# TRANSFORMATION LESSONS FROM DISEASE-BASED STRATEGIES: AN ENVIRONMENTAL SCAN

## Chronic disease: New frontier of healthcare

It is estimated that nearly 16 million Canadians, almost every other one of us, is living with a chronic condition.[i] There are approximately nine million Canadians living with at least one of seven "high-impact, high-prevalence" ii chronic illnesses.[iii] As the population ages so does the increase in prevalence with a majority of Canadian seniors over the age of 65 reporting at least one chronic illness.[iii] Chronic illnesses have become a serious economic burden, with total direct medical costs and indirect productivity losses surpassing $93 billion a year.[iv] The importance of addressing these costs cannot be overstated. Even more staggering is the number of lives claimed by chronic illnesses–nearly three quarters of all deaths in Canada arise from only four types of chronic disease.[iv] Our international ranking when it comes to addressing chronic care delivery in primary care is no better–Canada ranked last out of seven countries.[v]

> Every other Canadian is living with a chronic disease. That's 16 million people or roughly half of the population of Canada—One in seven of these is a "high-impact, high-prevalence" chronic illness.

Publicly-funded healthcare in Canada was largely designed to treat acute episodes of illness, not chronic conditions. Public health insurance plans, collectively referred to as medicare, primarily cover medically necessary hospital and physician services. Overall, the healthcare system in Canada is comprised of 14 healthcare systems – 10 provincial, three territorial and one federal. A recent assessment by the Canadian Academy of Health Sciences reported major gaps between the current functioning of the healthcare system and the needs of patients with chronic diseases. Simply put, healthcare in this country was not designed to meet the care needs of those living with a chronic condition, let alone of those living with multiple chronic conditions.

> "It is important to recognize that reforms which aim to strengthen primary healthcare and implement more effective chronic disease management and population health interventions will inevitably challenge the predominant logic of the current system."[vii]

A more active and organized response for the management of chronic diseases in Canada is needed. A recently published report to the Canadian Health Services Research Foundation (CHSRF) that assessed initiatives to transform healthcare in Canada came to the same conclusion.[vii] A number of strategies and frameworks exist that aim to mobilize support across the country, to reduce the burden of specific chronic conditions. With their emphasis on a population health approach that maximizes the potential of existing services, these strategies and frameworks may offer key lessons for health systems transformation across provinces and territories.

CHSRF undertook an environmental scan to better understand the shared guiding principles, goals and key elements from a subset of these strategies and frameworks. The scan used a framework analysis approach,[viii] examining the most current national framework or strategy documents (published from 2006 to 2011) in high-burden disease areas.[ix-xv] Specifically, the scan examined disease-based strategies for diseases that account for the greatest share of mortality and morbidity across Canada, including: cancer, cardiovascular disease, mental health, respiratory illness and stroke. Following completion of the scan in February-March 2011, CHSRF staff held key informant interviews to validate the results. This summary presents findings from the framework analysis and key informant interviews in order to glean useful information for health systems transformation.

## Shared goals and guiding principles

Strategies and frameworks that aim to address high-burden disease areas take a comprehensive approach to improving health and healthcare. Whereas healthcare currently operates primarily downstream (treating diseases and illnesses once they happen), a comprehensive approach emphasizes the need to simultaneously make upstream investments (addressing root causes of diseases before they happen and alleviating illness symptoms before they worsen). There is strong evidence that if we redesign or transform healthcare to reduce the burden of chronic diseases, then Canadians can enjoy better quality of life and improved quality of care, possibly at a lower cost. Denton and Spencer (2010) predict that if 50% of the population with one or more chronic illnesses had one less chronic illness, then the frequency of hospital stays and physician consultations would drop by 16% and 10%, respectively.[xvii] This would represent an estimated cost-savings of more than one-third of the projected cost of healthcare currently associated with chronic disease

