CANADIAN PARTNERSHIP AGAINST CANCER
PARTENARIAT CANADIEN CONTRE LE CANCER

The Future of Cancer Control in Canada

A discussion paper on pan-Canadian cancer control priorities for 2012-2017

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The views expressed herein represent the views of the Canadian Partnership Against Cancer.

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Message from the Partnership

We are delighted to share this discussion paper, *The Future of Cancer Control in Canada,* with cancer and health system leaders, clinicians, administrators, researchers, charities, advocacy groups, patients and volunteers across the country.[i] By sharing this document, we seek to refine and prioritize the major strategic themes and opportunities to continue to accelerate cancer control in Canada.

In 2006, when the federal government made the historic announcement to establish the Canadian Partnership Against Cancer (the Partnership), co-ordinated, pan-Canadian cancer control was simply an idea that resonated with the tens of thousands of people working hard to improve and advance cancer control in all parts of Canada. Today, it is a reality. The Partnership has transformed the way the cancer control community in Canada works together to co-ordinate action. From informing the implementation of organized, high-quality screening in every jurisdiction, to co-ordinating efforts to maximize Canada's investments in cancer research, to facilitating best practices such as electronic surgical and pathology checklist reporting, the Partnership is enabling provinces and territories to put into practice what we know will improve cancer control for all Canadians, no matter where they live. We invite you to read this discussion document and our *Impact Report 2010* (available through www.partnershipagainstcancer.ca) to obtain a snapshot of the Partnership's work and contribution to advancing cancer control in Canada.

While we have built a strong foundation and made significant gains in a matter of four years, improving the performance of Canada's cancer control system is a long-term journey and requires a sustained commitment.

Building on this progress, we need your help to prioritize and validate strategic themes and opportunities. We also need to understand how to continue to leverage and integrate work to date and still make room to capitalize on new high-priority opportunities. This paper presents a starting point from which to work through these issues together with our partners.

Cancer affects all Canadians, which means we are all part of the cancer control community and all play a role in helping to answer the questions that are central to reducing the impact of cancer on Canadians. In the coming months, we look forward to a continued dialogue about where we go from here to build on a solid foundation and achieve an ever-growing impact.

Simon Sutcliffe, MD
Chair

Jessica Hill
CEO

[i] This document is the result of an initial round of consultations to examine the Partnership's potential future focus, including in-person meetings, focus group discussions, online surveys and a large stakeholder meeting in Winnipeg in October 2010.

Executive summary

This paper is a starting point to refresh the cancer control strategy for Canada. It demonstrates the impact to date of a pan-Canadian approach to cancer control through a five-year funding commitment by the federal government, and lays out the case for sustained action. It also presents a working list of the major opportunities on the horizon that the Canadian cancer control community should seize to reduce the risk of cancer, save lives and improve the quality of life of people affected by cancer.

Together we are making an impact

In its first four years, the Canadian Partnership Against Cancer (the Partnership) has made significant progress and built a solid foundation to accelerate cancer control in Canada. By systematically sharing and implementing best practices across the country, the Partnership has shown that it is possible to reduce the impact of cancer sooner and more cost-effectively for all Canadians.

Since the Partnership was created:

- Unprecedented **high-impact approaches to prevent cancer and other chronic diseases are being implemented across Canadian provinces and territories.** Through the Coalitions Linking Action and Science for Prevention initiative, seven large-scale efforts are being implemented to combat the common risk factors for cancer and other chronic diseases.
- **Organized colorectal cancer screening programs are underway in every province.** To improve Canada's relatively low rates of screening for colorectal cancer, the National Colorectal Cancer Screening Network enabled provinces without existing programs to accelerate and reduce the duplication of effort.
- **Population-based stage data is now within reach.** By bolstering the ability of provinces and territories to collect cancer stage data in a standardized format, the Partnership's National Staging Initiative will yield significant gains in our collective ability to improve cancer patient outcomes and to continuously monitor the effectiveness of screening and treatment programs.
- **Standardized electronic operative and pathology reporting to improve quality and patient safety is now underway in multiple provinces.** Clinicians are leading and implementing efforts to ensure the information necessary to provide timely and quality care is available. By developing and embedding pan-Canadian quality standards into reporting tools, clinicians can now assess and compare their practice and outcomes against best evidence and with those of their colleagues practising in other areas of the country.
- **Comprehensive public reporting of cancer system performance in Canada is now available.** Four years ago, we only had limited information on the performance of the cancer system across the country. At a high level, we could track incidence, mortality and survival, and the self-reported risk reduction behaviours of Canadians. Today, the Partnership tracks quality and makes in-depth provincial comparisons of some of the treatment elements patients receive against best practice standards, and of system capacity, supportive care and survivorship, among other measures.

- **The quality of life of cancer patients and their families is being improved across Canada.** Through its pan-Canadian screening for distress initiative to improve the management of pain and other symptoms for cancer patients, and through its investment in the Canadian Virtual Hospice, the Partnership is enabling improvements in supportive, palliative and end-of-life care for Canadians experiencing cancer.
- **Co-ordinated, pan-Canadian efforts to improve culturally relevant and people-specific cancer control initiatives for First Nations, Inuit and Métis communities are gaining momentum.** The Partnership's work in this area has been guided by First Nations, Inuit and Métis communities to best reflect their needs and priorities. This work includes the development and validation of a First Nations, Inuit and Métis cancer control action plan; the development and dissemination of an online course for community health representatives working in remote and rural First Nations communities; and a new online site with First Nations, Inuit and Métis cancer control tools and resources on www.cancerview.ca.
- **Canada now boasts the Canadian Partnership for Tomorrow Project, a living population laboratory that will help us understand the natural history of cancer and chronic diseases.** Building on the foundation of two previously independent research studies, this project combines the leading population health research expertise in Alberta, Quebec, British Columbia, Ontario and Atlantic Canada. Strategic investments to improve the co-ordination of Canadian cancer research, through the Canadian Cancer Research Alliance have also improved the targeted generation of new knowledge.
- **The Cancer Risk Management platform is enabling decision-makers to model the impact of evidence-based health system investments on long-term disease and economic impacts of cancer.** Through this platform, decision-makers can now compare the long-term impact of investments in various prevention and screening initiatives, and other interventions.
- **The Cancer View Canada knowledge platform (www.cancerview.ca) is supporting efforts across the national strategy.** The Cancer View Canada portal is a neutral Canadian information and collaboration hub for those working in cancer control or dealing with cancer. It supports knowledge management activities happening across the Partnership's initiatives but also supports partners in their work and profiles their content. Today, over 120 groups across Canada are using Cancer View Canada's virtual collaboration tools to work together online at no cost to them. The portal also offers critical tools to support patients directly, such as the Canadian Cancer Trials registry.

The case for sustained, co-ordinated action

Due in large part to an aging and growing population, cancer will continue to be a public health concern in Canada. We are also witnessing some troubling trends in lifestyle risk factors, including decreases in smoking cessation rates, increases in overweight and obesity rates, limited physical activity levels and increasing alcohol consumption. If these changes are not addressed, they may also contribute to a rise in the number of cases of cancer and other chronic diseases. At the same time, important advances in the screening for, early detection of and treatment of cancer have improved the long-term prognosis for cancer patients and we will see more survivors living with the disease well after their treatments end. All of these factors will create pressures on many fronts, including the cancer treatment system, primary care and informal care giving, as well as on system capacity to support transitions back to community, school and workplace.

