Community Health/ Community Health centre	<input type="checkbox"/> Mental Health Centre		
<input type="checkbox"/> Home Care Agency (private or public)	<input type="checkbox"/> Business/Industry/Occupational Health		
<input type="checkbox"/> Nursing Station (Outpost or clinic)	<input type="checkbox"/> Private Nursing Agency		
<input type="checkbox"/> Self Employed in the Community	<input type="checkbox"/> Physician's office/medical clinic		
Primary Area of Responsibility:			
<input type="checkbox"/> Community health	<input type="checkbox"/> Occupational health		
<input type="checkbox"/> Home Care	<input type="checkbox"/> Rehabilitation		
<input type="checkbox"/> Outpatient education			
<input type="checkbox"/> Other:			

Part VIII – Additional Comments:

Would you like to receive a summary report of the results of the survey? ☐ Yes ☐ No

Thank you for taking the time and effort to complete this survey. The results will be analysed and reported in broad groups. Your identity will be held in strictest confidence.

Appendix B:
Health Care Teams in Community Practice: Physician

Health Care Teams in Community Practice

**Interdisciplinary Collaboration in Community Practice: Assessing Attitudes and
Participation in Team-Based Health Care**



Revised: March 2006
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For this study, a **health care team** is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

A **community practice** is defined as the majority of patient care services provided by you, the health care professional, occurring in non-institutional health care settings (i.e. not in hospitals or long-term care facilities).

Please refer to these definitions of a health care team and community practice as you fill out this questionnaire.

Part I – Attitudes about teams in community practice

Please indicate your level of agreement or disagreement with the following statements about health care teams, where a health care team is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

1. Compared to other ways of working, the team approach better meets the needs of patients/clients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Compared to other ways of working, the team approach better supports family caregivers

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Patients/clients receiving care from a team are more likely to be treated as whole persons

Strong Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The difficulties of providing team care outweigh its benefits for patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Patients are less likely to be satisfied with their care when it is provided by a team

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Patients with a chronic condition would benefit from team-based care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Working with a team would make most health professionals more enthusiastic about their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Working with a team would keep most health professionals more interested in their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. By working as a member of a team, most health professionals would be more responsive to the emotional needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Health professionals working on teams are more aware of the financial needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Regular face-to-face contact fosters better ongoing communication among team members

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Profession-specific jargon makes effective communication between health professions difficult

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The team approach makes the delivery of patient/client care more efficient

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Developing a patient care plan with other team members avoids errors in the delivery of care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. The team approach improves the quality of care that can be provided to patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Developing inter-professional patient care plans is too time consuming for the benefit gained

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. In the long run, the team approach increases the cost of patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Working in teams unnecessarily complicates patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. My profession needs to make more of an effort to understand the contributions of other professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. My profession needs to cooperate more with other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. The quality of patient care my profession provides greatly depends on other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. The quality of the relationship between other health professions and my profession is very good

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. As health care professionals we should be accountable to other health professions for our clinical decisions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Other health professions do not greatly value the contribution of my profession to patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Members of my profession, as a rule, are team players

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate your level of agreement or disagreement with the following statements.

[illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Part III: You and the Health Care Team

34. Are you of a member of a health care team? ☐ Yes ☐ No

35. If you indicated YES, briefly describe the purpose of the team(s), the size of the team(s) (number of participants), the professional designation of its members, how often you meet, how you meet (e.g. in person) and where you meet **(please add pages if necessary)**

a. Purpose of the team:

b. Size of team and Professional designation of members:

c. How often do you meet?

d. How/where do you meet?

36. If you indicated NO, identify any specific reasons why you are not a member of a team

37. If you indicated YES or NO, briefly describe the type of health care team you might like to be part of (i.e. describe its purpose, size, membership, how often, and where it should meet).

a. Purpose of the team:

b. Size of the team and Professional designation of members:

c. How often would you meet?

d. How/where would you meet?

