2010 - 11 Gap Analysis & Improvement Plan:
Chronic Disease Prevention
Core Public Health Program

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Provincial Health Services Authority
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Introduction

In 2005, the BC Ministry of Health released a policy framework to support the delivery of effective public health services. *The Framework for Core Functions in Public Health* identifies 20 core programs that a renewed and comprehensive public health system must provide. Evidence reviews are conducted for each core program to inform model core program papers, against which each health authority is responsible to perform a gap analysis and develop an improvement plan.

The objectives of the Chronic Disease Prevention core program are to:

- Enhance coordinated systemic support for population health initiatives, positive lifestyle behaviours and other protective factors that reduce chronic diseases at all stages of the lifecourse;
- Prevent and/or reduce modifiable risk factors that influence the occurrence and severity of chronic diseases;
- Reduce health disparities among different segments of the population with regard to chronic diseases;
- Increase the early detection of the chronic conditions which can be prevented and/or controlled through early intervention; and
- Enhance the health-related quality of life of people with chronic illnesses to prevent the deterioration of their condition and the occurrence of additional co-morbid diseases.

A number of key foundations, based on the literature and experience of experts in the field are considered necessary for achieving progress and successful outcomes in chronic disease prevention. These are:

- A population health approach which takes into account social, economic and environmental determinants of health including protective factors, risk factors and vulnerable populations;
- A comprehensive set of universal policies and programs focused across the lifespan and lifecourse and encompassing multiple settings and a “whole of society” approach;
- Multi-sectoral and multi-disciplinary collaboration by primary health care and public health partners, as well as community, regional and provincial partners to integrate health promotion, disease prevention, early identification and early intervention;
- The use of equity lenses to identify systemic barriers and differential impacts of health determinants on the lives of women and men and on vulnerable populations;
- Selected, targeted interventions for at-risk families and vulnerable populations;
- Healthy public policies, capacity building, skills development, and advocacy for best practice implementation by local and regional partners;
- A culture of evidence-based practice, evaluation and continuous quality improvement.

The program outlines four core components through which health authorities can support the objectives listed above. These are:

- Population health promotion;
- Clinical prevention of chronic disease;
- Prevention as part of chronic disease management and self-care; and
- Surveillance, monitoring, and program evaluation

The purpose of this document is to present PHSA’s gap analysis and improvement plan in relation to the Chronic Disease Prevention core program.

Background

PHSA's Strategic Plan 2010-2013 identifies *Creating Quality Outcomes and Better Value for Patients*, *Promoting Healthier Populations* and *Contributing to a Sustainable Health Care System* as its three key strategic directions. The PHSA's Population & Public Health initiatives support mainly the *Promoting Healthier Populations* strategic direction.

In 2009, the PHSA Centres for Population & Public Health model was launched as a coordinating mechanism to support the commitment made by PHSA's Executive Leaders Council and Board to advance population and public health in BC. The Centres provide a venue to leverage expertise across PHSA agencies and programs, facilitate knowledge exchange and collaboration, and coordinate PHSA's response to the Core Public Health Functions requirements. The Centres provide a mechanism for PHSA to internally coordinate primordial and primary prevention activities and link with external agencies to address issues across the province. The Centres are responsible for:

- Leveraging expertise and knowledge of key agencies.
- Developing gap analyses and performance improvement plans for Core Public Health Programs and report on progress of the plans.
- Collaborating on planning, implementation and evaluation of population and public health primary prevention projects funded by PHSA.
- Being a point of contact with external groups, including health authorities, government, community groups, aboriginal groups and other stakeholders; offer, and provide support to them in addressing province-wide needs through knowledge synthesis, transfer and exchange, coordination/facilitation of surveillance, consistent messaging, supporting healthy public policy and expert advice.
- Being a point of contact with academic institutions and a venue for coordinating and expanding academic initiatives in population and public health.