It was forward-looking of our federal government to invest in a national strategy to stem the rising tide of cancer and address its impact on the lives of Canadians. In its first four years, the Partnership has put in motion an innovative and effective approach to managing this tide. If these efforts to catalyze and accelerate cancer control are not sustained, we risk losing momentum and returning to a fragmented and inefficient approach. Sustained, co-ordinated pan-Canadian action is critical to continuing to reduce the impact of cancer on the Canadian population.

Improving cancer control is a long-term journey. The promise and impact of sustaining pan-Canadian momentum in cancer control can be illustrated by looking out 20 years and modeling what could be achieved. The Partnership's Cancer Risk Management modelling platform (www.cancerriskmgmt.ca) provides this capability.

- **For example, we know that if 80 per cent of people aged 50–74 years across Canada had up-to-date colorectal cancer testing by 2013, then by 2030:**[ii]
  - Approximately 32,000 deaths from colorectal cancer could be avoided. A cumulative increase of $2.6 billion in earnings would be gained.[iii]
  - There would be a cumulative increase of $9.4 billion in total income.[iv]
- **We also know that if the Canadian smoking rates were 10 per cent today, then by 2030:**[v,vi]
  - An estimated 58,000 new cases of lung cancer could be avoided.
  - An estimated 46,000 deaths from lung cancer could be avoided.
  - A cumulative increase of $3.2 billion in earnings would be gained.
  - There would be a cumulative increase of $10.2 billion in total income.

These are but two high-impact scenarios for two of the most common types of cancer. To achieve this type of long-term benefit for Canadians, a co-ordinated, focused approach is critical.

Where to from here?

In view of the predicted increase in the burden of cancer over the next two decades, there is much we should and can do to curtail this impact. We need to continue to identify innovative solutions that will create efficiencies in the system and help better manage scarce resources.

[ii] Canadian Partnership Against Cancer. (2010). Cancer Risk Management Model: *Colorectal Cancer Model*. Retrieved November 30, 2010 from http://www.cancerriskmgmt.ca/.

[iii] This includes earnings from both paid employment (wages and salaries) and self-employment.

[iv] Total income refers to income from all sources including government transfers before deduction of federal and provincial income taxes.

[v] In 2008, 21 per cent of Canadians reported daily or occasional smoking.

[vi] Canadian Partnership Against Cancer. (2010). Cancer Risk Management Model: *Lung Cancer Model*. Retrieved November 30, 2010 from http://www.cancerriskmgmt.ca/.

By working together in the cancer control community and by combining forces with other chronic disease partners in both the prevention and end-of-life care domains we can achieve our common goals to reduce the risk and impact of disease for all Canadians.

In a matter of four years, the Partnership has been able to establish and harness over 43 pan-Canadian networks of partner organizations, representing cancer experts, patients and survivors, clinicians, system leaders and researchers at the national, provincial and territorial levels. It has also built unprecedented capacity to innovate and improve cancer control across the country, including leadership, skills, advisory networks, data and technology. The capacity building undertaken offers a robust vehicle to shape and evolve some of the existing initiatives as well as to implement future high-impact opportunities to control cancer and other chronic diseases. In the coming months, the Partnership will be drawing on these extensive networks to identify the future top-priority opportunities that the cancer control community should seize to save lives, prevent disease and make the best use of evidence.

Summary of major strategic themes identified to date

The Partnership undertook an extensive consultation with its partners and stakeholders, as well as leading cancer control experts, throughout the summer and fall of 2010 to identify where the Partnership is best placed to add value and the potential future opportunities to co-ordinate and accelerate pan-Canadian cancer control. The list of potential strategic themes that emerged from these discussions is summarized below.

Achieve risk reduction in the Canadian population

- Co-ordinate multi-sectoral action to positively impact risk reduction in the Canadian population
- Improve our understanding of the risk factors–biology interaction for cancer and other chronic diseases

Advance excellence in patient care, services and support

- Accelerate the uptake of high-quality cancer screening programs
- Accelerate quality and safety initiatives in cancer patient care and services
- Improve the cancer journey for patients and families
- Accelerate the uptake of culturally appropriate cancer programs and services
- Maximize Canada's research investments in cancer to deepen our understanding of cancer and to improve care and services

Enable co-ordinated, pan-Canadian cancer control

- Deepen performance measurement and reporting to support quality improvement and application of best practice
- Improve best available tools to support knowledge transfer and exchange
- Improve access to best available data and evidence to inform and support practice, policy, investment and implementation decisions
- Intensify communications and public outreach

We are seeking your input

The strategic themes represent a starting point to refresh the cancer control strategy for Canada. As we think about the next five years of cancer control in Canada, we need to prioritize existing opportunities and determine how best to leverage and integrate the existing work while at the same time identifying new top-priority opportunities.

This document will be used by the Partnership over the winter and early spring of 2011 to nurture further conversations with partners and stakeholders. The Partnership will also accept written feedback from mid-February to early April 2011. The input gathered over the next few months will be critical to refining and shaping the course that, over the next five years, will deepen our collective ability to reduce the impact of cancer for all Canadians.

About the Canadian Strategy for Cancer Control

In November 2006, the federal government announced a $250 million five-year investment to begin to implement the Canadian Strategy for Cancer Control (CSCC) and created the Canadian Partnership Against Cancer (the Partnership) to lead this work.

Over a 30-year time-frame, the goals of the Strategy were to:

- Reduce the number of Canadians diagnosed with cancer
- Enhance the quality of life for those living with cancer
- Lessen the likelihood of Canadians dying from cancer

Cancer control environment in 2006

Given the multi-jurisdictional nature of Canada's health care system, the CSCC recognized the fragmentation and duplication of effort that existed in the cancer control domain. In this environment, opportunities to benefit from economies of scale were lost. Furthermore, without a common agenda and mechanisms for a co-ordinated approach to accelerate change, the Canadian cancer control community missed out on opportunities to optimize efficiency and effectiveness. The CSCC articulated a comprehensive approach to reduce fragmentation by being a catalyst for co-ordinated action, providing tools, resources and evidence to inform decision-making across jurisdictions.

Cancer Control: What has changed since 2006?

Cancer control, and health care more generally, has continued to evolve since 2006, when the federal government made a five-year commitment to implement the CSCC. Some of the main changes and trends over the last five to seven years are highlighted below.

Prevention and healthy living

- **Initiation by all provinces of HPV vaccination programs.** These programs may change cervical cancer screening schedules for immunized women and has led to awareness that we need to capture immunization status as part of screening.
- **Release of a National Lung Health Framework in 2006 and a Canadian Heart Health Strategy and Action Plan in 2009, as well as the decision by Canada's ministers of health to champion a healthy living agenda, with an immediate priority of taking action to curb childhood obesity.** The release of these frameworks and strategies, as well as the ministerial priority on healthy living, create an environment that is rich for innovation and collaboration with provinces and chronic disease groups with respect to action on common cancer and chronic disease risk factors.