Part IV: Actual interaction between YOU and other professions in your practice

The purpose of the next two pages is to determine the extent to which you actually discuss the care of your patient/clients with other health care and support professions, as well as how often you would like to discuss the care of you patients/clients with others.

38. How often do you ACTUALLY discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professional (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other:	[]	[]	[]	[]	[]	[]	[]

Part V: The need for greater interaction between YOU and other health professions

39. How often would you LIKE to discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professionals (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other: _____	[]	[]	[]	[]	[]	[]	[]

Part VI: Roles and the Health Care Team

40. As part of a health care team, how important would it be for you or someone in your profession to have a substantial role in carrying out the following activities?

Please indicate your opinion, even if you are not now a member of a team.

Activity	Exclusive role for my profession	Mostly role for my profession	Role to be shared with other professions	Mostly role for another profession	Exclusive role for another profession
a. Patient education	[]	[]	[]	[]	[]
b. Home visits	[]	[]	[]	[]	[]
c. Provide disease specific clinics	[]	[]	[]	[]	[]
d. Dispensing prescriptions	[]	[]	[]	[]	[]
e. Prescribing medications	[]	[]	[]	[]	[]
f. Diagnosing disease	[]	[]	[]	[]	[]
g. Monitoring symptoms	[]	[]	[]	[]	[]
h. Ordering routine blood work	[]	[]	[]	[]	[]
i. Evaluating lab/test results	[]	[]	[]	[]	[]
j. Evaluating the performance of team members	[]	[]	[]	[]	[]
k. Co-ordinating team activities	[]	[]	[]	[]	[]
l. Nutritional assessment	[]	[]	[]	[]	[]
m. Diet/menu planning	[]	[]	[]	[]	[]
n. Nutrition counseling	[]	[]	[]	[]	[]
o. Providing inservices to other health care professions	[]	[]	[]	[]	[]
p. Assessing the health status of a patient	[]	[]	[]	[]	[]
q. Evaluating the patient's response to treatment	[]	[]	[]	[]	[]
r. Assuming legal responsibility for the actions of the team	[]	[]	[]	[]	[]

Part VII – The Respondent

Main focus of your clinical practice		What is your age?	<input type="text"/>
<input type="text"/>		<input type="checkbox"/>	Female
Additional areas of interest		<input type="checkbox"/>	Male
<input type="text"/>			
How many years have you been practicing medicine?		<input type="text"/>	

Indicate the location of your main office	
<input type="checkbox"/>	Home-based practice
<input type="checkbox"/>	Converted residence
<input type="checkbox"/>	Office Building/Tower
<input type="checkbox"/>	Shopping Centre/Strip Mall
<input type="checkbox"/>	Hospital Office
<input type="checkbox"/>	Rehabilitation Centre
<input type="checkbox"/>	Nursing Home
<input type="checkbox"/>	Health Centre/Community Clinic
<input type="checkbox"/>	Government office or Other _____
Main Practice Setting	
<i>Check more than one, if applicable)</i>	
<input type="checkbox"/>	Solo Practice
<input type="checkbox"/>	Physician Group
<input type="checkbox"/>	University Group
<input type="checkbox"/>	Hospital-based
<input type="checkbox"/>	Local Community Group
<input type="checkbox"/>	Health Region/District
<input type="checkbox"/>	Other _____
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> How many physicians are in your main practice setting? _____ </div>	

What percentage of your remuneration comes from the following methods?	
Fee-for-service	<input type="text"/> %
Salary	<input type="text"/> %
Capitated rate per patient	<input type="text"/> %
Sessional	<input type="text"/> %
Other _____	<input type="text"/> %
	100 %

Part VIII – Additional Comments:

Would you like to receive a summary report of the results of the survey? ☐ Yes ☐ No

Thank you for taking the time and effort to complete this survey. The results will be analysed and reported in broad groups. Your identity will be held in strictest confidence.

