

Facilitating Collaboration between Primary Care and Public Health

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Executive Summary

When patients interact with the health care system, distinctions between public health and primary care are unclear and often go unnoticed. To the public, health services may appear to be seamless but in fact they are not. Historically, primary care and public health were closely intertwined. They worked together to reduce the incidence of illness and death caused by environmental conditions related to poverty and increased urbanization. Changes in technology and administration over the past 150 years have resulted in a changed relationship between public health and primary care. They have become two distinct sectors with different educational programs, professional philosophies and administrative structures. This study was conducted for the Ministry of Health to determine whether common models of collaboration exist, what barriers and issues prevent collaboration from occurring and how to address these barriers to enable collaboration and to answer the research question:

In what ways can the primary care sector and the public health sector collaborate effectively?

The BC Ministry of Health (the Ministry) acts as a steward for the health care system in BC. As a steward the Ministry leads, supports and coordinates health service delivery partners. Other responsibilities include setting the strategic direction of BC's health system, which includes goals, standards and expectations for health service delivery across the province. The Ministry also maintains an accountability framework with health authorities and oversees regulatory bodies for health professionals. The Ministry's mandate is "to guide and enhance the Province's health care services to ensure British Columbians are supported in their efforts to maintain and improve their health" (BC Ministry of Health, 2012a). Disease prevention and health promotion along with the integration of primary care with health services provided in the home and community are two key priority areas for the Ministry.

Literature Review

While public health and primary care have worked together successfully in the past, differences in administration, backgrounds and philosophies have developed over time. These differences persist today and have resulted in challenges to working collaboratively between the sectors. Interest in collaboration between public health and primary care has grown steadily over the past decade and literature on the topic has increased considerably since 2003. This increased interest is due to the perceived benefits of collaboration for patients, health workers and to the health care system.

This increased interest in collaboration has led researchers and policymakers to attempt to categorize collaboration into models. Some models categorize types of collaborative work based on structure, others focus on the activities completed within the collaboration, while others use a combination. Most of the models do not provide adequate descriptions of specific activities public health and primary care should adopt. Further problems with these models include limiting collaboration to specific functions, restricting collaboration to specific health care structures, and confining the location of collaboration to a primary care setting.

A scan of collaborative practices in Canada and other jurisdictions revealed three broad areas for examples of collaboration: integration of public health into the primary care system, utilization of the skills and position of nurses and targeting specific health problems. First, integration of public health into the primary care system has been used in various jurisdictions, most of which have used Community

Oriented Primary Care, a form of integration. Second, researchers have suggested that nurses are in a unique position to bridge the gap between primary care and public health. Options for collaboration include redefining the scope of nursing practice to include responsibilities from both sectors and nurse secondment programs in which public health nurses work in primary care practices performing public health and primary care duties. Third, collaborative activities targeting specific health problems occur across settings and in primary care settings. Interventions across settings include high level framework development to guide collaborative behaviour for practitioners and community level programs that contain multi-disciplinary teams working together to improve health issues. Interventions limited to a primary care setting focus on specific behaviours such as promoting healthy eating to prevent illness. These examples are not an exhaustive inventory of collaborative activities, but they provide an overview of different possibilities for collaboration.

Methodology

The research design and primary data collection method used in this project was a series of semi-structured open-ended interviews conducted with leaders in the area of public health and primary care collaboration. In semi-structured open-ended interviews the researcher asks open-ended questions that are based on the research question and have been determined in advance. The questions were designed to gather specific information and to elicit a narrative response, allowing respondents to choose how to respond to the questions. Twenty-one interviews were conducted with researchers and representatives of health authorities, the Ministry of Health and professional health care organizations in BC.

Findings and Discussion

Respondents explained what they saw as important qualities of collaboration, provided definitions of collaboration, and shared their thoughts on how collaboration should move forward and be structured. They also discussed contextual and individual qualities that have the potential to effect collaboration and the conversation about collaboration. Having a strategic imperative for collaboration, evidence to support and structure collaboration, and completing evaluations of collaborative activities were all seen as important elements of successful collaboration. Personal qualities such as willingness to work together, buy-in to the idea of collaboration, communication, qualities of leaders and development of relationships were seen as necessary elements in beginning collaboration between public health and primary care. Contextual qualities such as interdisciplinary difference, knowledge of public health and primary care, and unique organizational structures were highlighted by many respondents as areas that have the potential to impede or bolster meaningful collaborations. Limited time and large workload can also act as barriers to collaboration. Finally, examples of successful collaboration between public health and primary care included policy development at a leadership level, such as development of practice guidelines, programs and health plans, and targeted interventions for specific populations. Other examples included maternity care programs, public health interventions in a primary care setting, co-location of primary care and public health services and community development.

Interdisciplinary differences in areas such as professional values and education maintain a gap between public health and primary care and prevent professionals from working together. The organization of the health care system reflects this divide. The two sectors do not share immediate goals and do not connect with each other. Further, most primary care practitioners operate independently from the rest of the health care system in privately run family practices. This makes sharing information and communicating difficult. Moreover, physicians receive limited compensation for collaborative work with public health,

making collaboration a potential financial hardship. Options for addressing these challenges include: developing education programs to increase knowledge about each sector and collaboration; promoting strong leadership to encourage working together and to provide evidence for its success; and providing financial support to allow collaborative work to move forward and to compensate physicians for their time.

People define collaboration subjectively and understand it based on personal experience. Without a common language for collaboration, working effectively together is challenging. However, time to build relationships, communicate and discuss collaboration based on practical and local problems makes collaboration more viable.

Recommendations

Seven recommendations are proposed based on research conducted for this report. They follow from the key challenges presented in the discussion. The first two recommendations address the need for increased knowledge and understanding of collaboration. Practitioners interested in collaboration need to understand what collaboration is, what it looks like so they can determine how they can apply it to their own work. Strong leadership is required to direct such collaboration and set priorities to make collaboration part of everyday work.

The third recommendation focuses on the challenge that public health and primary care professionals work in independent organizations that do not often connect with each other. Communication is imperative for successful collaboration as people need to know each other before they can work together.

Recommendations four and five address the gap between public health and primary care that is maintained primarily through differences between the sectors in values and education. Public health and primary care professionals do not have the opportunity to learn about the other sector and their roles and responsibilities. Development of education options addresses this barrier to collaboration and allows professionals from both sectors to gain a better understanding of their colleagues.

The final two recommendations address the fact that collaboration demands increased funding. The staff and funds required to coordinate activities across disciplines require resources to move forward. While public health employees receive a salary and as a result are compensated for collaborative work, family physicians are not reimbursed when they work on collaborative activities. Provision of funding to support collaborative activities helps to overcome these barriers.

Conclusion

This report suggests that strong leadership, open communication, education and funding are all important elements required to facilitate collaboration between primary care and public health. Collaboration is already occurring throughout the province and BC is in a position to build on current successes and leverage opportunities for further collaborative work to deliver high-quality services to British Columbians.

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1.0 Introduction

When patients interact with the health care system, distinctions between public health and primary care are unclear and often go unnoticed. To the public, health services may appear to be seamless but in fact they are not. Historically, primary care and public health were closely intertwined. They worked together to reduce the incidence of illness and death caused by environmental conditions related to poverty and increased urbanization. Changes in technology and administration over the past 150 years have resulted in a changed relationship between public health and primary care. They have become two distinct sectors with differing educational programs, professional philosophies and administrative structures. Public health takes a population health¹ approach and focuses on organized activities that act to positively affect the health of the population, or specific groups within a population (e.g. pregnant women). In contrast, primary care focuses on the health of the individual and the direct provision of health care services, such as treating injury or illness. Public health professionals, including public health nurses, managers and policy-makers, are most often employed by government and health authorities. While some primary care professionals (including physicians, midwives and nurse practitioners) also work for these government and health organizations, most physicians in British Columbia operate independent fee-for-service practices.

The Ministry of Health wishes to increase collaboration between primary care and public health as collaboration can result in positive outcomes, including improvements in health service delivery, increased health sector staff retention and improvements in chronic conditions and in immunization rates (Martin-Misener & Valaitis, 2009). The purpose of this report is to determine whether common models of collaboration exist, what barriers and issues prevent collaboration from occurring and how to address these barriers to enable collaboration. This report will outline a number of recommendations for how to facilitate discussions about collaboration and reduce the conceptual gap between public health and primary care professionals. The recommendations are intended to lead to more constructive discussions about how public health and primary care can collaborate more effectively in BC. The primary research question addressed in this project is:

In what ways can the primary care sector and the public health sector collaborate effectively?

This report is organized into eight chapters. The first two chapters introduce the topic and provide background and context for the paper. They discuss the reason for this project, the role of the Ministry of Health and the relevant organizations in the area of public health and primary collaboration. The third chapter is a literature review of relevant academic and government sources. It discusses the relationship between primary care and public health, and models and examples of collaboration. The fourth chapter explains the research methodology for the semi-structured open-ended interviews. It explains how

¹ Population health is defined as “an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups. In order to reach these objectives, it looks at and acts upon the broad range of factors and conditions that have a strong influence on our health.” (PHAC, 2012)

respondents were selected and recruited, how findings were analyzed using thematic analysis, and potential limitations to the research.

Chapter five summarizes the interview findings, organized based on a thematic analysis. Broad themes include qualities of collaboration, barriers and facilitators of collaboration and examples of collaboration. The barriers and facilitators to collaboration include: collaboration as a strategic imperative; evidence and evaluation; willingness and buy-in; relationships and communication; leader qualities; interdisciplinary differences; knowledge and education; resources; and organization structure. Examples of collaboration provided by interviewees include policy development, targeted interventions, maternity care, and provision of public health in a primary care setting.

Chapter six discusses the findings in relation to the literature review and considers the similarities and differences between the literature and the interview results. This chapter explores the idea that interdisciplinary and organizational challenges must be addressed in order to bridge the gap between the sectors. It also examines how the concept of collaboration is understood differently, as evidenced in definitions and examples of collaboration. Chapter seven presents seven recommendations to the Ministry of Health regarding how to facilitate collaboration between primary care and public health. These recommendations follow from the key challenges presented in the discussion and include recommendations that promote collaboration, facilitate communication, and address educational and financial shortcomings. The final chapter concludes the report, reflects on the main findings and suggests that future research focus on broader collaboration across health care and social services. It notes that British Columbia is in a position to build on current collaborative success and leverage opportunities for further work.

2.0 Background

The BC Ministry of Health (the Ministry) acts as a steward for the health care system in BC. As a steward the Ministry leads, supports and coordinates health service delivery partners. Other responsibilities include setting the strategic direction of BC's health system, which includes goals, standards and expectations for health service delivery across the province. The Ministry also maintains an accountability framework with health authorities and oversees regulatory bodies for health professionals. The Medical Services Plan, PharmaCare, BC Vital Statistics Agency and HealthLink BC are programs and services managed by the Ministry (BC Ministry of Health, 2012a). According to its 2012/13-2014/15 Service Plan, the Ministry's mandate is "to guide and enhance the Province's health care services to ensure British Columbians are supported in their efforts to maintain and improve their health" (BC Ministry of Health, 2012a). Disease prevention and health promotion along with the integration of primary care with health services provided in the home and community are two key priority areas for the Ministry.

The Ministry is organized into seven divisions with different areas of responsibility (see Appendix A for an organization chart). Three divisions report to a Chief Administrative Officer, three report to a Chief Operating Officer and one reports directly to the Deputy Minister of Health. Two divisions of particular relevance to this study are the:

Medical Services and Health Human Resources Division. This division is responsible for managing health care services provided by physicians and allied health care providers. The Assistant Deputy Minister of this division reports to the Chief Operating Officer. Within this division is the Primary Health Care and Specialist Services branch, which is responsible for strategic implementation of programs and initiatives related to physicians and primary care.

Population and Public Health Division. This division provides stewardship on public health initiatives with the intent to promote a healthier BC population. Public health initiatives under this division include physical activity and healthy eating promotion, tobacco reduction, and maternal and child health. The Population and Public Health division also leads initiatives to improve the health and well-being of specific populations in BC including women and Aboriginal people. Various program areas develop policy and legislation, provide evidence-based advice, build stakeholder relations and plan, guide and evaluate programs. The Assistant Deputy Minister of this division reports to the Chief Administrative Officer.

The client for this project is Sylvia Robinson, Joint Director for Public Health and Primary Care Collaboration at the BC Ministry of Health. In 2012, the Ministry of Health created the position of Joint Director for Public Health and Primary Care Collaboration, the purpose of which is to find and develop opportunities for the public health and primary care sectors to work together collaboratively.

Five regional health authorities are responsible for delivering the majority of health services across the province. These regional health authorities are named for their designated geographic areas of responsibility as follows: Northern Health Authority, Interior Health Authority, Vancouver Coastal Health Authority, Fraser Health Authority and Vancouver Island Health Authority. A map of the health authorities is included in Appendix B. The regional health authorities determine health needs of their regions, develop plans to address these needs, deliver and manage health care services and report to the Ministry on performance measures (Health Authorities Act, R.S.B.C. 1996).

The Provincial Health Services Authority's mandate is to work with regional health authorities and the Ministry to design and manage province-wide program delivery and provision of specialized services (BC Ministry of Health, 2012b). The Provincial Health Services Authority oversees eight specialized health-service agencies that provide services to the province. These organizations include BC Transplant, BC Provincial Renal Agency, BC Cancer Agency, BC Centre for Disease Control, BC Children's Hospital & Sunny Hill Health Centre for Children, BC Women's Hospital, BC Mental Health & Addiction Services, Cardiac Services BC and Riverview Hospital (BC Ministry of Health, 2012b).

The First Nations Health Authority is a non-profit society (formerly known as the First Nations Health Society) that works with the Ministry, provincial health authorities and the Government of Canada to manage health care delivery to First Nations. The Authority also works to implement the Tripartite First Nations Health Plan and the Transformative Change Accord: First Nations Health Plan. First Nations leaders in BC appoint members of the First Nations Health Authority. These members then appoint a Board of Directors to govern the society (First Nations Health Council, 2012).