Cancer care and treatment

- **Increased public awareness of safety and quality as critical to cancer care.** This awareness has been heightened by media stories profiling safety and quality issues related to cancer care delivery. These includes:
  - The death of a woman in Alberta as a result of inadvertent chemotherapy overdose delivered via an ambulatory pump
  - Controversies related to pathology and laboratory reporting issues in Newfoundland, Quebec and Windsor, Ontario
  - Reports relating to quality issues in mammography reading in Quebec and Saskatchewan
- **Increased recognition of the role of primary care as a key to the health system overall and the potential role of primary care in the follow-up of patients with cancer once they have finished acute care.**
- **Increased recognition within the cancer control system that surgery is a critical element of cancer care and increased interest in including consideration of the impact of surgery on outcomes.**
- **Growing recognition and awareness of psychosocial issues in the care of patients and families.** Across the country, programs and new staffing are being planned and implemented in recognition of the importance of supportive care and its contribution to comprehensive care.
- **Observed decreases in breast cancer mortality.** Decreases in breast cancer mortality have been observed since the mid-1990s, demonstrating that cancer control strategies such as screening, early detection, drug development and targeted treatments can make a difference to overall population outcomes.
- **Increased development of personalized or "tailored" medicine.** The concept of tailoring treatment depending upon specific tumour characteristics has existed for many years with

estrogen/progesterone receptor testing for breast cancer and tyrosine kinase inhibitors for chronic myelogenous leukemia. Researchers have now identified several more new therapies suitable only for patients with particular molecular characteristics (so called "test/treatment" pairs) and the future will hold many more. Emergence of these treatments will raise issues related to the quality of laboratory testing and the need for treatment guidelines to ensure the therapies are directed appropriately. In addition, it will be important to have system performance measures in place to ensure patients and the system benefit from the targeting of resources. Furthermore, systems monitoring can assist in evaluating the cost-benefit proposition of various approaches.

Technology and research

- **Several international randomized controlled trials, on a range of screening tests, have just published or will soon publish results that may change how screening is delivered.** This includes:
  - Past publication on PSA testing and flexible sigmoidoscopy, with two more studies in flexible sigmoidoscopy expected
  - Major studies in ovarian cancer screening and spiral CT for lung cancer screening (among current or past smokers only) are expected soon
- **Dramatic changes in imaging technology have occurred.** Digital radiography is widely in place, with some provinces having capability to share e-images with all providers through electronic health records. In addition, new capabilities in MRI and PET scanning have emerged; however, the evidence or guidelines to ensure optimal use of these resources is still under development.
- **There is growing recognition of the need to continue to ensure access to and participation in clinical trial research in Canada.** Clinical trials are important in that they provide access to new therapies, identify better cancer treatments and are the only way to identify which patient subsets benefit from new therapies. There is also evidence that cancer outcomes are better for all patients treated in an institution where there is an active clinical trials program. While Canada enjoys a strong reputation internationally for its impact on the standard of practice, largely based on trials conducted by arms-length academic trials groups, there is evidence that Canada's clinical trial system is under significant threat from changing institutional and research environments. As a result there is a need to address this to ensure improved outcomes for cancer patients and continuous improvements in health care.

Access to drugs

- **Targeted cancer drugs are putting increasing pressures on drug funding.** Many new cancer therapies are derived from biotechnology known as targeted therapies. These targeted therapies are often much more expensive than traditional chemotherapy agents. According to IMS data, over 2,000 individual molecules for cancer are under development, many of which are in the near term (within four to six years), by over 100 companies.[1] Most of these drugs will be targeted cancer therapies. While many will not make it through the clinical pipeline, the increasing focus on cancer drugs by manufacturers will mean that payers will have to consider financing these expensive new therapies and managing the demand for access to them by cancer patients and their families.

- **Common approaches are being developed for the clinical and pharmacoeconomic evaluation of cancer drugs.** This was initiated through the Joint Oncology Drug Review pilot process; upon a positive evaluation the pan-Canadian Oncology Drug Review was established, demonstrating the willingness of provinces to work together to develop common approaches.

Patient preferences and expectations

- **Continued focus on balancing treatment closer to home and centralization of low-volume interventions.** With respect to treatment closer to home, this includes development of auxiliary clinics, specialized general practitioners, pharmacists and other care-givers in smaller centres, and the use of telehealth as well as other initiatives that facilitate the delivery of care closer to where patients live. There has also been a shift to centralizing some surgical procedures where evidence has shown that volumes matter with respect to quality outcomes for patients.
- **Continued high levels of hospital use in last days of cancer patient life compared with the United States.** Since surveys show that the majority of Canadians would prefer to die at home, this trend is disturbing and thus requires collaborative investigation and action.
- **Increasing expectations on the part of Canadians with respect to health care.** Canadians are increasingly taking a consumer-driven approach to health and health care services. As a result, they are demanding improved services, including sharing of information among their health care team; rapid access to the most advanced and appropriate treatments/best practices; more personalized programs; and greater access to information, including their health records, educational material, and options for self-management. At the same time, they are concerned about the escalation of costs, the use of existing resources and duplication of services.[2]

Economic environment

- **Changing economic environment and intensified focus on health care sustainability.** Although Canada has weathered the recent economic storm relatively well, Canada still faces significant economic pressures. The federal and provincial governments have increased their deficits in order to stimulate the economy. Looking forward, there is growing concern about the escalation in health care spending and the looming impact of the aging population. All jurisdictions are examining how to “bend” the health care cost curve to ensure sustainability and access for their populations in the future.

In addition to the above, the creation of the Partnership made an indelible impact on the Canadian cancer control landscape. The following describes some of the key achievements of the first four years of co-ordinated pan-Canadian cancer control.

Implementing the Strategy: The Partnership's contributions to advancing cancer control

Canada's federal government announcement in 2006 of the creation of a Partnership to implement a national strategy to control cancer was forward-looking. By actively scanning for research results and systematically sharing and implementing best practices across the country, we can reduce the impact of cancer sooner and more cost-effectively for all Canadians. Health care in Canada is delivered by 13 provinces and territories as well as the federal government. The potential for fragmentation and unnecessary duplication of effort is high. The Partnership plays an important role in harnessing the relatively small and geographically dispersed expert cancer control community and connecting them with increasing efficiency and effectiveness. The Partnership is providing common tools and resources and supporting initiatives aimed at improving quality of service delivery for patients and the public, thereby maximizing cost-effectiveness in the cancer control domain. The Partnership's business model leverages best practices and supports jurisdictions in customizing approaches to fit the local context. Essential to a pan-Canadian approach to cancer control is relevance and alignment with provincial and territorial priorities and commitments, given their role in health care delivery and healthy living strategies.

Within the context described above, the Partnership, working with and through partners, is making progress across the cancer continuum, consistent with the objectives outlined in the CSCC.