Health Care Teams in Community Practice

Dobson et al., 2006

Appendix C:
Health Care Teams in Community Practice: Pharmacist

Health Care Teams in Community Practice

**Interdisciplinary Collaboration in Community Practice: Assessing Attitudes and
Participation in Team-Based Health Care**



Revised: March 2006
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For this study, a **health care team** is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

A **community practice** is defined as the majority of patient care services provided by you, the health care professional, occurring in non-institutional health care settings (i.e. not in hospitals or long-term care facilities).

Please refer to these definitions of a health care team and community practice as you fill out this questionnaire.

Part I – Attitudes about teams in community practice

Please indicate your level of agreement or disagreement with the following statements about health care teams, where a health care team is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

1. Compared to other ways of working, the team approach better meets the needs of patients/clients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Compared to other ways of working, the team approach better supports family caregivers

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Patients/clients receiving care from a team are more likely to be treated as whole persons

Strong Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The difficulties of providing team care outweigh its benefits for patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Patients are less likely to be satisfied with their care when it is provided by a team

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Patients with a chronic condition would benefit from team-based care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Working with a team would make most health professionals more enthusiastic about their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Working with a team would keep most health professionals more interested in their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. By working as a member of a team, most health professionals would be more responsive to the emotional needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Health professionals working on teams are more aware of the financial needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Regular face-to-face contact fosters better ongoing communication among team members

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Profession-specific jargon makes effective communication between health professions difficult

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The team approach makes the delivery of patient/client care more efficient

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Developing a patient care plan with other team members avoids errors in the delivery of care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. The team approach improves the quality of care that can be provided to patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Developing inter-professional patient care plans is too time consuming for the benefit gained

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. In the long run, the team approach increases the cost of patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Working in teams unnecessarily complicates patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. My profession needs to make more of an effort to understand the contributions of other professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. My profession needs to cooperate more with other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. The quality of patient care my profession provides greatly depends on other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. The quality of the relationship between other health professions and my profession is very good

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. As health care professionals we should be accountable to other health professions for our clinical decisions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Other health professions do not greatly value the contribution of my profession to patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Members of my profession, as a rule, are team players

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II: Barriers to Collaborative Practice

Please indicate your level of agreement or disagreement with the following statements.

26. Other health professions are too protective of their “professional turf”

[illegible]

27. My profession is too protective of its “professional turf”

[illegible]

28. In community practice there is not enough time to carry out team-based activities

[illegible]

29. In community practice there are few opportunities to meet with other health care professions

[illegible]

30. The clinical knowledge of my profession is not sufficient to be an effective member of a team

[illegible]

31. In community practice the financial incentives to be part of a health care team are adequate

Strongly Agree **Agree** **Somewhat Agree** **Somewhat Disagree** **Disagree** **Strongly Disagree** **Unable to Judge**

□ □ □ □ □ □ □

32. Health care teams are not practical in most community practice settings

[illegible]

33. Please indicate other barriers to participating as a member of a team that you are aware of in your community practice.

Part III: You and the Health Care Team

34. Are you of a member of a health care team?

☐ Yes

☐ No

35. If you indicated YES, briefly describe the purpose of the team(s), the size of the team(s) (number of participants), the professional designation of its members, how often you meet, how you meet (e.g. in person) and where you meet **(please add pages if necessary)**

a. Purpose of the team:

b. Size of team and Professional designation of members:

c. How often do you meet?

d. How/where do you meet?

36. If you indicated NO, identify any specific reasons why you are not a member of a team

37. If you indicated YES or NO, briefly describe the type of health care team you might like to be part of (i.e. describe its purpose, size, membership, how often, and where it should meet).

a. Purpose of the team:

b. Size of the team and Professional designation of members:

c. How often would you meet?

d. How/where would you meet?

Part IV: Actual interaction between YOU and other professions in your practice

The purpose of the next two pages is to determine the extent to which you actually discuss the care of your patient/clients with other health care and support professions, as well as how often you would like to discuss the care of you patients/clients with others.