## SHARED GOALS AND EXAMPLES

- **Improving access to care**
  One of the goals of the Mental Health Strategy Framework: " people have equitable and timely access to appropriate and effective program, treatments, services and support that are seamlessly integrated around their needs."[xiii]
- **Enhancing quality of life**
  A goal of the National Lung Health Framework is "to improve the health outcomes and quality of life for everyone in Canada through early detection and better management of respiratory disease."[xiv]
- **Improving population health**
  The Heart Health Framework suggests increasing the support for infrastructure development that promotes active, healthy living (e.g. "sidewalks, walking paths, recreation centres, parks, bike paths and lanes)."[ix]
- **Achieving the best possible care**
  The Canadian Strategy for Cancer Control aims at providing information and tools to help provinces and territories build cancer management strategies tailored to their own needs and based on a solid foundation of cancer knowledge and comparable national data.[xi] One such tool is a platform that can do microsimulation modelling to project the impact of interventions, such as prevention, screening and new treatments including economic impact.

management.[xvii] Interestingly, this is not one of the explicit shared key goals across disease-based strategies and frameworks. The key and common goals, which describe the desired state for the future and provide direction for the strategies, largely entail maximizing the potential of existing services (which arguably includes improved efficiency and cost-effectiveness), while realizing large-scale gains in the quality of life and health of the population.

The underlying principle driving the proposed strategies and frameworks is that decisions about health and healthcare are based on the best-available evidence. Evidence includes synthesized scientific data as well as knowledge from lived experience and other ways of knowing that are more culturally appropriate, such as storytelling traditions in First Nations, Inuit and Métis populations. An evidence-informed approach implies concerted coordination among the various types of evidence and consultation with all relevant parties to inform policy and practice. Often, this takes the form of a deliberative process to ensure consultation is informed and participatory, with fair representation of researchers, policy-makers, practitioners, patients and families, community members and others involved in or affected by the decisions.

Delivering healthcare in a way that is responsive to the diversity of the Canadian population is another key guiding principle underpinning the disease-based strategies and frameworks. This entails providing care that is culturally competent and safe. To achieve cultural competency involves taking into consideration the cultural background and primary language of patients and families in all aspects of service delivery, including: patient education materials, questionnaires, healthcare organization settings, direct care design and delivery, and public health. Across strategies and frameworks, it is well recognized that a tailored approach is sorely needed for First Nations, Inuit and Métis populations. The approach must foster meaningful collaboration, where those in need of, or receiving care, as well as their families and communities, take a central role in designing the approach and implementation. Furthermore, the approach must apply the concept of "cultural safety"—a term which recognizes the contemporary conditions of Aboriginal people resulting from their post-contact history.[xviii] In Canada, Aboriginal people have experienced a history of colonization and assimilation leading to historical trauma and loss of cultural cohesion.[xviii] The resultant power structures continue to undermine the role of Aboriginal people as partners in their own care with healthcare professionals.[xviii] The concept of cultural safety can contribute to a greater understanding of the origins of the crisis situation facing many Aboriginal communities and how policies can be developed to address these situations.[xviii]

## Key elements

Disease-based strategies and frameworks in the areas of cancer, cardiovascular disease, mental health, respiratory illness and stroke, share common challenges and opportunities for improving the health and healthcare of all Canadians:

- The current approach to healthcare offers little assistance in understanding root causes of chronic diseases, as services aim to treat diseases and illnesses once they happen. **Health promotion and**

prevention is an upstream way to understand and address root causes of diseases before they occur and alleviate illness symptoms before they worsen, thereby allowing Canadians to live healthier longer.

- There is good evidence about how to treat chronic illnesses and alleviate risk factors and symptoms. However, it does not always reach, let alone drive clinical practice. Sharing and applying best practices will help maximize existing healthcare resources and ensure high quality of care for Canadians. Although this action is called for at the clinical level, it is also needed at the organizational and policy levels.