Helping Canadians be healthier

- **Unprecedented high-impact approaches to prevent cancer and other chronic diseases are being implemented across Canadian provinces and territories.** Through the Coalitions Linking Action and Science for Prevention initiative, seven large-scale efforts, each engaging two or more provinces and territories, are being implemented, bringing 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. Through these efforts to bring together research, practice and policy specialists across provinces and territories, we are accelerating change and learning what can be achieved through large-scale prevention efforts.
- **We are mapping exposure to cancer-causing agents in the workplace and in the environment.** Available through CAREX Canada (www.carexcanada.ca), the National Occupational and Environmental Carcinogen Surveillance Initiative allows health professionals, policy-makers and partners to address important questions about occupational and environmental exposure and potentially prioritize and develop strategies to enable Canadians to reduce their risk of carcinogenic exposure.

Detecting cancers earlier

- **Organized colorectal cancer screening programs are underway in every province.** To improve Canada's screening rates for colorectal cancer, the National Colorectal Cancer Screening Network sought to share knowledge and expertise to implement organized screening programs in every province. The Network's sharing of best practices in clinical engagement, technology and data meant that provinces without existing programs have been able to accelerate and reduce the cost of implementation. While each province will make its own choices about program delivery, the Network's establishment of common quality determinants means that provinces can meaningfully compare data and learn from one another's experiences.

Supporting informed decisions

- **Capturing population-based stage data to better monitor trends and patterns of cancer in Canada.** By bolstering the provinces' and territories' ability to collect cancer stage data in a standardized format, the Partnership's National Staging Initiative will yield significant gains in our collective ability to improve cancer patient outcomes, and continuously monitor the effectiveness of screening and treatment programs.
- **Assessing the impact of new decisions using the Cancer Risk Management modelling platform.** This platform enables decision-makers to model the impact of evidence-based health system investments to determine long-term disease and economic impacts of cancer. This includes comparing the impacts of various prevention initiatives, including screening and other interventions.
- **Supporting the pan-Canadian Oncology Drug Review (pCODR) process.** This collaborative effort among participating provinces will provide a consistent clinical and pharmacoeconomic review of cancer drugs and make recommendations to provinces to inform their drug funding decisions. The Partnership is providing the technology platform to support the collaborative review through its investment in Cancer View Canada, which will also host pCODR's public website. The Partnership is supporting the operations of pCODR through office space, HR and IT.

Measuring performance

- **Comprehensive public reporting of cancer system performance in Canada.** Optimizing the cancer control system for Canadians is at the heart of the Partnership's work. But 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, we had limited information to help us to 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 behaviours of Canadians. There was limited information on the impact of treatments and interventions on these measures. Through the Partnership's annual System Performance Report, we are now in a much better position to track quality and make in-depth provincial comparisons on the treatment patients receive against best practice standards, system capacity, and supportive care and survivorship, among other performance measures. This in-depth information provides a baseline for measuring progress and provides clinicians and system managers with a mechanism to identify areas of strength and priorities for action at the provincial and national levels.

Improving quality and safety

- **Standardized electronic operative and pathology reporting to improve quality and safety of care.** Through pan-Canadian synoptic reporting initiatives**,** clinicians are leading and implementing efforts to ensure the information necessary to provide timely and quality care is available. A key component of this work is getting consensus on the content of standards for reporting. In addition, clinicians are able to assess how their practice and outcomes compare with guidelines and with those of their colleagues in other areas of the country.
- **Enhancing processes and developing evidenced-based standards for care delivery underway.** The Partnership is facilitating quality initiatives such as efforts to develop ambulatory chemotherapy administration standards in collaboration with Accreditation Canada and the Canadian Association of Provincial Cancer Agencies, pathology laboratory processes for immunohistochemistry testing with the Canadian Association of Pathologists, and development of a patient-oriented quality system for colonoscopy with the Canadian Association of Gastroenterology.

Supporting patients and families through the cancer journey

- **Improving quality of life for people with cancer.** A number of projects are underway to support the cancer patient journey, including the development and implementation of a toolkit and guidelines for screening for distress during cancer treatment, definition of patient navigation models, and demonstration projects on the use of care plans to address the needs of patients following cancer treatment. The guidelines for screening for distress have been endorsed by Accreditation Canada.
- **Expanding awareness of the Canadian Virtual Hospice.** The Partnership has worked with the Canadian Virtual Hospice (www.virtualhospice.ca) to expand awareness of this unique web-based resource, which provides information and services related to palliative and end-of-life care that are designed to support patients, families and professionals.

Generating new knowledge

- **Building a pan-Canadian platform to understand the natural history of cancer and other chronic diseases.** Canada now boasts the Canadian Partnership for Tomorrow Project, a living population laboratory. This initiative is being built on the foundation of two existing studies – Alberta Health Services' Tomorrow Project and Université de Montréal's CARTaGENE. In addition to these two organizations, the pan-Canadian effort is being driven forward by the BC Cancer Agency, Cancer Care Ontario with the Ontario Institute for Cancer Research, and Cancer Care Nova Scotia with Dalhousie University collaborating on work in Atlantic Canada.

- **Improving the targeted generation of new knowledge.** Beginning with a collaborative survey of research funding allocation, major cancer research funders are increasingly looking for opportunities to co-fund major initiatives to better target the generation of new knowledge and accelerate change. The Canadian Partnership for Tomorrow Project is a major example of this; others can be found in the recently published pan-Canadian research strategy developed by the Canadian Cancer Research Alliance. Another example is investment in the Early Lung Cancer Detection study, which is putting discoveries into action. This particular study is shedding light on the effectiveness of tests to triage individuals at high risk of developing lung cancer, Canada's leading cause of cancer death. Overall, the study aims to determine who may benefit from further examination through CT scanning – a more sensitive but costlier test than X-ray.

Collaborating to share best practices

- Knowledge management, which refers to tools and systems that support all aspects of knowledge creation, organization, translation, diffusion and uptake, are central to the Partnership's approach to implementing the CSCC. **Cancer View Canada (www.cancerview.ca) provides a neutral Canadian information and collaboration hub for those working in cancer control or dealing with cancer.** It supports knowledge management activities happening across the Partnership's initiatives but also supports partners in their work and profiles their content. It also includes tools that support patients directly, such as the Canadian Cancer Trials registry.

Responding to the specific challenges of cancer for First Nations, Inuit and Métis communities

- A people-specific and **culturally relevant action plan** has been developed and validated through Canada's First Nations, Inuit and Métis organizations to respond to the specific challenges of cancer among **First Nations, Inuit and Métis** communities.
- **In collaboration with Saint Elizabeth Health Care, an online cancer course for community health representatives working in remote and rural First Nations communities** has been developed and implemented. The course has so far reached more than 215 First Nations communities and organizations and over 770 practitioners in Manitoba, Saskatchewan and British Columbia. It is estimated that if a portion of these individuals had been required to travel for knowledge development, between $125,000 and $325,000 would have been expended on travel costs alone. Work is underway to expand the course to Ontario, Alberta, Quebec and Atlantic Canada – this is expected to reach between 3,000 and 5,000 practitioners.
- **Working with Cancer Care Ontario to evaluate its Aboriginal Data Indicators Project,** a pilot program designed to enhance cancer data and client and family care for Aboriginal peoples in Ontario. Currently, First Nations, Inuit or Métis status is not recorded in the cancer registries. This pilot program is the first of its kind in Canada. Evaluation results will help inform other provinces as they conduct similar work.
- **A new online site with First Nations, Inuit and Métis cancer control tools and resources on Cancer View Canada.** This is the first known clearinghouse of its kind in Canada specifically focused on cancer control among Canada's First Nations, Inuit and Métis communities.