The PHSA Centre for Chronic Disease Prevention has undertaken the responsibility for developing the gap analysis and improvement plan for this core program.

Context

The Provincial Health Services Authority (PHSA) is responsible for ensuring that high-quality specialized services and programs are coordinated and delivered within the regional health authorities. PHSA operates eight provincial agencies including: BC Mental Health & Addiction Services, BC Children's Hospital, BC Women's Hospital, BC Centre for Disease Control, BC Cancer Agency, BC Renal Agency, BC Transplant and Cardiac Services BC. All of these agencies contribute to the chronic disease prevention (CDP) agenda through either agency specific activities or participation in activities that cut across PHSA as a whole.

Due to the provincial scope of PHSA's mandate, a dual role related to core programs has emerged for PHSA: improvements aimed at streamlining PPH activities within PHSA agencies and programs, as well as potential provincial coordination in areas such as surveillance, consistent messaging, expert advice, and supporting development of healthy public policy. The role for PHSA could be to: convene and coordinate provincial dialogue; facilitate the identification of common needs and joint problem solving; collaborate with and support regional and provincial partners to meet common needs; and jointly identify available resources for common initiatives.

It is important to note that the primary focus of the chronic disease prevention model core program paper was to look at chronic, non-communicable disease conditions that have not already been addressed in other core programs. For this reason, chronic communicable diseases addressed in the Prevention & Control of Communicable Diseases core program were omitted, as were mental health disorders addressed in the Mental Health Promotion & Mental Health Disorders core program and injuries which were included in the Unintentional Injury Prevention core program. Of the remaining diseases in the CDP model core program, while PHSA may make a contribution, it does not have a lead role to play in addressing most neurological disorders, sensory disorders, diabetes, musculoskeletal disorders, respiratory disorders or digestive disorders.

PHSA Role

PHSA does, however, play a lead role in addressing cancer (through the BC Cancer Agency), cardiovascular disease (through Cardiac Services BC), and genitourinary disorders (through BC Provincial Renal Agency) in addition to other important promotion/prevention roles.

The BC Cancer Agency (BCCA) is responsible for cancer care for the people of B.C. The Agency's cancer control program includes research, education, prevention, care and treatment, and is provided through its five regional centres in Vancouver, Vancouver Island, the Fraser Valley, Abbotsford and the Southern Interior. BCCA also has partnerships with other health care providers (physicians, pharmacists, nurses and others) and regional hospitals and clinics across B.C. to bring care closer to home for those who do not live in urban centres. BCCA has refined key messages of cancer prevention and developed programs that help British Columbians lower their risk of cancer by avoiding the main risk factors for the disease. The BC Cancer Agency Prevention Programs seek to implement cancer prevention at the community level through a network of Prevention Educational Leaders (PELs) throughout BC. PELs support health authorities in implementing public education programs in their regions and encouraging cancer prevention through health-conscious practices. PELs also work to increase awareness, education and participation in BCCA's many cancer screening programs (e.g., Cervical Cancer Screening Program and Screening Mammography Program). Screening is used to detect the types of cancers that, when detected early, can reduce deaths.

Cardiac Services BC is responsible for the province-wide planning, coordination, monitoring, evaluation and funding of adult specialized cardiac services across the spectrum of cardiovascular disease. CSBC maintains a cardiac patient Registry containing 20 years of high quality cardiac-related procedural data. The data is used in monitoring and analyzing access time to service, projecting and planning future service requirements, analyzing and reporting on patient outcomes and supporting evaluation and research. Stroke is the leading cause of acquired long term disability in adults and the third leading cause of death in the province. Stroke is a highly preventable and treatable disease with the interventions currently available. Stroke prevention and care is currently not well organized resulting in decreased quality of life for stroke survivors and significant costs to the health care system. Recently, through Cardiac Services BC, PHSA accepted a leadership coordination role for the next phase of developing and implementing an action plan for stroke care in the province.