The BC Medical Association is a professional organization that represents the medical profession in British Columbia. This organization is responsible for setting fee schedules and negotiating physician compensation and benefits (BC Medical Association, 2007). Membership is not restricted to physicians working in specific areas, such as primary care. The Society of General Practitioners of BC works on funding issues, including negotiation, provides tools to general practitioners to improve practice, including billing tools, and advocates on behalf of general practitioners (Society of General Practitioners of BC, 2006).

The Public Health Association of BC is a non-profit organization that focuses on promoting and protecting public health. The association advocates for healthy public policy and does work in the areas of health promotion, health protection, and disease and injury prevention. The Public Health Association of BC's board of directors includes leaders from the Ministry of Health, health authorities and other sectors (Public Health Association of BC, 2011).

The General Practice Services Committee is a joint committee between the BC Medical Association, the Ministry and the Society of General Practitioners of BC. Its mandate is "to support and sustain full service family practice in BC" (BC Ministry of Health, 2012c). Funding for this committee is designated to address priority areas, including prevention.

The Divisions of Family Practice initiative was developed by the General Practice Services Committee. Divisions are groups of family physicians that are located in the same geographic area and/or share common health care goals. The physicians work together within their communities to provide comprehensive patient services, influence decisions that affect health care in their communities and improve clinical practice. The Divisions provide a forum to develop and exercise a collective voice (General Practice Services Committee, 2009) and allows physicians to participate in professional development, support one another and work on issues such as physician recruitment. The Divisions work with their health authorities, the General Practice Services Committee and the Ministry to determine where there are gaps in their community so that they can develop solutions to meet their community's needs (Divisions of Family Practice, 2012a). Thirty Divisions are currently located throughout the province in various communities and in all of the health authorities (Divisions of Family Practice, 2012b).

Collaborative Services Committees are local committees comprised of representatives from the regional health authority, the General Practice Service Committee (either a Ministry or BC Medical Association representative) and a physician from the local Division of Family Practice. The health authority and Division representatives act as co-chairs for the committee. Collaborative Services Committees address complex issues that are important to all committee members, that cannot be addressed by one organization alone and that can improve local health care. The committee makes collaborative choices about what issues are priorities and makes consensus decisions. An example of a topic that could be covered by Collaborative Services Committees could be how family physicians provide support to patients in hospitals who do not have family physicians (General Practice Services Committee, 2011).

The health care system contains many committees and organizations that have different priorities and commitments. While the groups discussed above are not an exhaustive list of potential stakeholders, they are the most relevant players in the area of public health and primary care collaboration.

3.0 Literature Review

The literature review of collaboration between public health and primary care examines both academic and government sources. It is divided into three sections. The first section discusses the history of the relationship between public health and primary care² and how it has changed over time. This section also considers the reasons that collaboration has recently become a topic of interest for researchers and policymakers. The second section examines theoretical ideas about structures and methods of collaboration. It provides examples of how different researchers and policymakers have organized collaboration into models. The final section describes examples of collaboration from Canada and other relevant jurisdictions. These examples are categorized based on their most salient characteristics.

3.1 Relationship between Public Health and Primary Care

The history of public health provides a useful framework within which to explore the relationship between public health and primary care. According to Ashton (1990), North America and Europe have experienced four phases of public health in the last 150 years. In the first phase, starting in the mid-19th century, the prominent cause of death was infectious disease associated with increased urbanization and poverty. Public health workers concentrated on improving environmental conditions to control the spread of disease. The public health workers were both employed in government created health boards and departments and volunteers in groups such as sanitation organizations (Lasker, 1997, p. 12). The second phase of public health identified by Ashton began at the turn of the century when environmental problems were relatively under control. This phase lasted until the 1940s and focussed on personal prevention including family planning and immunization. Ashton also identified a third phase of public health that began when medical technology developed in the 1930s and 1940s. This phase centred on therapeutic treatments using medicine and technology to treat illness and disease. The prominence of public health and primary care practitioners began to decline as treating illness in hospitals increased and organized medical services took form. Finally, in the 1970s the high cost of medical technologies and the increasing elderly population necessitated a change in the approach to public health. A Canadian government report in 1974 entitled 'A New Perspective on the Health of Canadians' highlighted that untimely death and disability in Canada was mostly preventable. This report triggered the fourth phase of public health that affected North America and Europe. Known as the New Public Health, this phase represented a change in thinking about health that blends environmental and lifestyle changes with a focus on prevention and treatment. New Public Health recognizes the underlying social cause of some illnesses and the need to address social determinants of health. Although these ideas are not novel, this phase is called 'new' because it uses an organized work plan to change the determinants of health (Ncayiyana, 1995).

According to Lasker (1997), the relationship between public health and primary care was strong during the mid-19th to early 20th century when infectious diseases were more prevalent as neither field was able to address infectious diseases independently. Primary care practitioners benefited from the close relationship because they did not have the technology to treat illnesses. Working with public health professionals to address environmental factors was the only available option. Public health benefited from the authority of primary care when general practitioners advocated to governments and policymakers to make public health changes. Further, primary care professionals had immediate contact with patients and were able to communicate public health messages directly.

² Throughout this report the terms sector and discipline refer to the public health or primary care professions and areas of study, while professional refers to the individuals belonging to either profession

Over time, barriers arose that led to the divergence of the two sectors. Lasker (1997, p. 16-17) identifies administrative and inter-professional reasons for the erosion of the relationship between primary care and public health. First, the two sectors were physically separated with primary care providers working in independent practices and public health practitioners employed in community level organizations. They also became more independent and developed specialities within their sectors. No administrative structures to bridge the gap between the two areas were developed. Further, as public health began to target individuals through chronic disease prevention and maternal and child care, concern developed in primary care that government and public health, which is financed and delivered by government, would interfere with the autonomous relationship between physicians and patients. In addition, incentives to work together did not exist. The free and publicly available nature of public health was not compatible with the fee-for-service model of primary care service provision. Public health and primary care became increasingly disconnected, functioning as separate parts of the larger health system. New Public Health provided more opportunities for public health and primary care to work together in areas such as maternal and child health, screening and prevention. However, these opportunities were not fully realized due to these barriers.

Even today, administrative challenges prevent collaboration between public health and primary care. In a 1995 editorial Bhopal explains that overlapping jurisdictional responsibility of the sectors makes working together difficult. He also highlights that staff shortages in public health and the increasing level of responsibility for primary care practitioners are challenges to working together. Other researchers note that primary care medical practices have large amounts of work that must be completed prior to participation in collaborative activities (Busby, Elliot, Popay, & Williams, 1999) and that time is a limited resource (Bradley & McKelvey, 2005). In addition, finding the resources to develop and monitor the collaborative process and to ensure that everyone is participating may be difficult (Novosel & Sorensen, 2010).

Several researchers have argued that challenges to working across disciplines can prevent collaboration (Bhopal, 1995; Bradley & McKelvey, 2005; Busby et al., 1999; Hannay, 1993; Novosel & Sorensen, 2010). Hannay (1993) explains that public health and primary care professionals have different educational backgrounds. Primary care practitioners rarely learn about population and public health, although public health professionals are familiar with primary care. Kearney, Bradbury, Ellahi, Hodgson and Thurston (2005) observe that the lack of education in population health results in reduced strength in prevention for primary care professionals. The disparities in the educational backgrounds of the two disciplines also create challenges because groups do not always understand the roles of each other's profession (Bhopal, 1995). Busby et al. (1999) explain that primary care professionals are reluctant to work on the public health agenda, which may be a key reason why collaboration does not occur. Moreover, no consistent definitions of public health and primary care exist across jurisdictions and professions, resulting in confusion about the relationship between the two disciplines. The Public Health Agency of Canada (PHAC) (2005) reports that this confusion about definitions may cause wide-ranging opinions regarding the respective responsibilities of public health and primary care. For example, in the areas of community health promotion and prevention and community health assessments, some respondents to PHAC's research study believed that they are core functions of public health while others reported that they are core functions of primary care.

Busby et al. (1999) suggest that minimal evidence supporting the ability of collaborative work to reduce health inequalities may be the reason why obtaining support for collaboration is difficult. Kearney et al. (2005) also cite the lack of evidence for prevention methods as a challenge to working collaboratively. In their review of preventative interventions delivered by primary care and community organizations working together, Portersfield et al. found that evidence supporting collaboration was absent (2012). Bradley and McKelvey (2005) note that without an understanding of collaboration, individuals will not know where to begin. These researchers also explain that public health uses a public health model approach while primary care uses a biomedical model, which affects professional values. For example, primary care focuses on individual consultation and might place higher value on the immediate needs of the current patient whereas public health focuses on the larger picture, including society and the environment and might see more value in the needs of potential patients (Bhopal, 1995). With such differences in philosophy these disciplines may appear to lack a common agenda (Welton, Kantner, & Katz, 1997). Furthermore, Millar, Best, Lee and Herbert (2011) suggest that professionals may be hesitant to change their roles because of threats to personal autonomy, status and remuneration. Benady (2003) explains that general practitioners in Montreal have been hesitant to take part in collaborative organizations due to a fear that they may lose a level of autonomy. Likewise, Bindman, Weiner and Majeed (2001) argue that fear of loss of autonomy and mistrust of government are issues in collaborative efforts in the United Kingdom.

Despite the divergence between these two disciplines, the beginning of a shift in focus toward a preventative care model in general practice has forced professionals to revisit their relationship (Bhopal, 1995). Literature about collaboration between primary care and public health has been on the rise since the late 1990s and especially since 2003. The amount of literature on the topic has more than tripled between 1996 and 2002 and more than quadrupled since 2003 (Martin-Misener & Valaitis, 2009). In June 2012, the American Journal of Public Health published a supplement devoted entirely to the concept of collaboration between public health and primary care. Researchers consistently identify benefits associated with collaboration that affect organizations, users of healthcare services, employees and the healthcare system in general.

In their review of the literature about public health and primary care collaboration, Martin-Misener and Valaitis (2009) found that organizations that engage in collaboration may lead to positive outcomes, including better health service delivery, funding and resource enhancements, the development of new and innovative programs and improved education, teams and partnerships. Research conducted by Struthers, Cook and Mee (2009, p. 9) reveals that users of collaborative health care services found the services to be more accessible, inclusive and supportive. Health professionals in both public health and primary care responded better to urgent situations, developed a better understanding of the clients in the community and of community health issues, and felt like they had increased support and more opportunities for skills development. Novosel and Sorensen (2010) report that collaboration between public health and primary care may result in improved patient satisfaction, health outcomes and employee satisfaction (pp. 156-157). They also explain that employees experienced an improved ability to increase operational efficiency and brainstorm innovative ways to work (pp. 156-157).

Several researchers have shown that collaboration between public health and primary care has far reaching effects. For example, Starfield, Shi and Macinko (2005) found that when prevention is the focus of the collaboration, primary care providers are able to concentrate on early detection and management of

health problems thereby preventing unneeded suffering and death (Canadian Institute for Health Research, 2003). Van Weel, Koopmans, van der Velden, Bottema and de Vries Robbé (2009) explain that individual lifestyle changes may be less effective without changes in areas such as legislation, food labelling and advertisements. The health advocacy role of general practitioners can facilitate partnerships between primary care and government to make changes in these areas. When public health and primary care professionals work together, the living conditions for the population improve, leading to happy, healthy, longer living populations. Improved health of the general population may lead to increased economic productivity resulting in positive economic gains for the jurisdiction practicing collaboration (Millar et al., 2011).

3.2 Collaboration Models

Well-developed models of collaboration between primary care and public health do not exist (Martin-Misener & Valaitis, 2009). The Institute of Medicine (2012) found that prescribing a model or template of public health and primary care interactions is impossible, as the interactions between the two disciplines are so diverse and dependent on community conditions. Regardless, some researchers have attempted to create categories of collaboration. The following section summarizes four collaborative models representative of these attempts. They were chosen to provide an indication of the range of examples of how to categorize collaborative activities. Some researchers categorize on the basis of partnership goals, others focus on the structure of the collaborations and some use a combined approach. The first two models of collaboration are proposed by academic researchers and the last two were developed by government organizations.

Lasker (1997) developed a model that separates examples of collaboration by synergy and then further by “models” within these synergies. The synergies are ways public health and primary care merge both skills and resources. The models act as examples of how each synergy occurs. The following table summarizes the synergies and models described by Lasker (1997)³:

	Synergy	Models
I	Improving health care by coordinating services for individuals	Bring new personnel and services to existing practice sites Establish “one-stop” centers Coordinate services provided at different sites
II	Improving access to care by establishing frameworks to provide care for uninsured	Establish free clinics Establish referral networks Enhance clinical staffing at public health facilities Shift indigent patients to mainstream medical settings
III	Improving the quality and cost-effectiveness of care by applying a population perspective to medical practice	Use population-based information to enhance clinical decision-making Use population-based strategies to “funnel” patients to medical care Use population-based analytic tools to enhance practice management
IV	Using clinical practice to identify and address community health problems	Use clinical encounters to build community wide databases Use clinical opportunities to identify and address underlying causes of health problems Collaborate to achieve clinically oriented community health objectives
V	Strengthening health promotion and health protection by mobilizing community campaigns	Conduct community health assessments Mount health education campaigns Advocate health-related laws and regulations Engage in community wide campaigns to achieve health promotion objectives Launch healthy communities initiatives
VI	Shaping the future direction of the health system by collaborating around policy, training and research	Influence health system policy Engage in cross-sectoral education and training Conduct cross-sectoral research

Lasker’s theory is comprehensive but may be ill-suited for application in Canada due to its base in the American health system. For example, Synergy II focuses on providing health care to uninsured individuals. Further, the models do not explain which activities each sector should complete. This could create implementation challenges between the disciplines.

³ Reprinted from Lasker, R. (1997). *Medicine and public health: The power of collaboration*. Chicago, IL: Health Administration Press.