Engaging our partners and creating linkages

- **Enabling partnerships with the provinces and territories.** The Partnership engages provinces and territories in a meaningful, respectful way and we have worked hard to align our efforts with provincial and territorial priorities. The advisory mechanisms reflect the provinces, territories and cancer agencies/programs, and we work directly with clinicians and experts on the ground to implement the work.
- **Creating a common agenda for cancer control at the national level.** The Partnership plays an important role in integrating cancer activity and linking with other national organizations with a mandate in health. We are actively working with the Public Health Agency of Canada, Health Canada, Canadian Patient Safety Institute, Accreditation Canada, Canada Health Infoway, Canadian Agency for Drugs and Technologies in Health, Statistics Canada, Canadian Institute for Health Information and others on various initiatives. We have formalized some of these relationships, as appropriate, through the development of Memoranda of Understanding, Letters of Agreement or contracts.

While much progress has been made in four short years, there is more work to do as cancer will continue to place a substantial burden on Canadians and on the health care system over the next 25 years, unless there is ongoing effort to address the increase in cancer cases and deaths and to support cancer survivors in transition back to the community.

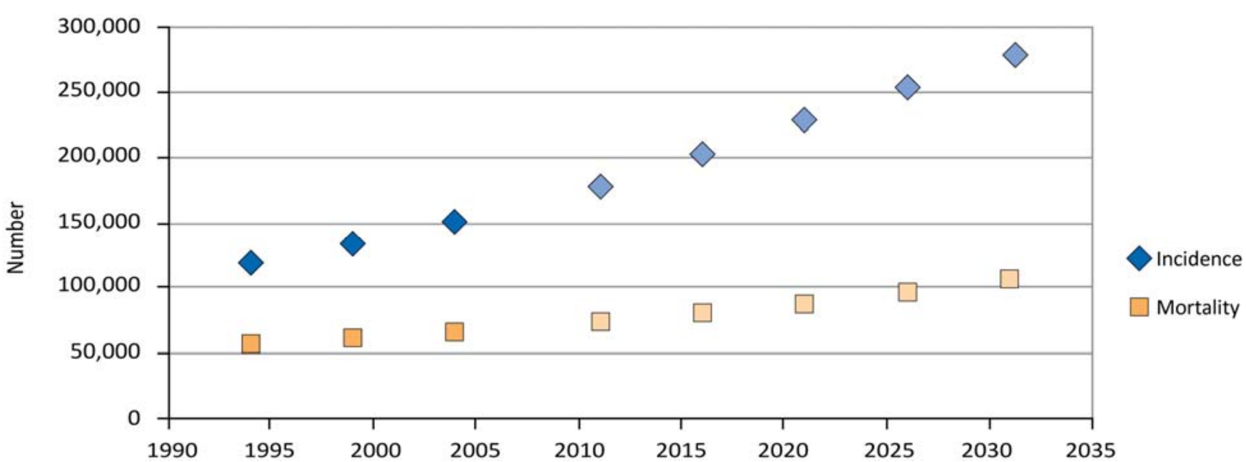
The rising tide of cancer

Almost half of all Canadians will develop cancer or be diagnosed with cancer in their lifetime; 40 per cent of Canadian women and 45 per cent of men will develop cancer.[3] Not surprisingly, Canadians identify cancer as their top health concern. Eight in 10 Canadians say they are concerned about cancer, including almost four in 10 who are very concerned. These proportions are higher than concerns expressed for heart disease or diabetes. Approximately six in 10 say they are more concerned about cancer than they are about heart disease (most feared by two in 10) or diabetes (most feared by one in 10). Seven in 10 Canadians believe there is some risk they will be diagnosed with cancer.[4]

Increasing incidence and mortality

The number of new cancers and deaths from cancer are expected to continue to rise (Figure 1). This is due in large part to the aging of Canada's population as well as population growth. Between 2006 and 2031, we expect that new cancer cases will increase from 160,000 to 280,000 (76 per cent increase) and deaths from cancer from 68,000 to 107,000 (58 per cent increase). Cancer is not only a disease of the aged, it is the leading cause of death for Canadians aged 35-64 years, killing a greater number of younger Canadians than heart disease, injuries, stroke and diabetes combined.[5] Existing studies show that cancer has also risen dramatically among the First Nations, Inuit and Métis populations. Among Canada's First Nations, Inuit and Métis communities, cancers tend to be discovered at more advanced stages, incidence is increasing faster and deaths from preventable cancer are higher than in the overall Canadian population.[6] Without a sustained effort to manage its effects, the impact of cancer will continue to grow as the number of cases of cancer and cancer deaths continue to rise.

Figure 1. Projected numbers of cancer cases and deaths in Canada – all sites, both sexes, years 2011, 2016, 2021, 2026 and 2031



Note: The numbers reported above are predicted using average trend over years with available data (incidence: 1992 onward; mortality: 1987 onward). The numbers up to 2005 are observed.
Source: Canadian Partnership Against Cancer (2010)

Troubling trends for common risk factors

Cancer is a complex disease and as noted above, is the number one health concern for Canadians. However, much can be done to reduce its impact. Tobacco control and healthier lifestyle choices can play a significant role in reducing the risk of cancer.[7] However, many of these risk factors are showing troubling trends.

Specifically:

- The rate of cessation for smoking has slowed, particularly in older smokers.
- The rates of overweight and obesity are climbing.
- Little change has been seen in leisure-based physical activity levels since 2000-2001.
- The likelihood of exceeding guidelines for lower-risk drinking has increased over time.[8]

Trends in tobacco use

Tobacco use is a major preventable cause of cancer, accounting for 85 per cent of all new cases of lung cancer in Canada.[9] Tobacco use also contributes to a number of other cancers, including cancers of the larynx, oral cavity and pharynx, esophagus and bladder, and is also a major risk factor for heart disease, stroke and respiratory illnesses.

According to the 2008 Canadian Community Health Survey, 16.8 per cent of Canadians smoke daily and an additional 4.6 per cent smoke occasionally. The smoking rate varies widely across the country, with smoking rates highest in Nunavut (greater than 50 per cent) and lowest in British Columbia (18.6 per cent).[10]

The decline seen in smoking rates in Canada has not been consistent across age groups. From 1999 to 2009, smoking rates among those aged 15-44 years declined steeply, with reductions of between 9 per cent and 14 per cent recorded across these age groups.[11] Unfortunately, smoking rates for those aged 45 years and older have decreased much less, with an observed decline of about 3 per cent between 1999 and 2009.[12] While smoking cessation rates for younger Canadians aged 20-34 years have remained relatively stable, the cessation rates have worsened among Canadians aged 45 and older. From 2003 to 2008, the per cent of recent smokers who quit smoking in the past two years decreased from 21.2 to 15.6 per cent among those aged 45-64 years and from 26.0 to 19.9 per cent among those aged 65 and older.[13] While preventing youth from smoking will impact mortality in the decades beyond 2050, smoking cessation in adults currently smoking will have more immediate impact on reducing tobacco mortality.