- People living with multiple chronic diseases are often treated for each of their diseases separately. Integrated service delivery—taking a team-based and patient-centred approach to care at the organizational level—will help reduce service delivery silos and allow for care that is more timely, responsive and offers improved continuity. For Canadians living with more than one chronic disease, a cohesive approach to care is especially required to coordinate efforts and implementation, applying multiple interventions and strategies simultaneously.

- The risk factors for chronic disease are broad and so too must be a chronic disease prevention and management approach to care. Multi-sectoral and multi-stakeholder collaboration is required throughout, and across, the healthcare sector and other government sectors. This implies a whole-of-government approach, across sectors and levels (municipal, provincial/territorial and federal) for leveraging successful policy change.

- The proportion of Canadians living with one or more chronic diseases continues to rise; there remains a poor understanding of the prevalence of various diseases and of how care is provided. In order to gain a complete picture, a concerted effort to develop common indicators is required. This will enable comparisons across diseases, systems and assessments of which interventions are working best to improve the health and lives of Canadians. Quality improvement and the application of best practices cannot be achieved without the support of standardized performance measurements. A performance approach will support improved practice, organizational change and policy implementation, demonstrating accountability for health outcomes.

## Health prevention and promotion

Healthcare across Canada was organized in a hospital- and physician-centric way, best suited to treating acute episodes of illness. The current model works well for someone who needs an appendix removed, for example, but when it comes to treating or reducing the impact of chronic diseases, such as lung disease, cancer or mental illness, the model often falls short. Arguably, in the context of chronic disease, the best approach is to prevent the disease before it happens or alleviate its impact once it has developed. A health promotion and prevention approach is central across disease-based strategies. There is recognition that, across diseases, there

are often common risk factors, such as an unhealthy diet, physical inactivity, tobacco use, socio-economic and environmental determinants.[xix] As such, joint efforts can be leveraged to better understand the interactions between risk factors and to intervene in a coordinated way to more effectively address them.

The National Lung Health Framework identifies health promotion, awareness and prevention as one of its four pillars and is undertaking multiple key activities "to prevent and moderate the impact of respiratory illnesses through the development and implementation of effective, coordinated: health promotion, awareness, exposure reduction, and smoking prevention/cessation activities."[xiv] The framework aims to take key action in First Nations, Inuit and Métis communities. For example, one of the projects they mentioned looks at the First Nations, Inuit and Métis perspective on community respiratory health initiatives.[xv] One of the objectives of the project is to determine the types of educational material and programs on respiratory health and the risk factors for chronic respiratory disease that need to be developed to meet the unique needs of Aboriginal communities.[xv]

> "Research has shown that many of the risks for cancer are identical to the risks for other chronic diseases such as cardiovascular disease, lung disease and diabetes. These risks can be modified by changes in both lifestyle and our environments. However, as can be seen from the previously described trends there is a pressing need to develop and implement effective strategies in support of Canadians making healthier lifestyle choices for themselves and supporting healthier public policies for their communities."[x]

The Canadian Partnership Against Cancer (CPAC) recognizes that reducing the risk of cancer and other chronic diseases in the Canadian population will require strategies to intensify and coordinate their prevention efforts across disease groups. Opportunities to do so include working with partners to ultimately reach some consensus on a limited set of established Canada-wide targets for risk reduction, which would serve as common goals to orient and assess the impact of collective disease prevention efforts. Specifically, CPAC is aligning its prevention investments with existing federal/provincial/territorial priorities, such as obesity prevention and tobacco control, to focus its efforts and achieve greater impact.[x]

One of the goals of the Mental Health Framework is that "mental health is promoted, and mental health problems and illnesses are prevented wherever possible."[xiii] This means that mental health promotion and mental health illness prevention must be integrated throughout mental health policy and practice, as well as into public health and social policy.[xiii] For example, addressing housing and employment can create better conditions for individuals to maintain their mental health and prevent mental illness.[xiii]