Stevenson-Rowan, Hogg and Huston's (2007) main findings were that public health and primary care have overlapping responsibility in three areas: health promotion, health surveillance, and disease and injury prevention. The authors categorize collaboration based primarily on the function of the activities, as opposed to the structure as outlined in Lasker's synergies. The following is an adaptation of the table presented by Stevenson-Rowan et al. (2007)⁴:

Functions	Health Surveillance	Health Promotion	Disease & Injury Prevention
Sample intervention	Health surveys Disease registries Communicable disease reporting Ongoing analysis of data Report to practitioners of increasing threat, what they need to look for & intervention required Report to public health re: suspected emerging infectious diseases Disaster response	Intersectoral community partnerships to solve health problems Advocacy for health public policies (e.g. income, education, housing) Improving personal skills Creating physical & social environments to support health (e.g. bike paths)	Immunizations Investigation & outbreak control Encouraging & supporting health behaviours (e.g. health eating, exercise, not smoking) Chronic disease prevention (e.g. Cancer Screening)
Intervention Objectives	Identify trends or emerging problems Activate screening & protection protocols to reduce outbreaks	Prevent movement to at-risk group	Prevent movement to established disease or hospitalization
Main Target Groups for Intervention	General population At-risk groups and individuals	General population At-risk groups and individuals	General population At-risk groups and individuals
Level of Prevention	Primary & Secondary prevention	Primary & Secondary prevention	Primary & Secondary prevention

This model of collaboration focuses on the specific areas where primary care and public health have overlapping areas of responsibility. It provides examples of how primary care and public health might work together under each area of responsibility. As with Lasker, Stevenson-Rowan et al.'s model does not prescribe what actions primary care and public health should take. Further, it limits the areas for collaboration to three functions, which may preclude the possibility of collaborations that focus on different functions.

⁴ Adapted in part from Stevenson-Rowan, M., Hogg, W., & Huston, P. (2007). Integrating public health and primary care. *Healthcare Policy*, 3(1)

The Public Health Agency of Canada (PHAC, 2005) conducted a literature review and a consultation with stakeholders on the topic of collaboration between public health and primary care. They identified that collaboration under the current organization of health services in Canada is challenging and proposed four different organizational structures to help improve collaboration between the sectors:

1. Formal collaboration mechanism between separate public health and primary care organizations

- Public health and primary care remain the responsibility of separate organizations, but mechanisms are in place to allow collaboration in a specific area
- Public health maintains its focus on the population and primary care continues to focus on the individual patients
- Public health can share expertise in prevention, education and case management. Options include co-location of services and/or provision of a public health resources person
- Routine meetings, designated contacts and engagement of primary care professionals in the communications processes are essential

2. Public health organization sponsors primary health care organization

- A public health unit would house a multidisciplinary primary health care team
- Other primary care providers could link to the sponsored primary health care team for health promotion, prevention and chronic disease management expertise

3. Public health services incorporated into primary health care organization

- Most suitable for a larger community, public health professionals would be a part of the primary care organization and would facilitate a stronger link between individuals and the community. The organization would include public health expertise, including surveillance, emergency response and epidemiology

4. Public health and primary care within a regional/local health authority

- Policy development and inter-organizational engagement would take place at a provincial level
- Activities including community assessments and planning, surveillance, control of communicable disease and building capacity within communities are the responsibility of public health with a regional health authority
- Some community needs have services provided by primary care providers. These can include mental health, nutrition and prenatal education, among others. Primary care organizations will also participate in planning, community development and initiatives

This model explores the specific behaviours occurring in organizational structure and designates responsibility to the primary care and public health sectors. However, focusing on the structure of the collaborative activities as opposed to the functions presupposes that the organization of health care must fit into one of these categories for collaboration to work. Many jurisdictions may not fit into these categories and may not be able to make the structural changes necessary to do so.

The Southeastern Ontario District Health Council (2000) details a thorough review of dominant literature in the area of public health and primary care collaboration. This review recognizes the potential for public health to assist in primary care and for primary care to assist in public health due to the overlapping nature of their work. Within their discussion of how primary care and public health can work together, they discuss a range of ways that public health activities can support primary care, ordered from least to most intensive:

1. Information exchange

- This least intensive mechanism for collaboration can include newsletters, annual reports and annual meetings

2. Collaboration and Partnership

- This mechanism would involve public health and primary care working together on high priority community health projects. Regular meetings may be held to address issues as they arise and to advocate for needed community services
- These projects could include: disease control, substance abuse and injury prevention, immunization, reproductive care and environmental health protection

3. Integration

- This model includes planning, developing and implementing Community Oriented Primary Care and other activities, such as attachment of a public health nurse to primary care and electronic health records

This model approaches the categorization of collaboration from a higher level than the other three models. It is not prescriptive in its activities and provides the opportunity for organizations that are considering collaboration to choose the intensity of their activities. This model asserts that public health should support primary care and does not provide the option for primary care to support public health.

3.3 Collaboration in Practice

The following sections provide examples of collaborative activities selected from various jurisdictions. These examples provide an overview of ways primary care and public health work together. The examples are categorized based on their most salient characteristics. Although rare, results from evaluations of these programs are provided when available.

3.3.1 Integration

A systemic option for collaboration is the integration of public health into primary care. Researchers argue that primary care is able to adopt this role because it is well connected to the community is a good setting to promote health and has the option to take a public health approach (Bradley & McKelvey, 2005). Authors suggest that primary care practitioners already value the lifelong health of patients and the health of the population they serve. Researchers hold different views on how public health should be integrated with primary care. Some argue that general practitioners should become completely responsible for the public health of the community they serve, completing public health functions including prevention and data collection (Tudor-Hart, 1988). Others have proposed specialized training for general practitioners (Bradley & McKelvey, 2005; Wright, 1993). This specialization would allow general practitioners to gain specific knowledge about public health. These physicians could then engage

other general practitioners in primary care fields (Bradley & McKelvey, 2005). This type of integration would require working with post-secondary education partners and other relevant stakeholders. The most commonly adopted version of integration is Community Oriented Primary Care (COPC) (Welton et al., 1997). Wright (1993) explains that COPC is an example of public health and primary care collaboration that provides both preventive and primary health care together, serves a defined community, promotes coordination of services and helps to encourage communities and citizens to participate in health care decision making. According to Nevin (1995), COPC has three main elements: a primary care practice, a defined population to serve and a method to address community health issues.

The United Kingdom provides a well-documented example of COPC. Developed in 1999 and based on pre-existing models, Primary Care Groups (PCGs) have been central to the primary care delivery model, although the National Health System is currently undergoing reform which may result in the removal of the COPC structure. PCGs are subcommittees of local health authorities governed by a board consisting of government, health authority employees, citizens and clinicians including general practitioners, community nurses and social workers (Cheater & Hale, 2001). PCGs help improve the health of their communities, develop community services and primary care services based on a community assessment, and provide advice to the health authority. They may also directly commission services for the populations they serve. Arora, Davies and Thompson (2000) describe Health Improvement Programmes (HIMPs), which are community plans developed and enacted by voluntary and government organizations. The PCGs use the HIMPs to address health issues and other health determinants, such as housing and education. Primary Care Trusts have the same functions as PCGs, but they also provide health services, run hospitals and employ staff, including community nurses (Cheater & Hale, 2001).

In New Zealand Primary Health Organizations (PHOs) are primary care organizations with a general public health focus (Widmer, 2011). Health Promoters are public health workers that complete public health work in PHOs. They focus on the health of populations, along with other determinants of health, such as environmental conditions (Careers New Zealand, 2012) and health promotion (Widmer, 2011).

Canada also provides examples of integration. In British Columbia, Community Health Centres (CHCs) consist of interdisciplinary teams of both public health and primary care professionals, and are located in communities across the province. These centres receive funding from regional health authorities. Some examples of public health workers that may be found at a CHC include dental health workers, social workers, nutritionists and public health nurses (Wong et al., 2009). CHCs in Ottawa provide primary care and health promotion services, through a community development approach (Valaitis, Ehrich, O'Mara, & Brauer, 2009). Quebec is home to a similar service, the centres locaux de services communautaires (CLSCs). CLSCs were developed in the 1970s as community health centres designed to be the first point of contact for both health services and social services. They focus on public health and disease prevention (Cawley, 1996).

3.3.2 Engagement of Nurses

Using the broad experience and expertise of nurses is another way for primary care and public health to collaborate. Researchers and organizations both advocate for the importance of nurses in collaboration. The Canadian Nurses Association (CNA) argues that nurses are already in a position to see the range of care and services and identify both gaps and opportunities for collaboration (2011). Examples of collaboration in the literature note that nurses hold a pivotal role in many types of collaboration and the

role of nurses stands out as a salient quality of specific examples. This section presents two options for the use of nurses: redefining the role of nurses and nurse secondment programs. While nurses may already play a prominent role in collaboration, well-described examples are not readily available. As such, this section presents only one example of a nurse-secondment program.

In a review completed in Scotland, Jarvis (2006) proposes a new service model for nurses and recommends that nurses from public health, family health and district nursing disciplines become one discipline of “community health nurse.” This discipline would have a strong connection to individuals and the community, work on multi-disciplinary teams and improve coordination of health care services. This would also help patients navigate the health care system as the community health nurse would be a visible contact to help residents obtain services.

The Perth District Health Unit in Ontario (2006) advocates attaching public health nurses to family health care teams for two to three years and rotating them between practices. The nurses could perform various duties including bringing a community focus to primary care delivery. They could also complete a number of public health functions including, but not limited to, improvements in the following areas: immunization; injury prevention; healthy weight initiatives; screening; smoking cessation; surveillance; evaluation; targeting hard to reach patients; and local health issues. In 1989, Ontario ran a pilot public health program that seconded public health nurses to primary care facilities. In their review of this program, Ciliska, Woodcox and Isaacs (1992) found that nurses seconded to primary care offices more often described themselves as generalists, which was associated with increased satisfaction. This study also found that primary care practitioners with an attached public health nurse were more satisfied with the service provided by the public health nurse than those who did not have public health nurses attached to their practice. Hill, Levitt, Chambers, Cohen and Underwood (2001) explain that in this case the public health nurse functioned as a primary care nurse, completed community outreach, participated in research, advocated for underserved populations, developed programs to meet the needs of the practice’s patients and encouraged citizens to become more involved in the development of programs and policies in their community.

3.3.3 Targeted Issues for Collaboration

Formal structural modifications to the health care system such as complete integration and nursing secondments may not be as common as other forms of collaboration. The Public Health Agency of Canada (2005) recognizes that formal modifications to health system structures occur infrequently compared to collaborative activities based on local circumstances. Locally developed collaborative activities are separated into two categories: (1) primary care and public health organizations staying separate but working together across settings and (2) targeting issues within a primary care setting. Each of these approaches is illustrated in the following sections.

3.3.3.1 Targeted Interventions across Settings

A number of collaborative initiatives retain the independence of public health and primary care organizations but include processes and sub-structures to support working across disciplines without changing the structure of the entire system. These activities often include participation from other interested stakeholders including specialists and community groups. These types of collaboration occur at the policy development level in the form of frameworks and at the community level through service delivery.

Frameworks targeting specific health problems provide a broader opportunity for public health and primary care to collaborate. Frameworks for collaboration are not as focused or concrete as other examples but may guide the behaviours of public health and primary care professionals. Australia provides two examples of targeting specific areas where public health and primary care overlap to create opportunities for collaboration. First, the Framework for General Practice for Smoking, Nutrition and Physical Activity (SNAP), prepared by the Joint Advisory Group on General Practice and Population Health was developed to manage behavioural risk factors to chronic disease (2001). The purpose of this framework is to improve health outcomes in the community by supporting and enhancing the role that general practitioners play in increasing healthy behaviours. Developed by public health and primary care professionals, this framework assists general practitioners in improving population health by improving prevention methods, providing a centralized framework for general practitioners to reference and providing practical support tools. Second, the National Public Health Partnership created a framework for preventing chronic disease in Australia (2001). This framework recognizes that public health needs to create and maintain strong connections to primary care. While public health takes primary responsibility for prevention and health promotion, this framework recognizes that primary care is the pivotal point where individual care and general prevention meet. This strategic framework helps to guide the work of public health professionals and emphasizes the need to work across disciplines.

The Hamilton-Wentworth Heart Health Initiative in Ontario was a community level pilot program that targeted improvement in heart health through collaborative efforts (Hill et al., 2001). A committee overseeing the program included public health staff, family doctors, cardiologist, pharmacists, occupational therapists, nutritionists and geriatricians. The committee shared ideas about how to change and improve working together and how to enhance the heart health of the community. Physicians provided information to patients about improving heart health consistent with the broader information advertised in the community by public health professionals. This pilot project began in 1998 and collected baseline data about the health of individuals and public health professionals and followed up with general practitioners about the current health status of those involved in the program. While this program provides an example of how groups working together across disciplines, the pilot was never evaluated and information about the length of the program and how it has affected the health care system is not available.

The Hartslag Limburg cardiovascular disease prevention program in the Netherlands included partnerships between public health organizations, general practitioners and others including community organizations, hospitals, the local university and municipal staff (Ruland et al., 1999). The project consisted of two components; one targeted the whole community while the other focused on individuals who were at high risk for developing cardiovascular disease. For the community targeted component, community project committees were established that consisted of representatives of local organizations, health educators, civil servants and social workers. These committees organized interventions and activities to facilitate healthier lifestyles such as reducing smoking and increasing healthy eating and physical exercise. The community component included smoking cessation programs and tours of local grocery stores.

The focus of the high-risk portion of the project was the creation of a new Health Advisor position. Health Advisors came from various backgrounds and included nurses, a dietician and a medical assistant. Health Advisors made direct contact with targeted high-risk individuals and used the principles of

behaviour changes to help them make healthy life changes. When necessary, they connected the patients to the community component. The Health Advisors also played an important role in coordination and communication. They worked with the cardiologists and general practitioners to develop a strong joint approach and provided updates on the patients to the primary care practitioners. Health Advisors moved between general practices, determined areas for improvement in the program and community and completed some of the prevention activities regularly provided by the general practitioners.

A process evaluation study of the success of the process of the community targeted component determined that the interventions might have been more effective if they had been of higher quality and intensity and delivered more frequently (Ronda, Van Assema, Ruland, Steenbakkens, & Brug, 2004). A program review (Harting et al., 2006) of Hartslog Limburg, which ran between 1999 and 2003, revealed that the high-risk component of the program led to a decrease in saturated fat consumption and an increase in activity level. While no effect was seen for smoking interventions, these results indicate that multiple component interventions within public health and primary care collaborations may lead to positive outcomes.