Trends in obesity

It is estimated that approximately one-third of all cancers can be prevented through a combination of healthy nutrition, regular physical activity and avoidance of obesity.[14] Obesity is also recognized as a major risk factor for type 2 diabetes and cardiovascular disease.[15] The percentage of obese adults and children has been steadily rising in Canada over the past few decades and this will have an important impact on the incidence of cancer and other chronic health conditions. Among adults, the self-reported prevalence of obesity has increased from 5.6 per cent in 1985 to 14.8 per cent in 1998 and to 17.2 per cent in 2008.[16,17]

Childhood obesity is showing the same troubling trends. The percentage of obese children aged 2-17 years in 1978-1979 was 3 per cent and this grew to 8 per cent in 2004. As with adults, obesity in children causes a number of health problems and increases the risk of premature illness.[18]

Trends in physical activity

Evidence of the protective effective of physical activity against the development of several types of cancers is growing. In particular, there is evidence to support its protective effects against colon cancer and potentially protective effects against cancers of the breast (post-menopausal) and endometrium. Physical activity also protects against overweight and obesity, factors that are also responsible for increased risk of cancer.[19]

Overall, only one-fifth of Canadians aged 15-75 years reported levels of physical activity that would classify them as being "active." Furthermore, a temporal analysis of self-reported leisure-based physical activity levels between 2000-2001 and 2008 indicates very little change in physical activity levels over time.[20]

Trends in alcohol consumption

While research suggests that there may be potential benefits to alcohol consumption for coronary heart disease, there is evidence that alcohol consumption may contribute to the development of cancer. A low-risk drinking guideline of two drinks per day for males and one per day for females has been established taking these factors into account.[21]

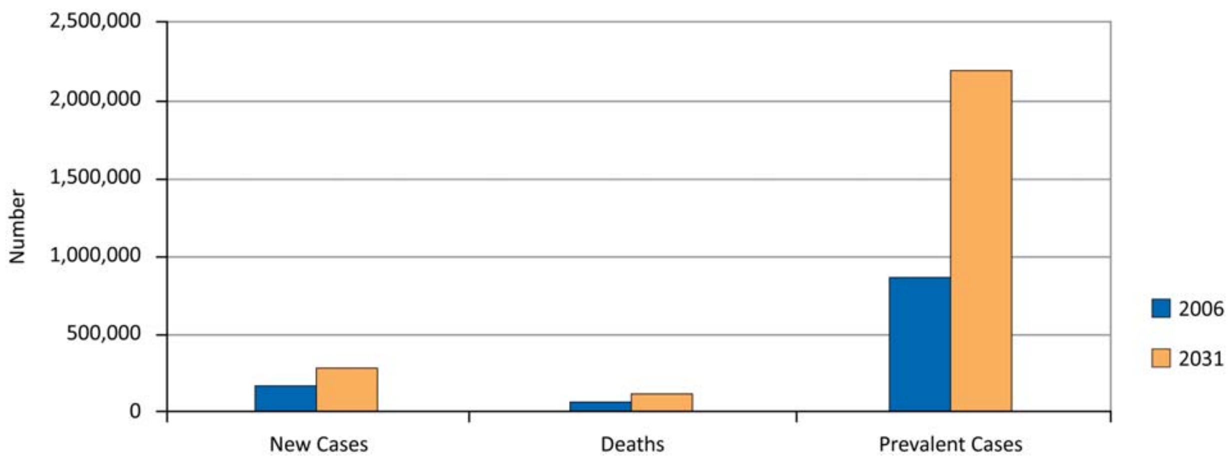
Temporal analysis of data from the Canadian Community Health Survey indicates that between 2001 and 2005, the percentage of adults exceeding the low-risk guidelines has been increasing steadily. The greatest increase was seen in adults aged 18-34 years, whose rate increased from 9.8 per cent to 12.8 per cent, followed by adults aged 50-64 years, whose rate increased from 6.8 per cent to 8.3 per cent. Adults aged 34-49 years and those who were 65 or older saw the smallest increases, with rates increasing from 7.7 per cent to 8.7 per cent and 4.1 per cent to 5.1 per cent, respectively.[22]

More survivors: New needs and new pressures

With important advances in cancer screening, early detection and treatment, the long-term prognosis for cancer is improving. Canada ranks highly in comparison with other countries for survival. A recent international study has found that Canadian survival rates for lung, breast, colorectal and ovarian cancer are higher than those of the United Kingdom, Denmark or Norway.[23]

In Canada, the overall five-year relative survival ratio for cancers diagnosed between 2004 and 2006 is 62 per cent and the 10-year relative survival ratio is 58 per cent.[24] Between 1992-1996 and 2004-2006, a number of cancers have seen significant increases in their five-year relative survival ratios. For example, the age-standardized relative survival ratio for non-Hodgkin lymphoma increased from 51 per cent to 63 per cent, for leukemia the ratio increased from 44 per cent to 54 per cent, and for liver cancer it nearly doubled from 9 per cent to 17 per cent.[25] The five-year relative survival ratio is high for cancers of the prostate (96 per cent), testis (95 per cent), skin melanoma (89 per cent) and breast cancer (88 per cent).[26] Assuming that past trends of improvements in survival continue, in 2031 the number of Canadians living with a history of cancer or active cancer will be 2.2 million, 2.5 times the estimated number of 900,000 in 2006. As can be seen in Figure 2, the increase in the number of people living with a cancer diagnosis will grow much more than cancer cases and deaths from cancer over the 25-year time span of 2006 to 2031.

Figure 2. Projected cancer incidence, mortality and prevalence in Canada – 2006 to 2031



Source: Canadian Partnership Against Cancer (2010)

Given the expected increase in the number of survivors, we need to better prepare to manage this segment of cancer care. The preparation needs to be both within the treatment system as well as the primary care system. We also need to give thought to informal caregivers. It is estimated that informal caregivers provide more than 80 per cent of care needed by individuals with “long-term conditions.”[27] Given the prevalence of cancer, it is reasonable to assume that a significant portion of this informal care is for people with cancer.

Attention to end-of-life and palliative care needed

Despite our current knowledge and best efforts, a significant number of people will succumb to cancer. As previously indicated, it is expect that deaths from cancer will increase from 68,000 to 107,000 (increase of 58 per cent) in the period from 2006 to 2031. While most Canadians would prefer to die at home, surrounded by their loved ones, most are still dying in hospitals or long-term care homes. The availability of high-quality care at the end of life varies widely in different parts of the country and in different settings.[28] There needs to be palliative care knowledge and skill within a broad range of health care providers, both those in specialized settings as well as those in primary care. Pain and symptom management continues to be of concern and a cause of emotional distress for patients and their families at the end of life.