38. How often do you ACTUALLY discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professional (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other:	[]	[]	[]	[]	[]	[]	[]

Part V: The need for greater interaction between YOU and other health professions

39. How often would you LIKE to discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professionals (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other: _____	[]	[]	[]	[]	[]	[]	[]

Part VI: Roles and the Health Care Team

40. As part of a health care team, how important would it be for you or someone in your profession to have a substantial role in carrying out the following activities?

Please indicate your opinion, even if you are not now a member of a team.

Activity	Exclusive role for my profession	Mostly role for my profession	Role to be shared with other professions	Mostly role for another profession	Exclusive role for another profession
a. Patient education	[]	[]	[]	[]	[]
b. Home visits	[]	[]	[]	[]	[]
c. Provide disease specific clinics	[]	[]	[]	[]	[]
d. Dispensing prescriptions	[]	[]	[]	[]	[]
e. Prescribing medications	[]	[]	[]	[]	[]
f. Diagnosing disease	[]	[]	[]	[]	[]
g. Monitoring symptoms	[]	[]	[]	[]	[]
h. Ordering routine blood work	[]	[]	[]	[]	[]
i. Evaluating lab/test results	[]	[]	[]	[]	[]
j. Evaluating the performance of team members	[]	[]	[]	[]	[]
k. Co-ordinating team activities	[]	[]	[]	[]	[]
l. Nutritional assessment	[]	[]	[]	[]	[]
m. Diet/menu planning	[]	[]	[]	[]	[]
n. Nutrition counseling	[]	[]	[]	[]	[]
o. Providing inservices to other health care professions	[]	[]	[]	[]	[]
p. Assessing the health status of a patient	[]	[]	[]	[]	[]
q. Evaluating the patient's response to treatment	[]	[]	[]	[]	[]
r. Assuming legal responsibility for the actions of the team	[]	[]	[]	[]	[]

Part VII – The Respondent

41. Gender: Female () Male ()

42. Your Age (years): _____

43. Year of Graduation: _____

44. Which of the following best describes your current employment status (check only one):

☐ Relief pharmacist (full-time or part-time at TWO or more location)

☐ Staff pharmacist (full-time or part-time at ONE location)

☐ Dispensary Manager ☐ Manager ☐ Owner

☐ Other: _____

45. Your Main Community Practice Location:

a. Community:	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input type="checkbox"/> Rural
b. Area:	<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential	<input type="checkbox"/> Mixed
c. Location:	<input type="checkbox"/> Stand Alone Building <input type="checkbox"/> Medical Arts Building <input type="checkbox"/> Enclosed Mall	<input type="checkbox"/> Strip Mall <input type="checkbox"/> Other: _____	
d. Type:	<input type="checkbox"/> Independent <input type="checkbox"/> Franchise <input type="checkbox"/> Mass Merchandiser	<input type="checkbox"/> Banner <input type="checkbox"/> Grocery Store <input type="checkbox"/> Chain	<input type="checkbox"/> Community Clinic <input type="checkbox"/> Department Store <input type="checkbox"/> Other:
e. Hours of Operation:	_____		
f. Pharmacists Employed At Your Location			
	Total Number (Full and Part-time): _____	Full Time Equivalents: _____	
g. Pharmacy Technicians at your Location			
	Total Number (Full and Part-time): _____	Full Time Equivalents: _____	
h. Average Number of Prescriptions Filled per Week in Your Pharmacy:			

Part VIII – Additional Comments:

Would you like to receive a summary report of the results of the survey? ☐ Yes ☐ No

Thank you for taking the time and effort to complete this survey. The results will be analysed and reported in broad groups. Your identity will be held in strictest confidence.

Health Care Teams in Community Practice

Dobson et al., 2006

Appendix D:
Health Care Teams in Community Practice: Dietician

Health Care Teams in Community Practice

**Interdisciplinary Collaboration in Community Practice: Assessing Attitudes and
Participation in Team-Based Health Care**



Revised: March 2006
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For this study, a **health care team** is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

A **community practice** is defined as the majority of patient care services provided by you, the health care professional, occurring in non-institutional health care settings (i.e. not in hospitals or long-term care facilities).