## Sharing and applying best practices

There is a heavy emphasis in the strategies on developing and influencing best practice of care delivery so that individuals receive the best level clinical care possible, informed by the best-available evidence. The Heart Health Strategy recommended that there be a consolidation of the multiple guidelines now available to address the prevention and management of cardiovascular diseases. Recent effort has resulted in the development of 89 recommendations directed to primary care providers that address all of the major risk factors for cardiovascular illnesses. In the same way, the stroke strategy considers that one of its major accomplishments is the Canadian Best Practice Recommendations for Stroke Care. First developed in 2006 and updated in 2008 and 2010, these are a package of performance indicators and toolkits for healthcare providers, covering everything from ways to improve emergency medical services to how to set up stroke units. The stroke strategy has also promoted enhanced networking, education efforts and workshops.[xvi]

> Applying knowledge: Far more is known both about how to prevent stroke as well as how to treat stroke patients than is being generally applied. Further, application of generally acknowledged best practice is inconsistent across the country – and the unique situation of each province and territory presents a challenge in terms of providing every Canadian with the best possible stoke prevention, care, rehabilitation and community reintegration support.[xii]

Best practice also includes an important emphasis on person-centred care. Individuals and their families make the most meaningful choice for themselves about how to address their own needs—they know best about the care experience, because they have experienced care. As such, they have the best evidence and relevant information to guide practice. In the Mental Health Strategy, the role of patient and family is seen as paramount to recovery and well-being. The framework for the strategy is based on this tenet. There is much for other chronic disease initiatives to learn from the recovery movement in mental health. It is not so focused on clinical recovery, but on recovery of a meaningful life in the community for people living with mental health problems and illnesses.[xiii] Collaborating with the individual and the family in order to fully understand the circumstances impacting their health can lead to better compliance, to changes in lifestyle that can diminish risk factors and more.

Additionally, information sharing among stakeholders is crucial and the various disease-based strategies are developing tools to share knowledge. Most of the strategies have numerous partners and stakeholders which can help in knowledge sharing. For example, the Mental Health Commission is creating a knowledge exchange centre for that purpose. Similarly, the National Lung Health Framework has created Respiratory Resources Canada (RRC), a free online database that connects users to lung health work being done across the country. RRC helps to identify and address resource gaps in lung health services, programs and initiatives across Canada, and in doing so will strengthen collaborative actions among respiratory stakeholders.[xv] Information sharing with decision-makers

is also very important. Strategies need to avoid the negative consequences of a health system functioning in silos with barriers preventing information from reaching the right person at the right time.

## Integrated service delivery

The complexity of dealing with cancer, cardiovascular disease, mental illness, stroke and respiratory illness requires specific actions to be taken at specific times. This also implies the delivery of service through a team-based approach that is person-centred to combine the expertise of the patient and their family with different healthcare professionals. It also requires that the patient journey brings patients from primary to more specialized care in a way that is streamlined, favouring continuity and quality of care. The integration of sectors outside of health can also make a difference. The Mental Health Commission of Canada (MHCC) has clearly identified that it is essential to break down silos within the mental health and healthcare systems and to extend the efforts to include stakeholders that are not usually considered as part of the mental health system such as primary care, schools, work place and law enforcement.[xiii]

Similarly, the National Lung Health Framework is participating in projects that bring together stakeholders outside of the traditional concept of healthcare to examine awareness of indoor or outdoor environmental risk factors in prevention and management of lung disease.[xv]

> To provide more integrated, patient-centred services, health care systems in Canada must make some fundamental changes in the way they organize and provide cardiac care. They must make effective use of people, technology and other resources to address inequities, and adopt models of care–such as the chronic disease prevention and management model and the regional integrated networks of specialized cardiac care. That will make the system more efficient and effective.[ix]

To improve the ability to access needed services in often fragmented systems, the Heart Health Strategy and the Mental Health Strategy Framework both suggest the incorporation of "system navigators" to help patients and their health information move easily between services and providers.[xiii,ix]

A fully integrated system means seamless integration across the public, private, and voluntary sectors, across jurisdictions and across the lifespan.