The cost of cancer

Cancer is an important driver of health care costs and lost productivity. The aging and growing population coupled with improvements in cancer survival means increasing demand for treatment and services. In 2009 alone, Canada faced $6.6 billion in health care costs and lost productivity related to new cancer cases.[29] A 2004 study estimated the direct costs of cancer treatment in Canada at approximately $2.5 billion in 1998.[30] It is safe to say that the costs of cancer treatment are much higher today given the escalation in overall health care costs during the last decade due to such factors as increased expenditures related to pharmaceuticals and increases in service utilization due to population growth and aging.[31] Using a more recent estimate of $2 billion in annual treatment costs in Ontario, the annual treatment costs for Canada are estimated at approximately $5 billion.[32] This does not capture the costs of informal care giving provided by families and friends of people with cancer. Recent estimates are that they contribute more than $5 billion of unpaid labour annually to the health care system.[33] A significant portion of this care would be for cancer patients given its prevalence. In addition to the financial burden, cancer also has an immeasurable impact on the quality of life of those affected, including their families and friends.

Stemming the tide of cancer and managing for the future

In view of the predicted increase in the burden of cancer over the next 25 years, there is much we should and can do to curtail this impact. By working together in the cancer control community and by combining forces with other chronic disease partners in both the prevention and end-of-life care domains, there is much we can do to benefit all Canadians. There is also a need to continue to work in the patient care domain that is unique to cancer in order to ensure that patients with a cancer diagnosis receive appropriate treatments in a timely manner that is both efficient and effective. A sustained and co-ordinated effort is required.

Working with chronic disease and other partners

The prevention and end-of-life and palliative care domains of the cancer control continuum are not unique to cancer.

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. During our first mandate the Partnership has learned, given the complexity and size of the issues before us as well as the potential benefits, that there is much to be gained by working with other chronic disease partners, public health and primary care on these strategies. Lessons across chronic disease groups can be adapted and applied.

With respect to palliative care services, a significant portion of these services are dedicated to those with a cancer diagnosis; however, the need for these types of services is not unique to cancer. Thus, similar to the prevention domain, opportunities exist to join forces with others to maximize our collective impact.

Increasing the efficiency and effectiveness of care and treatment

The gains in survival have been brought about by improvements in our ability to detect cancers earlier when they are more treatable, by increased screening and by better and safer treatments. We need to continue to build on these successes. Therefore, ongoing efforts in identifying and evaluating best approaches for screening and early diagnosis, as well as on advancing the treatment of cancer, are needed.

As indicated earlier, cancer care is estimated to cost the Canadian system approximately $5 billion per year. As the number of cancer cases increases, primarily due to the aging and growing of the population, the costs of cancer care will also increase. We need to optimize the trajectory of cancer care and ensure excellence in clinical pathways. Doing so will increase efficiency as well as quality.

System performance measurement is an important tool, allowing the measurement of successes as well as the identification of areas that would benefit from evidence-based quality improvement strategies. Focused efforts to implement these strategies will ultimately increase the quality of care delivery and patient outcomes. Appendix 1 provides an overview of how system performance monitoring can guide the quality improvement cycle.

Sustaining pan-Canadian action in cancer control is required

The Partnership has put in motion an innovative and effective model to manage the rising tide of cancer. If these efforts to catalyze and accelerate cancer control are not sustained, we risk continued growth of preventable cancers and unnecessary suffering as well as continued cost pressures on the health system. The positive impact of sustaining pan-Canadian momentum in cancer control can be illustrated by looking out 20 years and modelling what could be achieved. Using the Partnership's Cancer Risk Management modelling platform (www.cancerriskmgmt.ca), scenarios looking at the future impact on cancer of various interventions and approaches that can be implemented today are provided below.

Scenario 1: Organized colorectal cancer screening – 20 years out

Colorectal cancer is the third most common cancer diagnosed in Canada and the second leading cause of deaths from cancer. It will result in over 9,000 deaths in 2010.[34] However, regular screening in people aged 50-74 years can prevent deaths from colorectal cancer. In 2005, an estimated 20 per cent of Canadians reported being screened for colorectal cancer.[35]

If 80 per cent of people aged 50-74 years across Canada had up-to-date colorectal testing by 2013, then by 2030:[36]

- Approximately 32,000, deaths from colorectal cancer could be avoided.
- A cumulative increase of $2.6 billion in earnings would be gained.
- There would be a cumulative increase of $9.4 billion in total income.

Scenario 2: Smoking cessation – 20 years out

Tobacco use is an important preventable cause of cancer in Canada, accounting for 85 per cent of all new cases of lung cancer.[37] In 2010, lung cancer will result in over a quarter of all deaths from cancer in Canada.[38] Reducing tobacco use is currently the single most important action that can prevent cancer. In 2008, 21 per cent of Canadians reported daily or occasional smoking. The lowest smoking rates in Canada and the United States in 2009 were 9.1 per cent in Bethesda, Maryland; 9.8 per cent in Utah; and 12.9 per cent in California.

If Canadian smoking rates were 10 per cent today, then by 2030:[39]

- An estimated 58,000 new cases of lung cancer could be avoided.
- An estimated 46,000 deaths from lung cancer could be avoided.
- A cumulative increase of $3.2 billion in earnings would be gained.
- There would be a cumulative increase of $10.2 billion in total income.

These scenarios show how through sustained and co-ordinated action we can impact the future burden of cancer on the Canadian population. While the two examples show how prevention and early detection can have an impact, opportunities also exist to find more effective treatments and to increase the quality of current treatments and care.

Investing in the Partnership

The first four years of the Partnership have shown that an investment of about 1 per cent of the annual costs of cancer treatment (that is, the $50 million annual Partnership budget over an estimated $5 billion per year spent on cancer treatment in Canada) is a critical lever to reduce the impact of cancer sooner and more effectively for all Canadians. We have established key priorities and associated targets in which we invest over multiple years and work toward in collaboration with our partners. A nimble, pan-Canadian approach allows us to harness the collective Canadian knowledge, expertise and capacity to accelerate co-ordinated action on cancer. Building on this solid foundation, we can continue to accelerate efforts to control cancer.

The pan-Canadian model is working

Harnessing the available expertise and innovation in Canada to benefit multiple jurisdictions saves time, resources and effort. Nearly five years of experience in the implementation of large-scale pan-Canadian initiatives has taught us a lot about how to do this well. The following are critical success factors that we have identified:

Initiative selection:

1. Robust priority-setting process, including assessing:
    a. Relative disease burden
    b. Potential impact on health outcomes and health system resources
    c. Relevance and alignment with provincial and territorial priorities
    d. The potential value add of a pan-Canadian approach
    e. Readiness of multiple jurisdictions to commit to implementation
    f. Mechanisms and capacity to support implementation and sustainability

For each initiative:

2. Identify and engage the relevant
    a. Partner organizations
    b. Provincial, territorial and local decision-makers
    c. Clinical and scientific expertise in Canada
    d. Public and patients
3. Establish mechanisms and agreements to support local implementation and sustainability
4. Identify and support local champions to promote adoption and implementation
5. Identify and address local capacity needs (e.g., people, knowledge, infrastructure, etc.)
6. Establish and convene pan-Canadian networks over the life of the initiative with key opportunities for face-to-face interaction, collaboration and knowledge sharing
7. Convene expert panels to establish pan-Canadian standards and indicators as needed
8. Support local implementation flexibility based on pan-Canadian standards
9. Support pan-Canadian evaluation of impact

Planning for the future

2012-2017 Strategic framework

As we move ahead together beyond 2012, we must consider how we can build on the foundation that has been established to enable a co-ordinated approach, and identify new opportunities to accelerate our progress in cancer control. The Partnership's strategic framework has been refined and refreshed to reflect a greater degree of integration across its strategic initiatives, and a move away from priority areas operating in silos. This updated framework, depicted in Figure 3, will guide our work for 2012-2017. Once finalized, it will inform the selection of initiatives and the logic framework that will ultimately link tracking progress on initiatives against goals.