Please refer to these definitions of a health care team and community practice as you fill out this questionnaire.

Part I – Attitudes about teams in community practice

Please indicate your level of agreement or disagreement with the following statements about health care teams, where a health care team is defined as three or more health professionals – representing different professional knowledge bases, skills and perspectives – who work together to assess and manage their patients.

1. Compared to other ways of working, the team approach better meets the needs of patients/clients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Compared to other ways of working, the team approach better supports family caregivers

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Patients/clients receiving care from a team are more likely to be treated as whole persons

Strong Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The difficulties of providing team care outweigh its benefits for patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Patients are less likely to be satisfied with their care when it is provided by a team

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Patients with a chronic condition would benefit from team-based care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Working with a team would make most health professionals more enthusiastic about their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Working with a team would keep most health professionals more interested in their jobs

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. By working as a member of a team, most health professionals would be more responsive to the emotional needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Health professionals working on teams are more aware of the financial needs of patients/clients than those working as individual practitioners

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Regular face-to-face contact fosters better ongoing communication among team members

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Profession-specific jargon makes effective communication between health professions difficult

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. The team approach makes the delivery of patient/client care more efficient

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Developing a patient care plan with other team members avoids errors in the delivery of care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. The team approach improves the quality of care that can be provided to patients

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Developing inter-professional patient care plans is too time consuming for the benefit gained

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. In the long run, the team approach increases the cost of patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. Working in teams unnecessarily complicates patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. My profession needs to make more of an effort to understand the contributions of other professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. My profession needs to cooperate more with other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. The quality of patient care my profession provides greatly depends on other health professions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. The quality of the relationship between other health professions and my profession is very good

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. As health care professionals we should be accountable to other health professions for our clinical decisions

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Other health professions do not greatly value the contribution of my profession to patient care

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

25. Members of my profession, as a rule, are team players

Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Unable to Judge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II: Barriers to Collaborative Practice

Please indicate your level of agreement or disagreement with the following statements.

- ## 26. Other health professions are too protective of their “professional turf”

[illegible]

- 27. My profession is too protective of its “professional turf”**

[illegible]

- 28. In community practice there is not enough time to carry out team-based activities**

[illegible]

- 29. In community practice there are few opportunities to meet with other health care professions**

[illegible]

- 30. The clinical knowledge of my profession is not sufficient to be an effective member of a team**

[illegible]

- 31. In community practice the financial incentives to be part of a health care team are adequate**

Strongly Agree **Somewhat Agree** **Somewhat Disagree** **Disagree** **Strongly Disagree** **Unable to Judge**

☐ ☐ ☐ ☐ ☐ ☐

- ### 32. Health care teams are not practical in most community practice settings

[illegible]

- 33. Please indicate other barriers to participating as a member of a team that you are aware of in your community practice.**

Part III: You and the Health Care Team

34. Are you of a member of a health care team? ☐ Yes ☐ No

35. If you indicated YES, briefly describe the purpose of the team(s), the size of the team(s) (number of participants), the professional designation of its members, how often you meet, how you meet (e.g. in person) and where you meet **(please add pages if necessary)**

a. Purpose of the team:

b. Size of team and Professional designation of members:

c. How often do you meet?

d. How/where do you meet?

36. If you indicated NO, identify any specific reasons why you are not a member of a team

37. If you indicated YES or NO, briefly describe the type of health care team you might like to be part of (i.e. describe its purpose, size, membership, how often, and where it should meet).

a. Purpose of the team:

b. Size of the team and Professional designation of members:

c. How often would you meet?

d. How/where would you meet?

Part IV: Actual interaction between YOU and other professions in your practice

The purpose of the next two pages is to determine the extent to which you actually discuss the care of your patient/clients with other health care and support professions, as well as how often you would like to discuss the care of you patients/clients with others.