## Multi-sectoral and multi-stakeholder collaboration

The disease-led groups presenting national strategies or frameworks each recognize the roles and uniqueness of the provinces and territories as well as the need to adapt their recommendations to different contexts across Canada through key governmental and other partnerships. For example, the National Lung Health Framework

recognizes that to maximize synergy and minimize duplication of effort, it is necessary to work collectively and see opportunities to collaborate with the **Canadian Heart Health Strategy and Action Plan**, **the Canadian Strategy for Cancer Control, The Federal Tobacco Control Strategy,** and the **Integrated Strategy on Healthy Living and Chronic Disease**.[xiv] All of the frameworks/strategies involve an impressive number of different and diverse stakeholders such as, for example, researchers, healthcare organizations and the Public Health Agency of Canada. The development of the Mental Health Strategy Framework was based on a significant public and stakeholder consultation process.

The **Canadian Stroke Strategy** established a steering committee whose objective was to catalyze and actively support the development and implementation of integrated stroke strategies in every province and territory. One approach is to support the development and implementation of communications and advocacy initiatives at the provincial/territorial level.[xii]

The Canadian Partnership Against Cancer considers partnership fundamental and indeed the only way to be effective in implementing high impact approaches to prevent cancer and other chronic conditions. Through the Coalitions Linking Action and Science, seven large-scale efforts, each engaging two or more provinces and territories, are being implemented. The efforts bring together more than 70 organizations, including different disease-specific groups, health ministries and cancer agencies/programs to integrate research, practice and policy work on cancer and chronic disease prevention and to accelerate action on shared priorities across all 10 provinces and three territories.[x] The CPAC is also considering the National Staging Initiative to be one of its key achievements and is a great example of multi-sectoral work to enhance provincial infrastructure. Indeed, the National Staging Initiative is a partnership between CPAC and the Canadian Association of Provincial Cancer Agencies (CAPCA). Through participation from provinces, territories and national partners, the initiative is facilitating the national, systematic collection of standardized, population-based stage information for the four most common cancers–prostate, lung, breast and colorectal.

The Canadian Heart Health Strategy recognizes that the behavioural risk factors for cardiovascular disease such as poor diet, lack of exercise and smoking are greatly influenced by the "upstream" socio-economic determinants of health.[ix] Therefore, there are significant opportunities available to prevent cardiovascular disease and other chronic diseases by addressing these broader societal issues. To do so, requires broad inter-sectoral action, leadership and the involvement of all levels of governments, using whole-of-government approaches within each level of government, working collectively with the volunteer sector, industry and society in general.[ix]

Partnerships and a multi-sectorial approach are especially needed to address the needs of First Nations, Inuit and Métis populations. The Canadian Heart Health Strategy wants to develop a multi-year action plan to meet the cardiovascular needs of First Nations, Inuit and Métis and they acknowledge that it requires a partnership approach involving federal, provincial, territorial and municipal governments, non-governmental organizations, Aboriginal organizations and communities.[ix]

The National Lung Health Framework secretariat is working with important partners such as the Canadian Thoracic Society and the Canadian Respiratory Health Professionals on several initiatives to build relationships and strengthen collaboration among stakeholders in the respiratory community.

Partnerships are embedded within the structure of the Mental Health Commission of Canada, which has established a provincial-territorial reference group to support the development of the strategy. The Commission's infrastructure includes eight advisory committees[1] comprised of Child & Youth; Family Caregivers; First Nations, Inuit, & Métis; Mental Health & the Law; Science; Seniors; Service Systems; and, Workforce. For example, the workplace advisory committee has ongoing projects with business leaders across the country while the child and youth advisory group has projects in the area of school-based mental health. In addition, the Mental Health Strategy Framework includes a call to action to build a social movement to guide the development of a comprehensive and person-centred mental health system in Canada and to reposition mental health on the national agenda.