The mandate of the BC Renal Agency (BCPRA) is to plan and coordinate the care of patients with kidney disease throughout the province. This planning and coordination is accomplished through collaborative partnerships of renal care professionals, working with members of health

authorities, the Kidney Foundation, and UBC. As part of the mandate, the establishment and maintenance of an integrated comprehensive information system, which serves clinical, administrative and research purposes is used in planning and evaluative endeavors.

Not surprisingly, because of the lead role PHSA plays via the three major agencies just described, it is cancer, cardiac disease and renal disease that are the main focus of PHSA's activities related to the core program.

In addition to the promotion and prevention activities occurring in these three agencies, PHSA's role in chronic disease prevention also includes but is not limited to the following:

- Acting as a "knowledge resource" for the province by linking and using health information to reduce the burden of chronic diseases and to support provincial policy development. This involves contributing to research and knowledge exchange;
- Engaging in research on inequities related to chronic disease, such as gender specific evidence reviews; and,
- Collaborating with provincial Ministries, municipalities, the voluntary and private sector to promote active healthy living and healthy public policy for British Columbians.

This core program is different than others as it includes clinical prevention based on the Lifetime Clinical Prevention Schedule and often provided by primary care. PHSA contributes significantly to clinical prevention of chronic disease by supporting, promoting and encouraging their own staff and care providers to integrate the prevention of cardiovascular disease and infectious disease, cancer screening and smoking cessation into their practice where appropriate, in addition to providing some specific programs to support those activities.

Gap Analysis & Improvement Plan

Strengths Identified for the Chronic Disease Prevention Core Program

There is work going on throughout PHSA Agencies to address various components of the model core program. Several activities have been highlighted, to serve as examples of the type of work PHSA is engaged in. Where an activity overlaps with more than one component, the activity was listed within the component that reflects the primary activity.

Population Health Promotion

- Aboriginal Health Program: Indigenous cultural competency training; and, CPPH primary prevention projects in three communities to promote wellness through traditional activities for youth and elders.
- BC Children's Hospital: Childhood obesity prevention through the SCOPE (Sustainable Childhood Obesity Prevention through Community Engagement) project; CPPH primary prevention project for developing a healthy living toolkit for mental health for professionals who work with children & youth; and, early childhood development.
- BC Cancer Agency: BCCA prevention programs implemented regionally by Prevention Educational Leaders such as Healthy Living Schools, HeLP/Hi5Living, Stop Smoking Before Surgery, Sun Awareness, promotion of Screening Programs, and Tobacco Education and Action Module; reducing health inequities through a Northern BC Cancer Service Plan; establishing stronger links between cancer prevention and cancer

screening programs - for example: placing greater emphasis on prevention of second primary cancers, embedding messages of prevention within cancer screening programs and developing best practices and knowledge transfer between BCCA and those involved in primordial aspects of cancer.

- BC Women's: Women's Health Strategy – planning for possible renewal of the strategy; Sexual Health Framework; and, Women's Reproductive Health Screening Education & Training Course.
- PHSA Employee Wellness: Tobacco Cessation including Nicotine Replacement Therapy.
- PPH Team: Food Security – Data collection on cost of healthy eating and policy/action framework for public institutions on healthy eating; CPPH prevention project for Reducing Health Inequities which looks at how the health system can address inequities; and, the completion of a report making recommendations for an obesity reduction strategy for BC.