38. How often do you ACTUALLY discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professional (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other:	[]	[]	[]	[]	[]	[]	[]

Part V: The need for greater interaction between YOU and other health professions

39. How often would you LIKE to discuss the care of patients/clients with members of the following professions (exclude routine communication associated with such activities as status reports, requesting a consult, or ordering or requesting a specific medication or test)?

Professional Group	Every Day	2 to 3 times a week	Once a week	2 to 3 times a month	Once a month	A few times a year	Never
a. Alternative Medicine Providers	[]	[]	[]	[]	[]	[]	[]
b. Chiropractors	[]	[]	[]	[]	[]	[]	[]
c. Dentists	[]	[]	[]	[]	[]	[]	[]
d. Dietitians	[]	[]	[]	[]	[]	[]	[]
e. Nurses	[]	[]	[]	[]	[]	[]	[]
f. Para-professionals (e.g. home care workers)	[]	[]	[]	[]	[]	[]	[]
f. Pharmacists	[]	[]	[]	[]	[]	[]	[]
g. Physical Therapists	[]	[]	[]	[]	[]	[]	[]
h. Physicians	[]	[]	[]	[]	[]	[]	[]
i. Psychologists	[]	[]	[]	[]	[]	[]	[]
j. Social Workers	[]	[]	[]	[]	[]	[]	[]
k. Other: _____	[]	[]	[]	[]	[]	[]	[]
l. Other: _____	[]	[]	[]	[]	[]	[]	[]

Part VI: Roles and the Health Care Team

40. As part of a health care team, how important would it be for you or someone in your profession to have a substantial role in carrying out the following activities?

Please indicate your opinion, even if you are not now a member of a team.

Activity	Exclusive role for my profession	Mostly role for my profession	Role to be shared with other professions	Mostly role for another profession	Exclusive role for another profession
a. Patient education	[]	[]	[]	[]	[]
b. Home visits	[]	[]	[]	[]	[]
c. Provide disease specific clinics	[]	[]	[]	[]	[]
d. Dispensing prescriptions	[]	[]	[]	[]	[]
e. Prescribing medications	[]	[]	[]	[]	[]
f. Diagnosing disease	[]	[]	[]	[]	[]
g. Monitoring symptoms	[]	[]	[]	[]	[]
h. Ordering routine blood work	[]	[]	[]	[]	[]
i. Evaluating lab/test results	[]	[]	[]	[]	[]
j. Evaluating the performance of team members	[]	[]	[]	[]	[]
k. Co-ordinating team activities	[]	[]	[]	[]	[]
l. Nutritional assessment	[]	[]	[]	[]	[]
m. Diet/menu planning	[]	[]	[]	[]	[]
n. Nutrition counseling	[]	[]	[]	[]	[]
o. Providing inservices to other health care professions	[]	[]	[]	[]	[]
p. Assessing the health status of a patient	[]	[]	[]	[]	[]
q. Evaluating the patient's response to treatment	[]	[]	[]	[]	[]
r. Assuming legal responsibility for the actions of the team	[]	[]	[]	[]	[]

Part VII – The Respondent

Gender: Female () Male ()

Your Age (years): _____ Year of Graduation: _____

Most Advanced Degree: _____

Employment Status:

Which of the following best describes your current employment status (please check only one):

- ☐ Full time with one employer
- ☐ Part-time with one employer
- ☐ Part-time with more than one employer
- ☐ Casual
- ☐ Other: _____

Current Position: _____

How Many Years in Your Current Position _____

Your Main Community Practice Location:

Area: ☐ Urban ☐ Suburban ☐ Rural

Main Practice Affiliation (also please specify your main duties/activities)

- ☐ Government Agency: _____

- ☐ Tribal Council: _____

- ☐ Community Health Centre: _____

- ☐ Private Practice: _____

- ☐ Other (please specify): _____

Part VIII – Additional Comments:

Would you like to receive a summary report of the results of the survey? ☐ Yes ☐ No

Thank you for taking the time and effort to complete this survey. The results will be analysed and reported in broad groups. Your identity will be held in strictest confidence.