## Performance measurement

Quality improvement and the application of best practices cannot be achieved without the support of performance measurement, which is essential in supporting practice, policy and implementation decisions. However, most of the strategies include a recognition that the necessary measurement system is not in place to allow consistent monitoring and management of the disease at all levels.

The Canadian Stroke Strategy identifies ongoing evaluation and reporting as integral to the success of their strategy. Ongoing evaluation is planned at two levels: evaluation of the strategy overall as guided by the strategic framework and evaluation of the stroke surveillance component to focus on patient-level processes and outcomes.[xii]

> "Assessment of the effectiveness of mental health policies and practices is in everyone's interest–governments, service providers, people using mental health services and their families, and, indeed, the Canadian population as a whole. Understanding what works and what does not work will allow for the best possible use of scarce human and financial resources, and will directly help to improve health and social outcomes of people living with mental health problems and illnesses, and contribute to improving the mental health and well-being of all people living in Canada.[xiii]

The Canadian Partnerships Against Cancer aims to deliver comprehensive public reporting of cancer system performance in Canada. Optimizing the cancer control system for Canadians is at the heart of the CPAC's work. Unless it is clear how well the cancer control system is performing, it is difficult for cancer agencies/programs (or other partners) to know where to focus improvement efforts or for Canadians to participate in setting priorities for improvement. In response to this challenge, the Partnership developed the System Performance Initiative, a pan-Canadian approach to reporting on performance across the cancer control continuum. Four years ago, Canada had

[1] The advisory groups focus on service systems, science, needs of family members, First Nations, Inuit and Métis, children and youth, workplace and seniors' mental health.

limited information to help understand the performance of the cancer system across the country. These high-level measures included incidence, mortality and survival and the self-reported risk reduction behaviour of Canadians. There was limited information on the impact of treatments and interventions on these measures. Through the Partnership's annual system performance report, the Partnership and other stakeholders are now in a much better position to track quality and performance.

## Conclusion

Examining disease-based strategies and frameworks provides meaningful lessons for health system transformation in Canada. The strategies are focused on improving access to care, quality of life, population health and achieving the best population health. One of the common elements that guide the strategies examined is the recognition that decisions at every level of the system need to be made on the best available evidence and in consideration of the diversity of the Canadian population. At their core is an emphasis on a population health approach that maximizes the potential of existing services while directing efforts and investments "upstream" to address root causes and symptoms of health and illness. This approach is expected to bring long-term health benefits for all Canadians, yet shifting resources and transforming the system to achieve this critical aim remains a considerable challenge:

> **"No significant changes [in healthcare in Canada] will occur without a serious attempt to realign the system to meet patients' needs and evolving demands. Such realignment requires concerted efforts across sub-sectors of healthcare systems. At the delivery level, it implies large-scale organizational development initiatives to implement new models and processes of care."[vii]**

Just as common themes have emerged in this backgrounder about how to improve healthcare for the benefit of population health, common approaches can be taken and alignment can occur across sub-sectors of healthcare systems and other sectors. The improved health of Canadians and a more responsive patient-centred healthcare system hinges on the commitment to do so.

This document is available in French and English on the CHSRF website: www.chsrf.ca / www.fcrss.ca

## References and notes

This backgrounder was written by Anne Brasset-Latulippe, Jennifer Verma, Gillian Mulvale and Kevin Barclay on behalf of the Canadian Health Services Research Foundation.


i. Centre for Chronic Disease Prevention and Control. (2003). The burden of chronic disease in Canada. Public Health Agency of Canada. Retrieved from www.phac-aspc.gc.ca/ccdpc-cpcmc/ topics/integrated_e.html

ii. Cripps, D. (2011). Effective treatment of chronic disease – Key to the future of our health system. HealthcarePapers, 11(1), 59-61.