Clinical Prevention of Chronic Disease

- BC Cancer Agency: Family Practice Oncology Network - work with BCMA and the College of Physicians and Surgeons to disseminate information on clinical prevention; screening programs for breast health, cervical health, prostate cancer; development of the "Population Based Cancer Screening Framework for Design, Delivery & Evaluation" - focus of work has been on utilizing a multi-faceted approach rather than the medical model.
- BC Women's: Women's Heart Health CPPH project – a demonstration project that is contributing to the development of a set of guiding principles for designing prevention projects. Population-specific screening programs including: Asian Women's Access Clinic (for disabled women); Aboriginal Women's Wellness Provincial Outreach; and, BC Women's Nurse Practitioner Inner-City Outreach Services which aim to improve health promotion and access to primary care for multi-barriered and at-risk populations of women and families.
- BC Children's Hospital: Work is underway towards improving chronic disease services in preventing secondary morbidity for patients with chronic conditions through better communication with families and continuity of care. The Social Pediatrics Initiative is an intersectoral partnership led by Child Health BC which provides an alternative approach to care delivery for children who are vulnerable as a consequence of their social and material circumstances.
- PPH Team: completed cost effectiveness analysis for bariatric surgery and made recommendations for a bariatric surgery strategy for BC.

Prevention as part of Chronic Disease Management and Self-Care

- The self-care and self-management component of the model core program is integrated into clinical processes throughout PHSA. Several PHSA programs and services such as Cardiac Services BC, BC Provincial Renal Agency and BC Cancer Agency have a prevention component following a clinical intervention or diagnosis.

- BC Women's: The Osteofit program addresses the need for an accessible community program for those with osteoporosis or osteopenia, providing the link between physiotherapy and group fitness classes for those who are at risk for falls and fractures.

Surveillance, Monitoring and Program Evaluation

- BCCDC: The integration of all labs in the Lower Mainland is rolling up test data to allow the linkage or data to health outcomes which would be valuable for program evaluation.
- PHSA's Agencies and Programs: Many PHSA agencies such as BCCA, BCCDC and BC Provincial Renal Agency offer surveillance and monitoring capacity through registries and other databases.
- PPH Team: Providing analysis and interpretation of health inequities, obesity and bariatric surgery related data.
- PHSA-wide project to more effectively link existing registries.

As noted, agencies are doing work on various components of the model core program, and the intention is that they will continue to work together across agencies where appropriate.

In completing the gap analysis & improvement plan (GA/IP) process, the Centre for Chronic Disease Prevention chose to focus the gap analysis exercise on achieving a high-level understanding of what all the agencies were doing towards this core program. Given that agencies contributing to the core program each have their own quality improvement processes, the decision was made to focus the improvement plan on issues that would benefit most from being addressed collectively across PHSA versus as part of a particular agency's mandate, and that are aligned with PHSA's strategic plan.

In moving forward with implementing the improvement plan, it is important to consider other relevant core programs that interface with the activities of this plan.

Gaps for the Chronic Disease Prevention Core Program

The two model core program components, *clinical prevention of chronic disease*, and *prevention as part of chronic disease management and self-care* are managed by individual agencies in their clinical service delivery. As such, the analysis was mainly focused on the components of *population health promotion* and *surveillance, monitoring and program evaluation*. The gap analysis identified the following challenges related to these two components that could benefit from a cross PHSA agency approach.

Population Health Promotion

Population health promotion, and particularly the topic of health inequities, is a gap where there is opportunity to build on work that has already been done. In 2010-11 PHSA completed the Reducing Health Inequities project which engaged the MoHS, health authorities, PHSA Agencies, and external stakeholders. The project fostered dialogue, identified opportunities for partnerships and knowledge exchange and developed a common understanding of the role that PHSA and other health authorities have in reducing health inequities and promoting health equity.

Dissemination and integration of the learnings within PHSA services could raise awareness and understanding of the impact of health inequities and promote health equity resulting in better health outcomes for the patients PHSA serves.

Surveillance, Monitoring and Program Evaluation

Surveillance, monitoring and program evaluation is an area where several challenges and gaps exist: There is no or limited health data available for children under the age of 12; data within PHSA is not linked; and there are no mechanisms in place to effectively monitor population outcomes along the entire trajectory of disease.