3.3.3.2 Targeted Interventions within Primary Care

The prescription of fruit and vegetables to patients by primary care professionals provides an example of health promotion in a primary care setting (Kearney et al., 2005). Nurses, general practitioners, health visitors⁵ and midwives in the Castlefields Heath Centre in the United Kingdom provided patients with doctor's prescriptions that included instructions to eat more fruits and vegetables. This health centre served about 12,000 people, with 11 physicians and a team that included nurses, health visitors and midwives. The fruit and vegetable prescriptions included discount coupons for local stores for purchasing produce. The practitioners also told the patients about the benefits of eating more fruit and vegetables and how diet changes can prevent disease. Health centre staff received training about the messaging and were updated intermittently about the messaging and the goals of the project. The prescription, messaging and vouchers were augmented through other strategies. Bowls of fruit and information regarding food cooperatives and cooking lessons were made available to patients. The clinics displayed posters and leaflets containing messaging consistent with that provided by the practitioners. Finally, volunteers were trained by a dietician to speak with patients in the waiting room, where they also offered free fruit and healthy eating advice. As of 2005 the program was underway and an evaluation was in progress. However, no results of this evaluation have been published and information on whether the program continues is unavailable.

Hogg et al. (2006) provide an example of a public health intervention in a primary care setting that is unrelated to health promotion for the public. Instead, this example focuses on the promotion of best practices about prevention of respiratory infections in family practices, as illness spreads easily in a family practice where sick people assemble. Prior to the intervention, the participating practices underwent an audit to observe practices for control of respiratory infections and potential contamination levels. Trained public health nurses provided the staff in the family practices with feedback about their audit results and presented information to the practices about infection control best practices. The family practices also received tool kits that included signs, posters, references and research promoting best practices. The kits contained infection control materials such as masks and alcohol gel pumps. While

⁵ Health visitors are public health nurses with training to work in primary care

participation in this study was low, the results appear to indicate that facilitator-based interventions using knowledge transfer have the potential to increase uptake of public health best practices in primary care settings.

3.4 Summary

The literature review describes the long and interconnected history between primary care and public health. While the two disciplines have worked together successfully in the past, differences in administration, backgrounds and philosophies have developed over time. These differences persist today and have resulted in challenges to working collaboratively. Interest in collaboration between public health and primary care has grown steadily over the past decade and literature on the topic has increased considerably since 2003. This interest is due to the perceived benefits of collaboration for patients, health workers and to the health care system.

The review explored four proposed models of collaboration. Some models categorize types of collaboration based on structure, others focus on the activities completed within the collaboration, while others use a combination. The review of the models determined that none were ideal for application in British Columbia. Three of the four models did not provide adequate descriptions of specific activities public health and primary care should adopt. Further problems with these models included limiting collaboration to three functions, restricting collaboration to specific health care structures, and confining the location of collaboration to a primary care setting.

A scan of collaborative practices in Canada and other jurisdictions revealed three distinct categories of collaboration: integration of public health into the primary care system, utilization of the skills and position of nurses and targeting specific health problems. First, integration of public health into the primary care system has been used in various jurisdictions, most of which have used COPC. Under this type of integration, primary care practices adopt a community-focused approach and target specific health problems within their communities. Second, researchers have suggested that nurses are in a unique position to bridge the gap between primary care and public health. Options for collaboration include redefining the scope of nursing practice to include responsibilities from both sectors and nurse secondment programs in which public health nurses work in primary care practices performing public health and primary care duties. Third, collaborative activities targeting specific health problems occur across settings and in primary care settings. Interventions across settings include high level framework development to guide collaborative behaviour for practitioners and community level programs that contain multi-disciplinary teams working together to improve health issues such as cardiovascular health. Interventions limited to a primary care setting focus on specific behaviours such as promoting healthy eating to prevent illness or reducing the spread of respiratory infections by promoting best preventative practice in primary care environments. While these examples are not an exhaustive inventory of collaborative activities, they provide an overview of different possibilities for collaboration.

4.0 Methodology

The research design and primary data collection method used in this project was a series of semi-structured open-ended interviews conducted with leaders in the area of public health and primary care collaboration. The following sections describe the choice of research design, the sample, recruitment and interview process, method of analysis and potential limitations of the study.

4.1 Research Design

In semi-structured open-ended interviews the researcher asks open-ended questions that are based on the research question and have been determined in advance. The open-ended questions are designed to gather specific information and are designed to elicit a narrative response, allowing respondents to choose how they respond. This interview style allows the interviewer to probe for more information and build rapport with the respondents by using active listening skills (Given, 2008). Semi structured interviews produce data that is both comparable and reliable (Cohen & Crabtree, 2006), and the design is helpful when researching a specific topic and to supplement information gathered from other sources (Laforest, 2009).

The semi-structured interview format was chosen because interviews provide the researcher with control over the questions (Cresswell, 2004, p. 150) and allows respondents to express themselves using their own words and conduct the interview on their own terms (Cohen & Crabtree, 2006). The objective of the interviews was to identify examples of positive collaboration between primary care and public health, determine what makes collaboration between the sectors more or less successful and how to make the conversation about collaboration more productive (see Appendix C for Interview Guide). The interview guide was established prior to the interviews to attempt to answer the research question and to confirm or refute information discovered in a review of literature on the topic.

4.2 Sample

Using a purposive sampling method the client identified 25 senior managers in health authorities, the Ministry of Health and other health organizations in BC. Purposive sampling is used to collect in-depth information from knowledgeable individuals (Patton, 2002, p. 47). Speaking with leaders from multiple areas of health care ensured that individuals with different areas of expertise provided information and knowledge to the project. Four researchers of public health and primary care collaboration in Canada were also identified increasing the total potential sample to 29. These researchers were selected because they were involved in a program of research about collaboration between primary care and public health in Canada. Semi-structured interviews were conducted with 21 leaders in collaboration between public health and primary care.

4.3 Recruitment

The client sent an initial email introduction to the 25 individuals in the health system, introducing the researcher and encouraging them to take part in the research. Two days after the introductory email, the researcher emailed an invitation to participate and an informed consent form to all 29 potential respondents. Of those invited, 20 agreed to participate: nine representatives of health authorities, eight representatives of the Ministry of Health, one representative of other professional health care organizations in BC, and two researchers. Two potential respondents declined due to unavailability and seven did not respond. Interviews were conducted with 19 respondents as one individual was unable to attend the scheduled interview and attempts to reschedule were unsuccessful. Two additional individuals from other health organizations contacted the researcher after hearing about the project and decided to

participate, bringing to total number of interviewees to 21. Nine individuals worked in public health roles, nine worked in primary care roles and three worked in roles that bridged the two sectors.

4.4 Interviews

Six interviews were conducted in person and 15 were conducted via telephone as the researcher and respondents were located in different cities. Prior to beginning the interviews, the respondents read and signed the informed consent form and the researcher confirmed the voluntary and confidential nature of the research. The researcher asked the interview questions and follow-up questions as needed throughout the interview. Detailed notes were taken by hand during the interview and transcribed onto a computer after the interview. Respondents were then emailed the notes and asked to review and make any edits, comments or changes to ensure the notes accurately reflected the interview content, if they felt any changes were necessary. Four respondents responded with edits, four responded with no changes and the remaining 13 did not respond. Interviews ranged in length from 15 minutes to 60 minutes with an average interview time of 35 minutes.

4.5 Analysis

The results of the interviews were analyzed using a thematic analysis. The data was reviewed and common themes across the interviews were identified. Themes were not predetermined but arose iteratively through the analysis process. An index of these themes was created and then applied to the interview responses. The responses were then charted according to these themes and summarized.

4.6 Limitations

Selection bias is a concern in any study where the sample is not random. For this project, the sample was selected purposively to obtain opinions from those with knowledge of public health and primary care collaboration. The client relied on her knowledge and professional network to develop a list of potential respondents. This limitation was deemed acceptable as knowledge of the topic was essential to obtain the desired information. The selective nature of the sample also limits the generalizability of the results of this study. However, the purpose of the research was to inform the actions of the client based on the opinions of public health and primary care collaboration leaders, not to create generalizable results.

Another possible limitation of the research design was that individuals who agreed to participate would over-represent one or more groups. The sample had the potential to be dominated by groups based on their employer (e.g. the Ministry of Health), their employment sector (e.g. public health), or their region (e.g. unbalanced representation from each regional health authority). If this over-representation of a group was to occur, the recruitment would have needed to be broadened to attempt to balance the sample. However, the respondents reflected a balanced distribution and this potential limitation did not arise. Nine individuals worked in public health roles, nine worked in primary care roles and three worked in roles that bridged the two sectors. The sample also included individuals from four of the five regional health authorities.

Recording and transcription is preferable to note taking in semi-structured interviews because note taking can be distracting and reduce rapport in the conversation (Cohen & Crabtree, 2006). Due to time and technological limitations, interviews were not recorded and transcribed. This limitation was mitigated by sending the respondents typed copies of their interview notes and giving them the opportunity to edit the notes to accurately reflect their opinions and thoughts.

Finally, the ability of the researcher to listen, understand, and respond to the information provided is essential to obtaining good quality data from the interviewees (Given, 2008). A novice researcher would be less likely to obtain high quality data, as the required active listening skills develop over time. However, the skill of the researcher undoubtedly increased as the interviews progressed due to practice interviewing the various respondents and developing a better understanding of the topic.

5.0 Findings

This chapter summarizes the findings of the interviews with 21 leaders in collaboration between public health and primary care. The findings are organized thematically to present the common ideas in responses from the broad range experience and knowledge of the respondents. Direct quotations are not provided as interviews were not mechanically or digitally recorded. Comments are not attributed to respondents to protect privacy and confidentiality. The interviews focused on collaboration between public health and primary care, and included questions about the definition of collaboration, examples of collaboration, barriers and facilitators of collaboration, keys to successful collaboration and factors that affect the conversation about collaboration. Findings from the interviews are presented in three main sections: qualities of collaboration, factors affecting collaboration and examples of collaboration.

5.1 Qualities of Collaboration

The following section explores how respondents define collaboration and the qualities they considered to be the most important when collaboration occurs.

5.1.1 Definition of Collaboration

Most respondents provided definitions of collaboration, although no two responses were the same. The majority of definitions included the concept of working together, which included sharing responsibility, mutual learning, and sharing knowledge. Four respondents explained that collaboration occurs on a continuum, and that the continuum includes complete integration with the rest of the health care system, formal partnerships with resource sharing, working together to build capacity of both sectors and information sharing.

All other definitions provided were unique and contained different defining characteristics. Five respondents commented that collaboration means different things to different people, and one interviewee explained that collaboration is challenging because people do not understand what it means. Three respondents suggested that public health and primary care need to work on developing a shared understanding of the word collaboration, and one of these respondents stated that that providing training on collaboration would help develop a common understanding.

5.1.2 Focus of Collaboration

Most respondents stated how they thought collaboration, and the conversation about collaboration, should be focused. Six respondents thought collaborative work between public health and primary care should be patient-focused, five thought it should be population-focused, and five thought it should be both patient and population-focused. Two of these respondents also indicated that service providers should be a central focus. In addition, two respondents stated that the focus of collaboration is to make services more seamless, to find ways to make care for efficient and accessible, and to save money. Two respondents discussed the Triple Aim approach adapted for use in BC from the Institute for Health Care Improvement. The Triple Aim states that three elements are necessary to achieve quality, effectiveness and efficiency: the Patient-Provider experience, Population Health Outcomes and Sustainable Costs. All three must be present in the aim or goal. One interviewee explained that the triple aim can promote successful collaboration by helping everyone focus on the same goal.

5.1.3 Structure

Seven respondents stated who they thought should be involved in discussions about collaboration. Three respondents explained that public health and primary care need to engage the front line workers, including doctors, early in the discussion so they can understand why there is a desire to collaborate. Having the front line workers involved can create new opportunities and ideas. One interviewee noted that the conversation about collaboration should be happening at the service provider level, but it is not. Three respondents explained that including the patient and public voice would help patients understand what is happening, get their input and help them understand their role in their health.

Divisions of Family Practice (Divisions) were identified by four respondents as a potential way to move forward with collaborative activities. Divisions are a way for public health to connect with family physicians and to address concerns physicians may have. However, two respondents warned against some of the organizational challenges that working with Divisions might present: one respondent noted that Divisions do not have any designated funding for collaboration, while another recognized that the planning and budgeting process for Divisions and health authorities differ, creating a barrier to working together.

Two respondents noted that Collaborative Services Committees provide a forum for discussing collaboration. One respondent cited that the Practice Support Program (a part of the General Practice Services Committee that provides support and professional development to general practitioners) has been used in the past to deliver public health messages and program information to doctors. This program could be used in the future to promote collaborative work. Finally, one respondent suggested that community health centres make it easy to collaborate because public health and primary care services are co-located in these centres. As explained by two other respondents, co-location of services makes collaboration easier.

5.2 Barriers and Facilitators of Collaboration

Whether collaboration between public health and primary care is successful is dependent on various qualities of the environment and the people involved in collaboration. Barriers and facilitators of collaboration often overlap, meaning that the absence of a quality that acts as a barrier has the potential to act as a facilitator and vice versa. Further, the same qualities can affect the conversation about collaboration. The following section provides an overview of the barriers and facilitators of collaboration identified by respondents.

5.2.1 Strategic Imperative

Most respondents indicated that a common vision or goal would assist collaboration or that the absence of shared vision or goal was a barrier to successful collaboration. According to two respondents, the public health and primary care sectors in BC do not currently have a shared vision. Three respondents stated that having a shared vision would make the conversation about collaboration easier. In addition, three interviewees explained that having a common vision is important because it helps prevent people from getting off track and completing work that is driven by personal motivation. Without a common vision, people can misinterpret what they should be doing and spend time and energy on something that will not contribute to successful collaborative work. One of these interviewees noted that managers in particular have competing responsibilities and can become sidetracked more easily.