iii. Health Council of Canada. (2007). Population Patterns of Chronic Health Conditions in Canada A data supplement to Why Health Care Renewal Matters: Learning from Canadians with Chronic Health Conditions. Toronto, ON. Retrieved from http://www.healthcouncilcanada.ca/

iv. Mirolla, M. (2004). The Cost of Chronic Disease in Canada. Prepared for The Chronic Disease Prevention Alliance of Canada. Retrieved from http://www.gpiatlantic.org/pdf/health/chroniccanada.pdf

v. Morgan, W.M., Zamora, E.N., Hindmarsh, F. M. (2007). An inconvenient truth: A sustainable healthcare system requires chronic disease prevention and management transformation. HealthcarePapers, 7(4) 6-23.

vi. Canadian Academy of Health Sciences. Transforming Care for Canadians with Chronic Health Conditions: Put People First, Expect the Best, Manage for Results. Ottawa, ON: CAHS. Retrieved from http://www.cahs-acss.ca/e/pdfs/cdm%20summary%20English.pdf.

vii. Denis, JL., Davies, H.T.O., Ferlie, E., Fitzgerald, L. (2011). Assessing initiatives to transform healthcare systems: Lessons for the Canadian healthcare system. CHSRF series of reports on cost drivers and health system efficiency: Paper 1. Ottawa, Canada: CHSRF. Retrieved from http://www.chsrf.ca/

viii. Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R.G. Burgess (Eds.), Analyzing Qualitative Data (pp. 173-194). London, England: Routledge.

ix. Canadian Heart Health Strategy. (2009). Canadian Heart Health Strategy and Action Plan Building a Heart Healthy Canada. Ottawa, ON: CHHS. Retrieved from http://www.chhs.ca/

x. Canadian Partnership Against Cancer. (2011). The Future of Cancer Control in Canada A discussion paper on pan-Canadian cancer control priorities for 2012-2017. Toronto, ON. Retrieved from http://www.partnershipagainstcancer.ca/

xi. Council of Canadian Strategy for Cancer Control. (2006). The Canadian Strategy for Cancer Control: A Cancer Plan for Canada Discussion Paper. CSCC. Retrieved from http://www.cancer.ca/~/media/CCS/Canada%20wide/Files%20List/English%20files%20 heading/pdf%20 not%20in%20publications%20section/CSCC%20discussion%20paper%20-%20PDF_1404842209.ashx

xii. Canadian Stroke Network & Heart & Stroke Foundation of Canada. (2006). Canadian Stroke Strategy. Strategic Plan 2006-2010.

xiii. Mental Health Commission of Canada. (2009). Toward Recovery & Well-being A Framework for a Mental Health Strategy for Canada. Calgary, AB: MHCC. Retrieved from http://www.mentalhealthcommission.ca/

xiv. Canadian Lung Association. (2011). National Lung Health Framework. Leading. Acting. Together. Ottawa, ON. Retrieved from http://www.lunghealthframework.ca/resources/framework-documents

xv. Canadian Lung Association. (2011). Goals and Strategies National Lung Health Framework. Leading. Acting. Together. Ottawa, ON. Retrieved from http://www.lunghealthframework.ca/

xvi. Canadian Stroke Network. (2011). Canadian Stroke Strategy moves to next phase. Ottawa, ON. Retrieved from http://www.canadianstrokenetwork.ca/

xvii. Denton, F.T., & Spencer, B.G. (2010). Chronic health conditions: Changing prevalence in an aging population and some implications for the delivery of health care services. Canadian Journal on Aging, 29, 11-21.

xviii. Brascoupé, S. & Waters, C. (November 2009). Cultural Safety Exploring the Applicability of the Concept of Cultural Safety to Aboriginal Health and Community Wellness. Journal de la santé autochtone. Retrieved from http://www.naho.ca/jah/english/jah05_02/V5_12_Cultural_01.pdf

xix. World Health Organization. (2005). Chronic Diseases and Their Common Risk Factors. Facing the Facts #1. Geneva: WHO. Retrieved from http://www.who.int/chp/chronic_disease_report/media/Factsheet1.pdf


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