Priority Areas for Improvement

Based on the strengths and gaps identified previously, PHSA's improvement plan for this core program focus on two model core program components as follows:

Population Health Promotion

The Centre for CDP has identified the value of building on the work completed to-date towards addressing the health of at-risk populations, by taking the learnings from the Reducing Health Inequities (RHI) project and applying it to PHSA services. Doing so would significantly improve the health of populations by increasing PHSA's capacity to promote health equity and reducing health inequities among vulnerable populations, and would therefore address PHSA's objectives to "promote health in high-risk populations" and to "improve service delivery to provide safe, reliable and efficient care for patients and families".

Specific actions to be taken include:

- Developing and implementing a plan to inform PHSA executive leadership, management and front line staff about the impact of health inequities and to propose opportunities and possible actions that can be taken to reduce health inequities and promote health equity. The plan will include:
    - Key messages tailored to specific audiences
    - Identifying opportunities to disseminate learnings
    - Building on learning obtained from other successful knowledge exchange strategies
    - A process and evaluation component

Surveillance, Monitoring and Program Evaluation

A key role for PHSA with its provincial mandate and expertise is to contribute to surveillance, monitoring and program evaluation. Specific actions to be taken include:

- Developing and implementing a plan, in collaboration with the MoH and HAs, to create improved surveillance, monitoring and evaluation mechanisms related to chronic disease prevention. Issues to address in this plan include:
    - The status of current CDP surveillance mechanisms and data in BC.

- Identifying effective surveillance mechanisms to monitor population outcomes along the entire trajectory of diseases such as cancer, cardiac and renal disease and for all age groups, including children under the age of 12.

Chronic Disease Prevention Improvement Plan:

Model Core Program Component	Priority Areas for Improvement (to address a particular gap)	Outcomes/Objectives	Performance Targets (Indicators)	Timeline	PHSA Lead
Population Health Promotion	Improving quality and safety of health service delivery within PHSA to at-risk, vulnerable populations	• Develop and implement a plan to inform PHSA executive leadership, management and front line staff about the link between the social determinants of health and inequities, and to propose opportunities and possible actions that can be taken to reduce health inequities and promote health equity.	• Develop plan • Implement plan • Evaluate plan	Nov 2011 Nov 2011-Dec 2012 Dec 2012 – Mar 2013	Lydia Drasic, PPH
Surveillance, Monitoring & Program Evaluation	Leading or coordinating provincial level surveillance, monitoring and evaluation in areas where there are gaps	• Develop and implement a plan, in collaboration with the MoH and HAs, to create improved surveillance, monitoring and evaluation mechanisms related to chronic disease prevention.	• Develop plan • Implement plan • Evaluate plan	Nov 2011 Nov 2011-Dec 2012 Dec 2012 – March 2013	Lydia Drasic, PPH

Appendix A – PHSA CENTRE FOR CHRONIC DISEASE PREVENTION MEMBERSHIP

CHRONIC DISEASE PREVENTION CORE PROGRAM (Centre for Chronic Disease Prevention)	
Tom Kosatsky	BC Centre for Disease Control (BCCDC)
Mel Krajden	BC Centre for Disease Control (BCCDC)
Donna Murphy-Burke	BC Provincial Renal Agency (BCPRA)
David McLean	BC Cancer Agency (BCCA)
Patti Byron	BC Children's Hospital (BCCH)
Anton Miller	BC Children's Hospital (BCCH)
Ann Pederson	BC Women's Hospital & Health Centre (BCW)
Jan Finch	BC Women's Hospital & Health Centre (BCW)
Paola Ardiles	BC Mental Health & Addiction Services (BCHMAS)
Lauren Mathany	Employee Wellness & Safety
Leslie Varley	Aboriginal Health
David Babiuk	Cardiac Services
Tannis Cheadle	Population & Public Health (PPH)
Deepthi Jayatilaka	Population & Public Health (PPH)
Lydia Drasic	Population & Public Health (PPH)