Two respondents suggested that developing a shared vision should occur at the leadership level, and one of these respondents suggested that having the vision developed at the local level is also important. One individual explained that having leaders commit to collaboration would help other parties involved in collaboration feel comfortable moving beyond the scope of their regular work and discipline. Two respondents discussed the need of the shared vision to be broad and understood by everyone involved. According to two other respondents, having a shared vision allows next steps of collaboration to occur, such as planning and determining the details of the work.

Three respondents commented that public health and primary care need to work together to determine how resources would support shared goals. One respondent suggested that primary care and public health should create a charter to determine what the team knows and what they do not and then develop common goals. Two respondents emphasized the need to make a plan for what to do, build consensus and move forward.

Seven respondents discussed the creation of a collaboration mandate. As two respondents explained, accountability mechanisms to promote collaboration between primary care and public health do not currently exist. Two respondents stated that without a mandate for collaboration, the two sectors are unlikely to work together and that people need incentives to work collaboratively. Three respondents suggested that BC needs a mandate to make collaboration more successful or more likely to occur. One respondent suggested that mandating health plans with a population focus might make the discussion about collaboration easier. This individual also indicated that an option to overcome barriers for collaboration might be to provide funds accompanied by a collaboration mandate to share between regional health authorities and Divisions. Another individual stated that local accountability mechanisms would help obtain desired collaborative results. In contrast, one respondent rejected the need for a collaboration mandate stating that collaboration is primarily about a willingness of parties to work together and not about being told what to do.

5.2.2 Evidence and Evaluation

Seven respondents commented that those who want collaboration to occur should provide evidence for why public health and primary care should collaborate. Two respondents explained that those who want to collaborate need to explain the value and benefit collaboration can provide. One respondent suggested that the vision should clearly explain that interdisciplinary collaboration is an important component of delivering quality services. According to another respondent, good collaboration occurs when people know what they are doing and why they are doing it, while another respondent explained that people who see the value in collaboration will be more likely to participate. One respondent explained that people do not often know the value of collaboration, while another respondent questioned whether evidence supporting collaboration between these sectors exists. Conversely, one respondent suggested that plenty of literature exists that shows examples of collaboration and how it has been successful.

According to two respondents, evidence and research should also be used to determine what kind of collaborative activities should occur. One respondent suggested that examples of successful collaboration and best practices should be used to determine how collaboration should proceed. Another respondent indicated that this research must be communicated to all levels of the organization, including front line workers, as evidence supporting process change is often known only by those at the leadership level.

Two individuals warned against collaborating for the sake of collaborating, because the collaboration transaction costs of time, money and effort are so high. Collaboration is only valuable if one has a purpose. Another person explained that goals are particularly important to avoid having collaboration become a reporting exercise. This respondent explained the need to understand the respective goals of the two disciplines, how shared goals would assist in meeting targets and accountabilities, and to clarify roles and responsibilities prior to planning and implementation. The respondent warned that working together is easier said than done.

The importance of evaluating collaborative activities and having appropriate measures of success was identified as important by six respondents. According to one interviewee, the absence of data and measurement is a barrier to collaboration. To overcome this barrier, the interviewee suggested that those who wish to develop collaborative activities should also develop indicators of success, collect the data and report out on the success of the collaborative process. Two other respondents suggested that those who work on collaborative activities should learn from their mistakes and move forward with the activities if they are deemed successful. One of these respondents stated that investments and supports should be provided to collaborative activities that are successful.

Four respondents suggested that using quality improvement is one way to approach collaboration. In the quality improvement approach, respondents begin the collaboration process, measure success continually and make iterative changes. The process is not stopped to determine success or failure, and information is shared along the way to support the work. One of these respondents explained that quality improvement is often used as a way to rationalize change and support a particular direction. Another respondent suggested that those planning collaboration should move forward on simple issues with minimal process. This would allow primary care professionals to see improvements without too much of the process that is often associated with public health. This process is both iterative and incremental. Two additional respondents noted that taking small steps is a good idea, one of whom stated that you must learn as you go through the process of collaboration.

5.2.3 Willingness and Buy-in

Three respondents stated that when people are open and willing to work together, it makes collaboration more likely to occur. People who make a conscious decision to work with one another will be more successful. One respondent explained that a lack of interest in collaboration prevents collaborative activities from moving forward. Those not currently participating in discussions about collaboration are the ones who should learn more about it. Another respondent explained that varying levels of commitment of those working together on collaborative work poses a challenge, as not everyone is equally willing to participate.

Three respondents thought that personal attributes can interfere with collaboration and that interpersonal interactions can be challenging. One respondent commented that some individuals are autonomous and do not work well with others, and it can be difficult to teach them to work collaboratively. However, this respondent also explained that many individuals at the service delivery level naturally work together and the label of collaboration is unnecessary. Another respondent felt that people naturally want to work together and will do so when they can. Two respondents explained that egos and turfs can be a barrier while two other respondents explained that people from both sides need to leave their egos at the door and be open to working with people from other sectors. One respondent explained that collaborative work is

currently person dependent and when individuals leave their positions, the collaborative opportunities leave with them.

Six respondents discussed the need to involve people in the planning process and obtain buy-in. Three respondents explained that planning together helps to make collaboration easier. Another indicated that having buy-in from leadership enables collaboration. One respondent noted that when people are involved in the planning process, they feel ownership. When people are told what to do, they do not feel ownership of their work. Another respondent made the distinction between gaining compliance and gaining commitment. This respondent explained that buy-in is needed to gain commitment which results in more sustainable results. People who have restrictions comply and do not fully commit themselves. When people do not perceive commitment, it is a barrier. One respondent explained that an important role government plays in obtaining buy in is providing clarity on what is within scope. Political changes have the potential to disrupt plans and upset respondents. However, this can be mitigated if government is clear about what elements have the potential to be disrupted.

5.2.4 Relationships and Communication

Seven respondents talked about how building relationships is an important part of collaboration. One respondent said building relationships is important because people do not really know each other. Four respondents suggested that small, specific, practical and concrete projects would allow people from public health and primary care to get to know each other. One respondent suggested that conversations about collaboration should occur face to face, and another discussed the need to encourage networking. Professionals in public health and primary care often experience barriers that prevent them from getting together regularly. Two respondents discussed the need to develop teams and have team meetings. One of these respondents explained that the dynamics of a team working together on collaboration is important, as is developing a team over time.

Most respondents emphasized the need for clear communication in successful collaborations. One respondent explained that communication is often difficult because health authorities and government have multiple layers of people, staff and bureaucracy. Three respondents highlighted that knowing who to contact in public health and primary care departments would be beneficial because they would then have direct access to information. Eight respondents stated that more opportunities to talk about collaboration would be beneficial to developing collaborative relationships. One of these respondents explained that public health and primary care should discuss practical examples, not theoretical, such as maternal child health, as it involves public health, primary care, community care and acute care. By discussing something practical it becomes a useful discussion and not a discussion about the concept of collaboration. Another respondent suggested discussions about collaboration look for opportunities to collaborate in areas where public health and primary care duplicate services.

Eight respondents stated that individuals involved in collaboration need to understand respective roles, value each other's work, and respect one another. Three respondents explained that it is important to understand respective work and roles. According to one respondent, public health and primary care professionals need to learn what both sectors are doing in order to work collaboratively. Two respondents explained that traditional roles must be broken down and revisited, while another emphasized the need for people to learn that public health and primary care are not competition and that the two sectors are actually complementary. One respondent explained that people in both sectors often work in isolation and

look down on other disciplines, while two respondents explained that public health and primary care professionals should strive to value each other.

5.2.5 Leader qualities

Eight respondents noted that leaders need specific qualities to support collaboration between public health and primary care. One respondent stated that leaders in public health and primary care need to understand why collaboration is important. One respondent emphasized the need for strong leaders who can take risks, learn from failure and be non-judgmental. Another respondent indicated that good leadership can overcome barriers to collaboration and that the Ministry of Health should model the leadership they would like to see in the health authorities. Conversely, two individuals suggested that leadership must begin at a local level as opposed to the Ministry level, as keeping discussions about collaboration at the provincial level will not be successful.

An important quality of leaders identified by four respondents is how they work with others. One respondent explained that leaders in both sectors need to build relationships with each other. Two respondents discussed the need for leaders to set examples for what they expect to see at service delivery and act as champions of collaboration. The third respondent stated that strong leadership needs to send a clear message that collaboration will be supported.

Two respondents cited knowledge as an important quality of leaders. One respondent indicated that having leaders that are knowledgeable about quality improvement and identifying opportunities to facilitate collaboration can go a long way. Another explained that people with knowledge, skills, attributes and values supporting collaborative work are needed.

5.2.6 Interdisciplinary Differences

Most respondents referred to the differences between the public health and primary care sectors and how they can present challenges to collaboration. One respondent pinpointed the public health sector as part of the problem, as public health professionals are not good at explaining what public health does. Conversely, one respondent explained that general practitioners have misconceptions about what it means for public health and primary care to work together, while another respondent explained that family doctors do not take the time to collaborate with public health.

Eight respondents commented that public health and primary care focus on different things. Public health focuses on the population and community and primary care focuses on individuals and immediate patient-focused goals. One respondent explained that the ethical frameworks of the two disciplines differ. Primary care places higher value on individual autonomy and public health values the health of many over the health and rights of the few. One respondent indicated that bringing these two perspectives together and reaching a common ground is challenging. Another warned that some of the work completed by public health and primary care is fundamentally different and not everything is an opportunity for collaboration.

Five respondents acknowledged the complex history of primary care and public health. One respondent explained that understanding how public health and primary care got to where they are today and how our health system came to be is helpful when working together. Two respondents explained that public health has been involved in a conversation about collaboration and integration in the past and that public health professionals fear that they will lose their minimal funding to acute care. One respondent explained that

the independent cultures of the disciplines have steeped for decades, creating challenges to working together. However, one respondent stated that despite the historical differences the two sectors are not that dissimilar. In fact, three other respondents questioned the differences between public health and primary care. One stated that the difference exists only at a bureaucratic level and community level leaders do not see a clear divide between the two. The differences are a function of a hierarchical organizational system and it does not always work that way, especially in rural areas. One respondent suggested that everyone should question traditional roles in primary care and look beyond family practitioners, as nurse practitioners and public health nurses also provide primary care. One respondent explained that there is more crossover than difference, and those working in public health often do primary care and vice versa.

5.2.7 Knowledge and Education

Six respondents expressed the importance of understanding the roles and responsibilities of both sectors. One respondent explained that public health and primary care do not often know what the other sector does while another noted that leaders in public health are not always talking to leaders in primary care at the Ministry of Health. Two respondents explained that the two sectors do not really understand one another and one respondent highlighted the challenges that many people do not know what their colleagues from another sector does, even when they are working in the same facility. One respondent stated that while public health and primary care have both made assumptions about how they can work together, they have not made the effort to really work it through. For example, one respondent explained that physicians and health authorities do not fully understand the role physicians can have in population health. Primary care practitioners are in a unique position to deliver public health messages to patients. Another respondent explained that work needs to be done to address stereotypes related to the two sectors, specifically the stereotype that public health only focuses on behavior change.

Two respondents explained that public health and primary care education is currently independent without much interaction or overlap. They both suggested that current programs be modified to include some interdisciplinary and collaboration training to help both disciplines gain a better understanding of the perspectives of the other group, and how to better work together. They also both mentioned the need for continuing education for those who are currently working in public health and primary care to teach them how to work together and to help them understand the other discipline.

5.2.8 Organizational Structure

Nine respondents raised the issue of the organizational differences between primary care and public health. Three respondents noted that primary care and public health operate independently from one another. Two respondents explained that public health was located in its own ministry which resulted in a divide between public health and the rest of the healthcare system. One respondent explained that while public health is easy to understand due to the structure in health authorities and the Ministry, it is harder to connect with primary care because it is not centrally located. Three respondents noted that leadership, priorities and strategic directions for public health and primary care are separate, which has increased the separation of the sectors. However, three respondents also recognized that changes have occurred recently and public health and primary care leaders are beginning to connect on the topic of Integrated Primary and Community Care.

One respondent stated that the healthcare system is complex and without a common information management system it cannot communicate. Four respondents identified the need for a common information technology system to help share information across the disciplines. They recognized that the ability to more easily share information would make collaboration easier and the absence of this system currently prevents collaboration from occurring.

5.2.9 Resources

Three respondents discussed the challenges with the way family physicians are compensated for their time. Most physicians in BC operate on a fee-for-service plan and are independent from health authorities. This makes collaboration challenging because when physicians take time to collaborate they experience a loss in wages. This is in contrast to public health workers, who are often on salary and employed by the Ministry of Health or health authorities, and are paid for their work regardless of their activities.

Four respondents felt that the way funds are currently distributed in the health care system is a challenge for collaboration. One respondent explained that asking for collaboration without providing appropriate funds makes it very unlikely that the collaboration will occur. Two respondents identified that few resources have been put in to the system to encourage collaboration and development of relationships. One respondent suggested earmarking funds specifically for collaboration to protect the funds from being spent on things other than collaboration.

Most respondents identified time as an issue relevant to collaboration. Seven of these respondents articulated that collaboration and building relationships takes time. Specifically, planning and implementing collaboration requires that those involved in the collaborative activities commit time to make it successful. Further, the process of relationship building is something that develops over time and that should not be rushed arbitrarily. One respondent noted that it has taken a long time for public health and primary care to get to the place they are today and changes will not happen immediately. One respondent highlighted that people often do not realize just how much time it takes to build relationships, while another suggested that even though collaboration takes more time than a system run by dictatorship and is messier, it is a better option.

Among the respondents who stated that time is a relevant issue to collaboration, seven recognized that a lack of time and overbearing workloads create a barrier to collaboration. Professionals in both areas of health care are often overworked and do not have extra time to spend on collaborative activities. In particular, primary care practitioners such as physicians experience challenges because they have many patients, and often do not have time to focus on issues beyond the immediate medical problems presented to them. One respondent raised the issue that in some areas of the province there is a shortage of physicians, and when they work on collaboration, the regular work is still there and needs to be done. Further, one interviewee noted that those who are overworked will find that collaboration appears to be a very slow moving process.

Four respondents saw a need to recognize those who participate in collaboration, to recognize the time and effort required to participate in collaborative activities. One interviewee suggested that work should be backfilled, while three respondents suggested that funding be made available for primary care providers to allow them to take time from their fee-for service practice to spend on collaboration. Two respondents discussed the need to recognize participation in collaboration and recognize that people's

circumstances may be different than one's own. Two other respondents noted that celebrating successes is important to collaboration, one of whom explained that external validation shows that the work has value.

Finally, two respondents identified externally applied timelines as a challenge to working collaboratively. Often ministries and health authorities impose project-based timelines that are simply too short to allow for meaningful collaboration to occur. One respondent offered an example of the Nurse Family Practitioner program because the timeline for the program was set at the ministry level, but implementing such a program in a collaborative way to make it the most successful was not possible with the deadlines. Therefore, people do the best they can, but it does not necessarily result in the best possible outcomes.

5.3 Examples of collaboration

The following section provides an overview of the examples of collaboration between public health and primary care as described by respondents. Examples provided by respondents included policy development that occurred at a leadership level, targeted interventions for specific interventions, maternity care programs and the presence of public health work in a primary care setting. Other examples that did not fit in to these categories included the co-location of public health and primary care services and the development of a community centre.

5.3.1 Policy Development

Two respondents described Prescription for Health, a program that allows family practitioners to have a discussion about prevention with patients who are at risk, such as smokers or unhealthy eaters. Primary care practitioners complete a personal health risk assessment and community and public health provide the supports, enablers and information for self-management, including links to lifestyle support services, such as QuitNow and HealthLinkBC. The Ministry works with the General Practice Services Committee to provide funds for the Personal Health Risk Assessment fee that doctors can charge for the assessment. The working group for this project included representatives from the Population and Public Health division at the Ministry of Health and from the General Practice Services Committee, and was an opportunity to build relationships between Ministry divisions and physicians.

One respondent briefly described that public health and primary care in the ministry worked together on the Clinical Prevention Policy Review in which they reviewed literature of clinical interventions and developed the Lifetime Prevention Schedule for use across sectors, including in primary care. Two respondents discussed the Tripartite First Nations Health Plan. The goal of the plan is to improve health outcomes for indigenous people in BC. It uses a health action implementation approach and includes 35 health action items. The health actions for primary care and public health are grouped together. Decision makers, leaders and subject experts at the strategic and operational level complete work on each of the health actions. This presents an opportunity for public health and primary care to work together to achieve their joint health actions. The Tripartite First Nations Health Plan focuses on relationships, encourages transformation and challenges people to think differently. One interviewee stated that while the process has not been easy, it may become a model of collaboration for other jurisdictions to use.

One interviewee described the BC Immunization program, which is a program with partners that include pharmacists, physicians, public health nurses, regional health authorities, along with many other health organizations in BC. This team acted as stewards to develop the Immunize BC Policy Framework and created mechanisms to promote immunization in BC. The BC Immunization committee makes recommendations to government to have consistent provincial solutions and when decisions are made, the

committee follows through on the required work. The program includes primary care and public health because immunizations are provided both in doctor's offices and public health clinics. The respondent expressed that this example is not only about collaboration between public health and primary care, but is collaborative work that operates within a larger system and includes multiple partners.

5.3.2 Targeted Interventions

One respondent described a health outreach program in Port Alberni that began with a public health focus and adapted to include primary care. A tuberculosis outbreak began in a marginalized population and public health nurses began work to address the problem. The public health nurses recognized a need in the marginalized population for primary care and brought in a physician to provide services for two sessions per week. Working with the First Nations in the community, and a First Nations Health Outreach worker (a lay person health worker) the physicians and public health nurses worked together to complete harm reduction work for Hepatitis C and HIV positive clients. In this example, the population was open to hearing public health messages, but they also needed a one-on-one connection with a primary care provider.

Another respondent described a new initiative that is currently under development. Public health and primary care leaders are working together and partnering with patients and others (such as police) to develop a new service model for intersecting populations in downtown Victoria (e.g. people with blood borne illness and low income). This program uses a patient-centred hub model that provides multiple health services in one location. The program does not focus on the roles of each sector, but instead works together. The model for this program has been approved and is currently moving to implementation.

Two respondents described the Seek and Treat to Optimally Prevent (STOP) HIV/AIDS⁶ program. This pilot program's goal is to increase the proportion of people with HIV who are engaged in care and to treat and prevent new infections. The rationale behind the program is that when people with HIV/AIDS are diagnosed early, they do better with their illness and the viral load is lower, which reduces the likelihood of transmission. The program uses a public health lens to HIV care by focusing on the larger population, and provides a public health practice change in a primary care practice setting. The program targeted two primary care provider groups: HIV primary care providers and primary care providers who were not testing for HIV. These groups were targeted because HIV providers had no resources to track down lost patients and the physicians who were not testing for HIV were not doing so because they did not know what to do if they diagnosed the illness and had concerns about providing competent HIV care. The STOP HIV/AIDS program includes a mobile clinical practice team that completes clinical outreach which includes helping clinicians reconnect with patients and supporting increased testing, diagnosis, care and treatment of HIV and AIDS. Other activities included recruiting primary care practices to participate in education events to increase routine testing for HIV. According to one respondent, this program shows that the public health sector is finding they need to make changes in primary care practice to achieve public health goals.

⁶ HIV is the Human Immuno Deficiency Virus, a virus that attacks the immune system leaving the individual susceptible for infections and cancer. When a person cannot fight infection any longer, the virus is known as Acquired Immunodeficiency Syndrome (AIDS)

5.3.3 Maternity Care

Three respondents described the maternity collaborative clinic in the Cowichan Valley. The Cowichan Valley Division of Family Practice recognized high rates of teen pregnancy, low birth weights and a large number of maternity cases in which the mothers did not have family doctors. The division wanted to develop a maternity clinic and had created plans, but had not worked with other groups. When the division reached out to other groups including First Nations and Vancouver Island Health Authority, the plans began to move forward. Some of the problems identified by working together were that many pregnant First Nations women were not comfortable with maternity care, and many pregnant women were not participating in prenatal care because they had disorganized lifestyles. The partners worked together to establish a clinic at the local hospital. Physicians provide primary care at the clinic and work alongside public health nurses who provide supports to women with multiple needs, such as homelessness or domestic violence, and link them to other services.

In the Fraser Health Authority, health units have begun to work with primary care at the provincial level to increase the number of prenatal registrations. Prenatal registrations allow pregnant women to receive information and receive a brief assessment. If deemed necessary in the assessment, a public health nurse will contact the pregnant woman and work with her through the pregnancy. Prenatal registrations result in better impact and assessments before the child is born and moves the public health focus from its place after birth to prenatal. This increases the ability of primary care to consult with public health. In the Fraser Health authority, numbers have improved for prenatal registrations.

One respondent described an example of a maternity program developed in Powell River. The health authority engaged with local family practitioners to develop a group visit prenatal model that providing pre- and post-natal services and delivery in a rural setting. The program began with two physicians on a pilot basis supporting both regular and complex, high need patients. These physicians partnered with the health authority, public health nurses, maternity care nurses and dieticians. This program is currently in its fourth group of mothers and is undergoing evaluation now, and it appears to be effective. The respondent explained that willingness to try was a key for success because the local health director was willing to support the physicians.

5.3.4 Public Health in a Primary Care Setting

One respondent explained that the experience with H1N1 (a subtype of the influenza virus that caused a pandemic in 2009) in Vancouver Island Health Authority provides a good example of collaboration between primary care and public health. This partnership included public health, primary care, the BC Centre for Disease Control and more health organizations. It included daily reports on outbreak statistics from the Office of the Provincial Health Officer. Barriers were broken down as primary care providers were given access to vaccines and Tamiflu.

One respondent described the immunization experience in Fraser Health Authority. Immunization provided by physicians has declined over time, so public health worked directly with primary health care through a physician focus group to determine the barriers to providing immunization. Results showed that doctors opt out because they view immunization as complex and not cost effective. The focus group resulted in specific changes, including improvements for availability of vaccines, streamlined paperwork and communication through medical health officers. According to the respondent, while there have been

no quantitative changes in immunization rates, qualitative evidence suggests that the focus group has helped doctors feel more supported.

One respondent described an example of allied health professionals working in primary care that were told by their public health supervisor to work on health promotion, a traditional public health activity, for one half day per week. In doing this public health work and by stepping away from clinical practice, these primary care practitioners recognized that healthy food subsidies for people on income assistance were low. The primary care practitioners then worked to change the policy to raise the subsidy. According to the respondent, it is generally accepted that public health focuses on policy while primary care focuses on clinical work. However, in this example coaching by public health allowed the clinical care team to recognize the need for a change and write a proposal to change a healthy public policy. Collaboration between primary care practitioners along with coaching by public health was able to change the policy. Without public health context, the primary care practitioners would not have recognized that policy work was within their scope.

5.3.5 Other Examples

Three respondents explained that collaboration naturally occurs when public health and primary care services are co-located. One of these respondents explained that in remote areas where services are provided by outpost nursing hospitals, public health and primary care functions are all provided in one location, and often by the same person. Another respondent described a one-stop shop providing primary care outreach services where the providers consider themselves to be both primary care and public health practitioners, providing services to vulnerable populations who are not well-served by the health system. These organizations are well networked with other organizations to connect patients to other providers.

One respondent discussed the development of an Aboriginal Health and Wellness Centre. The centre was developed in an area that had a negative association with Aboriginal people, and included education, social support, an art/culture centre, a primary care clinic with traditional medicine, and an employment centre. Professionals from primary care and the local health authority worked together to determine scope and determine how to work together. The scope of the project was so broad that it encouraged people to drop their egos, work together, and resulted in crossover of traditional roles. The respondent explained that the health and wellness centre was very successful and has made improvements over time, including adding a daycare to provide childcare to those taking courses through the centre.

5.4 Summary

This chapter reported the findings from 21 interviews with leaders in public health and primary care collaboration and organized them by themes that provide insight into how respondents understand collaboration, what they see as the qualities that effect collaboration, and provide examples of effective collaboration. Respondents explained what they saw as important qualities of collaboration, provided definitions of collaboration and shared their thoughts on how collaboration should move forward and be structured.

Respondents also discussed contextual and individual qualities that have the potential to effect collaboration and the conversation about collaboration. Often respondents identified that the presence of a quality as a barrier to collaboration and the absence of the same quality as a facilitator and vice versa. Having a strategic imperative for collaboration in the form of a mandate, vision or shared goals was seen by respondents as an important elements to collaborative work. Many respondents identified the need for

evidence to support and structure collaboration, and to evaluate collaborative activities. Most respondents highlighted personal qualities such as willingness to work together, buy-in to the idea of collaboration, communication, qualities of leaders and development of relationships as necessary elements in beginning collaboration between public health and primary care. Contextual qualities such as interdisciplinary differences, knowledge of public health and primary care, and unique organizational structures were highlighted by many respondents as areas that have the potential to impede or bolster meaningful collaborations. Respondents also identified resources such as limited time and large workload as challenges that can act as a barrier to collaboration.

Finally, many respondents described examples of successful collaboration between public health and primary care. These diverse examples included policy development at a leadership level, such as development of practice guidelines, programs and health plans, and targeted interventions for specific populations. Other examples included maternity care programs, public health interventions in a primary care setting, co-location of primary care and public health services, and community development.

6.0 Discussion

The purpose of this report was to determine how public health and primary care can collaborate effectively. This included identifying examples and common models of collaboration and identifying barriers and issues that prevent collaboration from occurring and their possible solutions. This chapter discusses the interview findings in relation to the relevant literature and is comprised of two sections. The first section discusses how most barriers stem from the divergence of the two sectors and include historical, educational and organizational differences. The second section discusses how differences and similarities between the literature and interview data affect the understanding of the concept of collaboration. Definitions, examples and models of collaboration are not consistent, and for public health and primary care to collaborate effectively, some of these discrepancies should be managed. Also, for public health and primary care to collaborate effectively, the gap between the two sectors should be reduced by addressing some of these barriers and interested parties should work together to develop a common understanding of collaboration.

6.1 Considerations for Bridging the Gap

Primary care and public health have had a complex relationship resulting in distance and differences between the two sectors, an idea supported by both respondents and the literature (Lasker, 1997). These differences have given rise to barriers that prevent collaboration (Bhopal, 1995; Bradley & McKelvey, 2005; Busby et al., 1999; Martin-Misener & Valaitis, 2009; Novosel & Sorensen, 2010). The factors that maintain the distance between public health and primary care discussed below are those explored in the literature, supported by the interviews and have the most relevance to the province of BC.

6.1.1 Interdisciplinary

The gap between public health and primary care is maintained through a number of interdisciplinary differences, including different values, education and a poor understanding of the other discipline's roles and responsibilities. To start, primary care places a higher value on the immediate needs of patients while public health focuses on population health (Bhopal, 1995). Further, educational programs for public health and primary care do not overlap. Primary care education does not contain courses about public health and population health, and while public health professionals often have a general understanding of primary care (Hannay, 1993), their education programs do not contain sufficient information about primary care. Educational programs in BC are no exception (Wong, et. al., 2009). Without a common educational background, public health and primary care professionals are not able to become familiar with the roles and responsibilities of both sectors. In fact, there was agreement between the researchers and interviewees that professionals often do not understand the work done by those in the other sector (Bhopal, 1995), even when they work in the same organization or building. Successful collaborations require professionals to understand each other's roles and value the time and resources of both sectors (Bhopal, 1995). When people understand each other, they are more likely to develop mutual respect and trust, which are qualities identified by both researchers and interviewees as important to collaboration (Struthers et al., 2009).

It appears that one way to overcome these differences between the sectors is through education. Shared training has the potential to help public health and primary care understand the roles and responsibilities of each sector (Horne & Costello, 2003), and to help them rediscover their common history (Hannay, 1993). To facilitate this, current education programs for public health and primary care should be

modified to encourage interdisciplinary work and increase interdisciplinary knowledge. Integrating public health e-learning courses into clinical programs could be a potentially effective tool to providing public health training to primary care providers (Hemans-Henry, Greene & Koppaka, 2012). As suggested by interviewees and researchers, developing and delivering educational programs to those already working in the field would help to bridge the knowledge gap between public health and primary care (PHAC, 2005). This kind of professional development could focus both on providing information of the background, roles and responsibilities of each sector, and on developing skills to work across disciplines.

6.1.2 Organizational Structure

The divide between public health and primary care also manifests in the health care system structure in BC which creates unique barriers for how the sectors can collaborate effectively. In recent years, the public health division of the Ministry of Health was located in a different ministry, separate from the rest of the health care system. Although the public health and primary care divisions are now located in the same ministry, the division between the sectors is persistent and creates challenges to working collaboratively at the leadership and policy level.

6.1.2.1 General Organizational Challenges

The lack of shared organizational structure makes it difficult for primary care and public health to have a shared vision and common goals. These strategic elements are important parts of effective collaboration (Arora et al., 2000; Martin-Misener & Valaitis, 2009; Struthers et al., 2009), and sharing goals and a vision could help collaboration move forward. In fact, public health and primary care may already share goals, specifically population health goals (PHAC, 2005). However, there was no consensus among respondents that the sectors share population health goals. Some interviewees stated that public health and primary care collaborative work should focus on the patient, while others said it should focus on the population or both the patient and the population. This incongruity suggests that public health and primary care are still not clear about what goals they share and need to work together to determine possible collective objectives.

Collaboration is challenging because public health and primary care are already overextended. Any collaborative work completed by primary care professionals is in addition to an already heavy workload (Busby et al., 1999). Public health practitioners also experience an excess of work with a shortage of time (Bhopal, 1995). Time shortages make collaboration challenging because people need time to develop the relationships that are essential to working together effectively. Further, working collaboratively requires more time than working independently (Bradley & McKelvey, 2005). In addition, externally imposed timelines can rush work that has the potential to be collaborative. When projects have government imposed schedules for implementation, they do not allow for the time needed to develop relationships and work together is not available, so professionals move forward with the work independently.

Overcoming these organizational barriers requires strong leadership, a concept supported by both interview data and the literature. For example, respondents emphasized that leaders in both sectors need to be knowledgeable about collaboration, understand why it is important and provide it with support. Leaders at both regional and central levels should understand that collaboration is important to ensure that policies and frameworks support collaboration (PHAC, 2005). Supportive and knowledgeable leaders have the ability to work with other leaders to develop a shared vision and common goals for public health

and primary care. If leaders support visions or goals that support collaboration, public health and primary care professionals will be able to prioritize their work and find time to spend on collaboration.

However, it appears that leaders may encounter challenges supporting collaboration because employees might be skeptical of the efficacy of collaboration. While collaboration results in positive outcomes (Horne & Costello, 2003; Martin-Misener & Valaitis, 2009; Novosel & Sorensen, 2010; Starfield et al., 2005; Struthers et al., 2009), some researchers are more skeptical, and are uncertain that research supporting collaboration exists (Busby et al., 1999; Portersfield et al., 2012). For example researchers explained that public health intended outcomes are unclear (Widmer, 2011), and that prevention lacks evidence supporting its efficacy (Kearney et al., 2005). Uncertainty can lead to resistance, which makes collaboration more difficult (Benady, 2003; Bindman et al., 2001; Martin-Misener & Valaitis, 2009; Millar et al., 2011).

To obtain this buy-in and interest in collaboration from staff, leaders need to present evidence that supports collaboration. Most of the examples of collaboration identified in the literature review and by respondents had not been evaluated, revealing an opportunity for leaders to encourage those who complete collaborative activities to evaluate them for effectiveness. Many respondents explained that having appropriate measures of success is important and suggested developing indicators and reporting out on their success. Leaders are in a position that allows them to promote the development of indicators and support reporting on the status and success of collaborative activities.

6.1.2.2 Structure of Primary Care

The structure of primary care in BC also presents organizational challenges. Connecting with public health as a group is fairly straightforward in BC because most public health professionals work in a central organization such as the Ministry of Health or a health authority. However, while some primary care leaders are employed by the Ministry or health authorities, most primary care professionals are general practitioners working in privately run clinics. This makes connecting with primary care as a group more challenging than connecting with public health. Despite the difficulty in involving primary care, connecting with physicians is an important part of public health and primary care collaboration, an idea supported by both respondents and the literature (Parton, Perlman, Koppaka & Greene, 2012). Further, connecting with primary care is also made more challenging because primary care and public health do not share information systems. Instead, they track patient and population data independently. Researchers have found that this lack of shared systems act as a barrier to collaboration (Bindman et al., 2001), and that sharing information helps to improve collaboration between public health and primary care (Klompas et al., 2012; PHAC, 2005; Martin-Misener & Valaitis, 2009).

This organizational difference also affects compensation. While some physicians are employed by health authorities, most physicians in BC are paid via a fee-for-service model that has physicians receiving reimbursement for different medical interventions they provide to patients. In contrast, public health professionals employed by health authorities or government are paid a salary. The different compensation methods make working together difficult. For example, interview respondents noted that this is a barrier for public health and primary care to work together because when family physicians take time away from their practice to work on collaborations with public health they are not compensated. Further, the literature reports that being paid in privately operated businesses can prevent collaboration with the health care system (Wong et al., 2009).

Financial and human resources are also required to overcome the barriers related to the structure of primary care in BC. Interviewees indicated that providing physicians with an avenue to get reimbursed would acknowledge the unique position of primary care in BC, and encourage physicians to take part in collaborative work. Respondents supported the literature stating that provision of compensation to those who work on collaborative projects has the potential to make collaboration more successful (PHAC, 2005). Financial support can move beyond physician compensation. Interview data and the literature state that collaboration has the potential to be expensive and finding the resources to support it might be difficult (Novosel & Sorensen, 2010). Provision of funding for collaboration can also help make it successful (Martin-Misener & Valaitis, 2009). Some interviewees suggested that funding should be specifically designated for collaborative work and cannot be used for other areas of health care. Marked funding might alleviate some fears that exist in public health of losing funding and stimulate interest in collaborative work.

6.2 Understanding Collaboration

Bridging the gap between the sectors is only one way for public health and primary care to collaborate effectively. A common understanding of collaboration does not exist, which potentially creates a barrier to working together effectively. The following section provides a discussion of literature and interview results in relation to how collaboration is understood, including collaboration definitions, models and examples. These findings demonstrate that collaboration is understood in different ways. Opportunities to build relationships between public health and primary care and to develop a shared understanding both make collaboration effective.

6.2.1 Models, Examples and Definitions

Commonly accepted models of collaboration do not exist. Many researchers and policy makers have attempted to categorize collaboration based on different characteristics, such as structure, goals, or a combination of the two. None of these models of collaboration provides a perfect blueprint for how collaboration should occur, and some researchers argue that a common model is non-existent (Institute of Medicine, 2012). None of the interview respondents identified a model of collaboration that guides their understanding of public health and primary care partnerships. Some respondents and the literature discussed that collaboration may occur on a continuum of integration (Institute of Medicine, 2012), yet none of these interviewees used this continuum to provide meaning to the examples of collaboration they provided. These interview results appear to indicate that finding a common model for collaboration may not be necessary to help people understand how public health and primary care can collaborate effectively. Respondents were comfortable discussing collaboration through concrete examples as opposed to theoretical models.

Examples of collaborative activities are subjective and dependent on individual exposure and knowledge of collaboration. Accordingly, similarities and differences arose in the examples of collaboration discussed in the literature review and by respondents. The literature revealed three categories of collaboration: integration, utilization of nurses and targeting specific health problems. While some of the examples of collaboration provided by interviewees were similar, the comparison revealed some surprising differences.

It appears that integration is more relevant in jurisdictions outside of British Columbia. The literature review revealed that integration is a popular and commonly understood type of collaboration in North

America and Western Europe. However, while some respondents discussed public health and primary care services co-located in the same building, they did not specifically refer to Community Health Centres, a British Columbian example of Community Oriented Primary Care (a form of integration). Further, none of the examples of effective collaboration provided by respondents described complete integration. This deviation from the literature is likely due to the independence of the public health and primary care systems in BC. Integration of these two systems in BC would require a major change effort. As a result, respondents are not familiar with integrated collaborative examples, since many of their experiences were restricted to BC.

The deployment of nurses as a key to collaboration is not a commonly accepted concept. The literature identified nurses as a key to effective collaboration, while in general, respondents did not. While many of the examples provided by interviewees included public health and primary care nurses working collaboratively with other professionals, the presence of nurses did not stand out to the majority of interviewees as the most important part of the examples. The limited focus on nurses might be because respondents focused more on the context and overall understanding of the collaborations as opposed to the individual roles of each professional involved. As most of the interviewees in the research study were leaders in health authorities and the Ministry of Health, a focus on the larger picture fits in with the strategic nature of their roles.

Despite these differences, a commonly understood type of collaboration appears to be targeted interventions for specific health problems. In the literature review, examples included collaborative activities that occurred across settings and within a public health setting. Many of the examples provided by respondents worked across settings, such as policy development for patients at risk of developing preventable diseases and targeted programs for vulnerable populations. Other examples were of collaborative activities provided in a primary care setting, such as maternity clinics and health promotion with dietitians. However, despite these similarities, the examples provided by respondents did not fit into the categories that came out of the literature review. This appears to show that international examples may not align directly with examples of collaboration from British Columbia.

There does not appear to be one universal definition of collaboration. When providing definitions of collaboration, many interviewees shared common ideas, such as working together. However, each definition was unique. Collaboration means different things to different people and that primary care and public health should work on developing a shared understanding of the word. When interviewees provided examples of successful collaboration between primary care and public health, the differences in understanding of collaboration were clear. While some respondents described the same examples of collaboration, most respondents described distinct illustrations of public health and primary care partnerships. For example, while some respondents described only examples that occurred within the Ministry of Health, others discussed examples of co-location of services in rural clinics, while others described targeted initiatives to seek and prevent HIV/AIDS. The examples provided were heavily based on the experience and knowledge of the respondents, which undoubtedly led to divergent understandings of what it means to collaborate effectively.

6.2.2 Moving Forward

The diverse understanding of collaboration seen in the models, examples and definitions has potential to create challenges to working collaboratively. People may find themselves disagreeing with each other

because they do not share an understanding of the terminology, not because they do not share similar opinions and thoughts. Moreover, research notes that without a common understanding of collaboration, people involved might not know where to begin (Bradley & McKelvey, 2005). Since all of the respondents understood collaboration differently, it would be difficult to impose one definition and expect every public health and primary care professional to agree and identify with it. Further, although some respondents stated that a shared understanding of the word would help collaboration occur, it does not appear to be a necessary component to understanding what collaboration is. Most of the respondents were confident and clear that the examples they provided illustrated successful public health and primary care collaborations.

Encouraging conversations about collaboration can help to begin to break down barriers in understanding and help build relationships. Connections between professionals can improve collaboration (Bhopal, 1995; Widmer, 2011). Respondents emphasized the need to discuss practical projects at a community level, preferably face to face, to help people network and build relationships. Since respondents clearly understood the examples they provided about collaboration, sharing these examples might be more effective than imposing a theoretical model of collaboration onto professionals. Researchers suggested that joint committees (Widmer, 2011) community planning (PHAC, 2005) might provide opportunities to increase communication between the two fields. Respondents familiar with the organization structure in BC suggested that Divisions of Family Practice, Collaborative Services Committees, and the Practice Support Program would all provide opportunities to have discussions about collaboration. These pre-existing organizational structures provide access to the primary care physicians who are usually harder to connect with because of their decentralized organization. Further, these opportunities would be a way to involve front line workers. Interviewees expressed the view that involving service delivery workers, particularly physicians, is an important part of collaboration. Encouraging communication about collaboration between the sectors helps to facilitate interest and buy-in to the process, and can also help overcome some of the challenges of ego and turf that are due to some of the interdisciplinary and organizational differences between the sectors.

6.3 Summary

This chapter has discussed respondent interviews in relation to the literature review. The discussion includes the historical, educational and organizational differences between public health and how this gap between the sectors creates barriers to effective collaboration can be overcome through education, leadership and provision of resources. Further, different perspectives about collaboration, including definitions, examples and models, present another barrier that can be overcome with communication and opportunities to develop a shared understanding of effective collaboration. These concepts provide the foundation of the recommendations presented to the BC government in the next chapter.

7.0 Recommendations

This chapter outlines recommendations to Sylvia Robinson, Joint Director, Public Health and Primary Care Collaboration at the Ministry of Health to answer the research question:

In what ways can the primary care sector and the public health sector collaborate effectively?

Seven recommendations are proposed based on research conducted for this report. They follow from the key challenges presented in the discussion. The recommendations are organized based on the relative level of implementation complexity. Recommendations one and two can be implemented primarily through changes at the Ministry level. The recommendations that follow require increasing coordination with other stakeholders, and will potentially take longer and require funding to implement.

7.1 Promote Collaboration:

Public health and primary care professionals need to know that collaboration is important and effective. There are two ways to increase this knowledge. First, strong leadership is required to direct collaboration and set priorities to make collaboration part of everyday work. Second, people interested in collaboration need to understand what collaboration is and what it looks like so they can determine how they can apply it to their own work. Both of these can be addressed by promoting collaboration.

Recommendation 1: Include Public Health and Primary Care Collaboration as a Goal in the Annual Service Plan

Inclusion of collaboration as a goal in the Ministry's annual service plan will ensure that it is recognized as a priority for the Ministry and consequently the health authorities and their employees. With collaboration recognized as a priority, public health and primary care practitioners will be more likely to participate in collaborative activities. Collaboration could be included within existing goals, incorporated into the vision or adopted as a new goal within the plan.

This change could occur in the Ministry of Health 2014/15-15/16 Service Plan that is set to be released in February 2014. In the Governance Letters of Expectation to the health authorities, the Ministry would provide direction that the health authorities must adapt their service plans to reflect the changes in the Ministry's plan. As a goal in the service plans, collaboration would become a strategic imperative that leaders in the Ministry and in health authorities will use to guide decisions and programs.

Recommendation 2: Develop an Educational Presentation to Share Collaborative Stories and Success and to Promote Discussion

For public health and primary care professionals to buy into collaborative activities they need to understand what collaboration is, what it looks like and how it can be effective. Sharing stories of successful collaborative activities between public health and primary care will increase knowledge of collaboration and its potential positive effects, and help stimulate discussion at a local level regarding possible opportunities for collaboration. As the steward of the healthcare system in BC, the Ministry is in a position to spread knowledge about collaboration and provide examples of collaboration to professionals to stimulate conversations.

The Ministry could develop an educational presentation to inform leaders and practitioners around the province describing current collaborative activities and related positive outcomes. The presentation would include opportunities for discussion about what collaboration means to the participants and opportunities to network. It would encourage evaluation of future collaborative activities to add to the body of evidence supporting intersectoral work.

The Ministry would deliver the educational presentation at all levels, including to leaders within the Ministry and in Health Authorities, to employees within health authorities and at the Divisions of Family Practice and Collaborative Services Committees. The presentation would be developed by January 31, 2013 and delivered throughout 2013 and 2014. Resources for this presentation will be provided to the client as a separate deliverable for this project.

7.2 Facilitate Communication:

Public health and primary care professionals work in independent organizations that do not often connect with each other. Communication is imperative for successful collaboration as people need to know each other before they can work together.

Recommendation 3: Provide Opportunities for Public Health and Primary Care Professionals to Connect

The Ministry could facilitate opportunities for public health and primary care professionals to connect with each other and build relationships. These networking opportunities would focus on sharing information about the roles and responsibilities of public health and primary care and sharing experiences of collaboration.

Representatives from the Population and Public Health Division should be added to the General Practice Services Committee (GPSC), which already contains representatives from the Medical Services and Health Human Resources Division and the BC Medical Association (BCMA), to develop these networking opportunities. They should be added to the GPSC by March 31, 2013.

These networking opportunities would occur at many levels. The Ministry would start by facilitating interdivisional networking between Population and Public Health Division and the Medical Services and Health Human Resources Division, as the two divisions are located within the same organization and planning does not require stakeholder involvement. A working group would be formed in the Ministry by June 30, 2013 to start internal networking events that should occur before the end of 2013.

Divisions of Family Practice and Collaborative Services Committees would be potential venues for regional networking events because they provide settings where physicians already meet locally. These networking opportunities would occur after those at the Ministry level because they will take more time and cooperation to coordinate. Working groups would be formed in each health authority region and include representatives from the Ministry, the applicable health authority, the Divisions of Family Practice and Collaborative Services Committees. Planning for these events would begin in January 2013. The GPSC would work together to determine how best to coordinate regional networking events over the next one to two years and begin holding the events throughout the province in 2015.

7.3 Develop Education Options:

The gap between public health and primary care is maintained primarily through differences between the sectors in values and education. Public health and primary care professionals do not have the opportunity to learn about the other sector and their roles and responsibilities. Development of education options addresses this barrier to collaboration and allows professionals from both sectors to gain a better understanding of their colleagues.

Recommendation 4: Incorporate Collaborative Work into Existing Curricula

The Ministry could work with stakeholders to improve public health and primary care education programs in BC. These changes would include providing information in the public health curricula about primary care, its roles, responsibilities, values and philosophy, and its shared history with public health. The same information about public health would be provided to primary care students. The curricula would also be adapted to increase awareness of how public health and primary care can work together toward common goals and about successful collaborative activities.

This topic should be added to the agenda of the joint committee for health care education between the Ministry of Advanced Education and the Ministry of Health. This committee would then work to determine where and when this information would be presented in the curricula and what other information to include. This topic should be added to the agenda by December 31, 2013 and the committee should develop changes to the curricula that would be implemented in programs beginning in September 2015.

Recommendation 5: Establish Professional Development Options

To increase awareness of interdisciplinary work for those who have completed formal education, Ministry staff could develop and deliver professional development opportunities. Staff from both the Population and Public Health Division and the Medical Services and Health Human Resources Division could work together and consult with partners including health authorities and the GPSC. These professional development courses would be offered to employees of health authorities and the Ministry through internal human resource learning centres. One option for delivery to primary care professionals would be through the Practice Support Program offered by the GPSC. These opportunities would provide information about how public health and primary care function as disciplines and their common history and goals. The courses would be developed over the next two years and be ready for delivery beginning in January 2015.

7.4 Provide Financial Support:

Collaboration demands increased funding. The staff and funds required to coordinate activities across disciplines require resources to move forward. Further, while public health employees that receive a salary receive payment, family physicians are not reimbursed when they when they work on collaborative activities. Provision of funding support to collaborative activities helps to overcome these barriers.

Recommendation 6: Provide Funding for Collaborative Work

The Ministry could provide funding for collaborative activities between public health and primary care. Funding would take the form of evaluation services for collaborative activities or regional administrative coordinators and project managers to support collaborative activities and lead projects. A steering committee would be formed by March 31, 2013 to determine how these resources would be allocated. The committee would include representatives from the Ministry of Health, including representatives from the Population and Public Health Division and the Medical Services and Health Human Resources Division, the BCMA, health authorities and the GPSC. The steering committee would provide strategic direction by December 31, 2013. Working groups would be formed by March 31, 2014 to begin implementation of projects or programs determined by the committee.

Recommendation 7: Develop Funding Mechanism to Reimburse Physicians

Physicians could be reimbursed for time spent on collaborative activities with public health which would eliminate financial hardship and increase the likelihood that physicians will participate in collaboration. Representatives from the Population and Public Health Division could be added to the GPSC to work to determine how to administer these funds. Potential options for payment include delivery of funds through the GPSC's existing funding agreed to in the Physician's Master Agreement, or delivery of funds through the Divisions of Family Practice or through the Medical Services Plan of BC. Public health representatives should be added to the GPSC by September 30, 2013 and the GPSC would make decisions regarding compensation classification and amounts by March 31, 2015. A working group would then be formed to implement the changes and inform physicians of the new payment option beginning in January 2016.

8.0 Conclusion

This report was completed for the Joint Director of Primary Care and Public Health Collaboration at the BC Ministry of Health to determine how to facilitate collaboration between public health and primary care in BC. Specifically, the report aimed to identify examples and common models of collaboration, and identify barriers and issues that prevent collaboration from occurring and their possible solutions. A review of academic and professional literature about public health and primary care collaboration was completed, along with interviews with leaders in the area of public health and primary care collaboration. Interviewees included representatives from both primary care and public health and were employed by the Ministry of Health, regional health authorities, research institutions and professional health organizations.

Collaboration between primary care and public health is important to provide effective and efficient health care services to individuals and populations. However, collaboration between these two sectors is only one part of a much broader system. Future research could focus on how public health and primary care can work with other areas of health care, such as community care and acute care, and other social services.

This report suggests that strong leadership, open communication, education and funding are all important elements required to facilitate collaboration between primary care and public health. Collaboration is already occurring throughout the province and BC is in a position to build on current successes and leverage opportunities for further collaborative work to deliver high-quality services to British Columbians.

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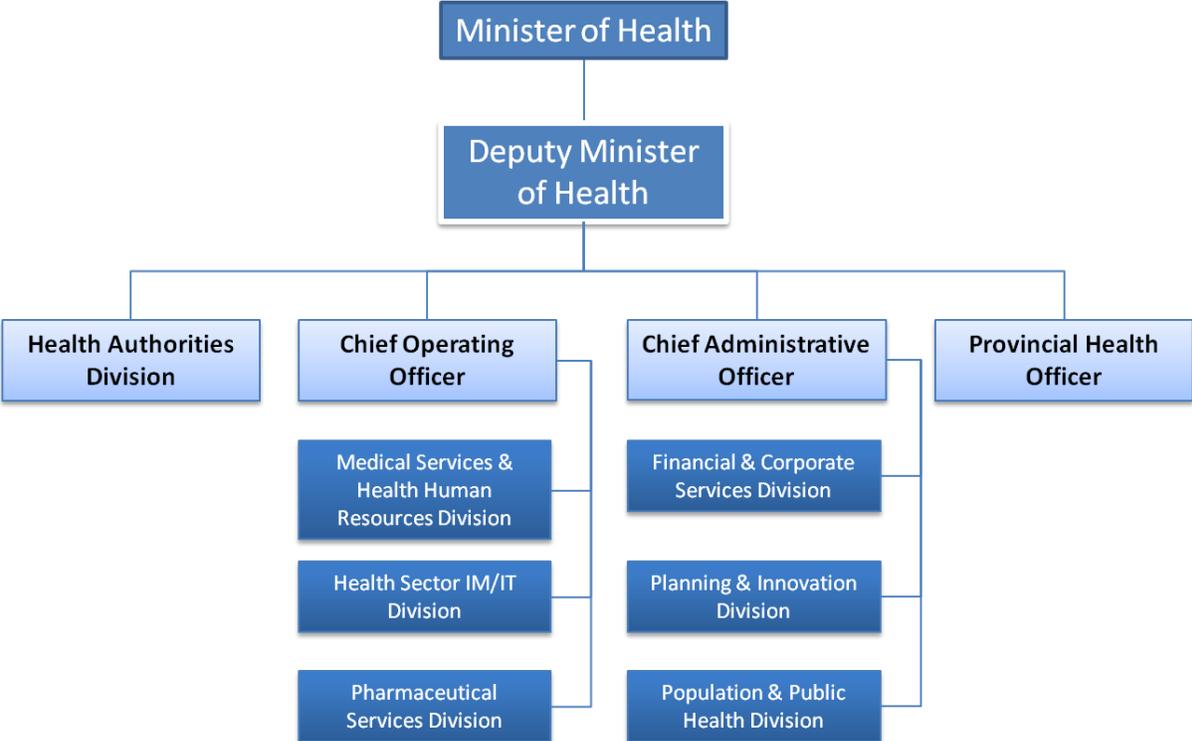
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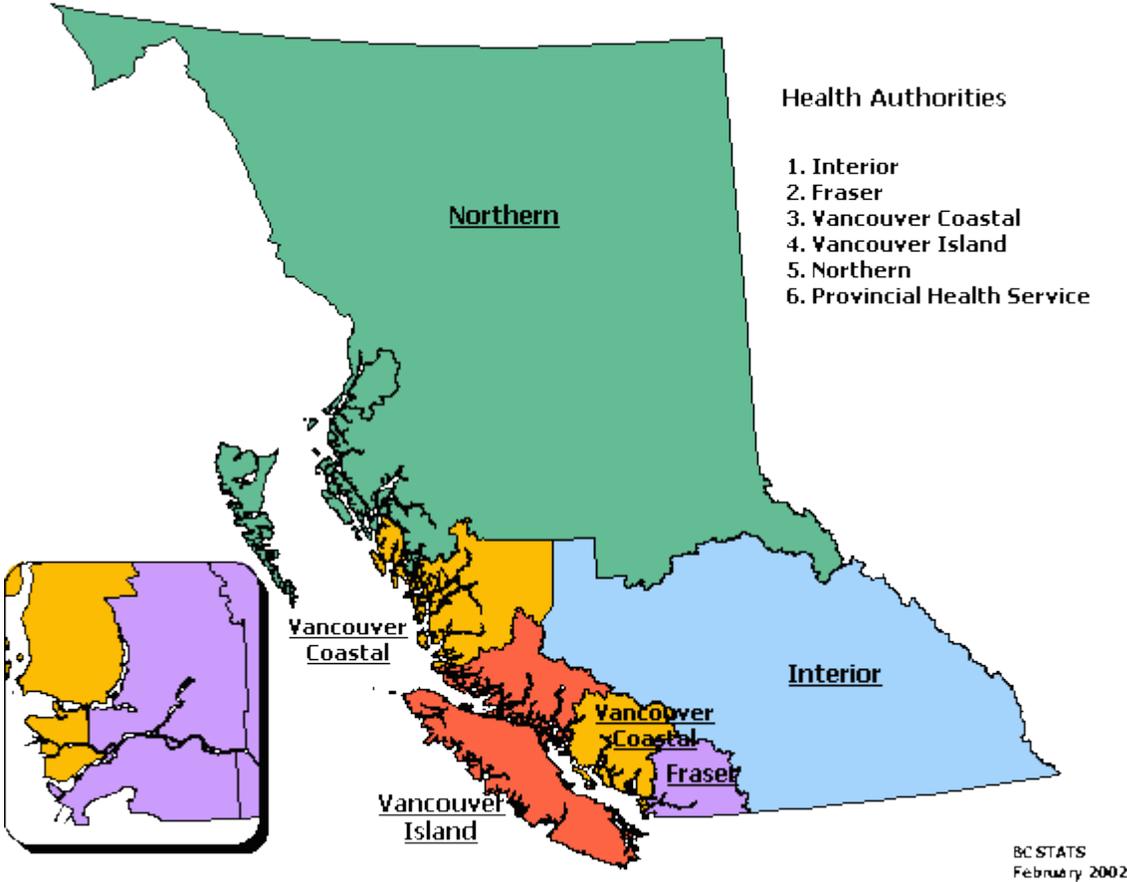
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10.0 Appendices

10.1 Appendix A: Ministry of Health Organizational Chart



10.2 Appendix B: Map of Health Authorities in BC



Reprinted from BC Ministry of Health (2012). Map of the provincial health authorities. Retrieved from: <http://www.health.gov.bc.ca/socsec/provmap.html>

10.3 Appendix C: Interview Guide

1. Can you tell me more about your role in the health care system?
2. My project is about collaboration between public health and primary care. Can you tell me about what collaboration means to you in this context?
3. Can you provide me with any examples where you've seen collaboration happen in a positive way?
4. What do you see as the barriers that prevent collaboration from occurring or prevent it from being successful?
 - a) If there were no barriers, what do you think prevented them from occurring?
 - b) If there were barriers, was there anything that was done, or could have been done, to help overcome them to make collaboration easier?
5. From your perspective, what do you see as the keys to successful collaboration?
6. What do you think are ways to make the conversation about collaboration more successful?