Vision

To reduce the impact of cancer for all Canadians.

Mission

Together with our partners we optimize cancer control in Canada by:

- Harnessing innovation and expertise
- Sharing best practices
- Building capacity
- Co-ordinating and accelerating action

Guiding principles

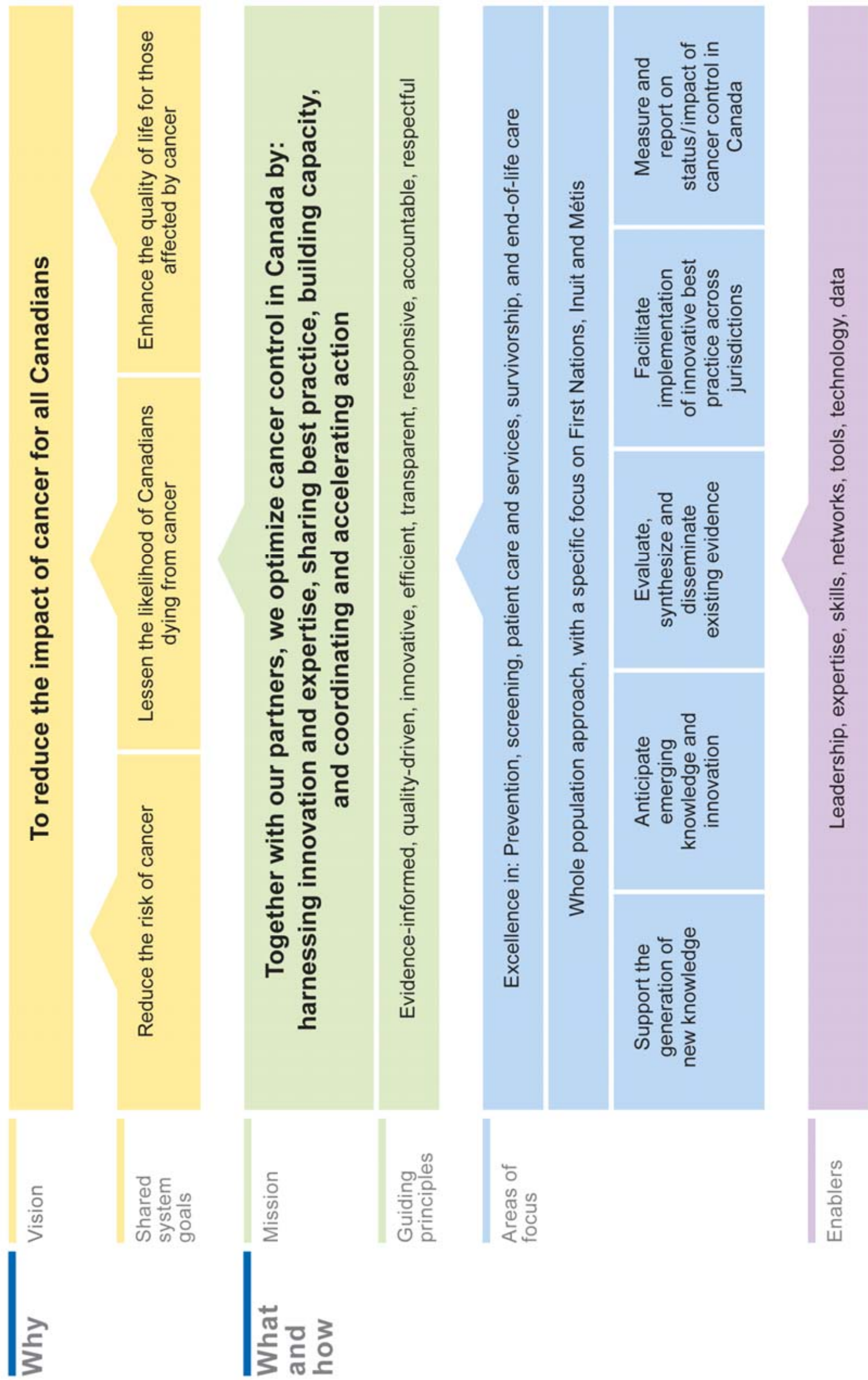
- *Evidence-informed* in decision-making
- *Quality-driven* in our efforts to improve cancer control
- *Innovative* in our approach to accelerating cancer control
- *Efficient* in our use of resources
- *Transparent* to the public, our partners and stakeholders
- *Responsive* to addressing areas of defined need
- *Accountable* to Canadians
- *Respectful* of federal, provincial and territorial boundaries

How will we carry out our mission?

It is through our core functions – part of any knowledge management strategy – that we will carry out our mission. These functions include:

- Supporting the generation of new knowledge
- Anticipating emerging knowledge and innovation
- Evaluating, synthesizing and disseminating existing evidence
- Facilitating the implementation of innovative best practices across jurisdictions
- Measuring and reporting on the status/impact of cancer control in Canada

Figure 3. Canadian Partnership Against Cancer's 2012-2017 strategic framework



Looking to the future: Potential outcomes and high-impact opportunities

Four years of experience in the implementation of large-scale pan-Canadian initiatives along with the information we have gathered through our consultation processes over the summer and fall of 2010 (see www.partnershipagainstcancer.ca for the consultation report) has resulted in the identification of a list of potential outcomes and opportunities to continue to accelerate cancer control. The list is currently broad and lengthy, reflecting the vast scope along the cancer control continuum. Further consultation and a priority-setting process will refine, shape and integrate the list of opportunities and inform the top high-impact priorities. This process will also include sustaining some of the Partnership's current initiatives that will serve as the focus of a refreshed strategic plan for cancer control in Canada.

The identified outcomes and potential opportunities that span the cancer control continuum are described below.

Achieving risk reduction in the Canadian population

There is so much we know about how to reduce the risk of cancer and other chronic diseases. From curbing smoking rates, improving nutrition, increasing physical activity and moderating alcohol consumption, to reducing exposure to infectious agents, toxic substances, and UV/ionizing radiation – the evidence is getting stronger all the time. To achieve a positive impact on risk reduction, we require multi-sectoral strategies to influence positive behaviour choices and improve the quality of our environment through co-ordinated efforts to encourage appropriate practice change and influence policy. Through Coalitions Linking Action and Science for Prevention (CLASP), the Partnership has enabled Canada's first efforts to intensify the prevention of cancer and chronic diseases by working across provincial and territorial boundaries and securing the commitment of organizations spanning multiple chronic diseases to unite their prevention strategies for greater impact.

(a) Desired outcome: Co-ordinated multi-sectoral action to positively impact risk reduction in the Canadian population

Reducing the risk of cancer and other chronic diseases in the Canadian population will require continued strategies to intensify and co-ordinate prevention efforts. Opportunities to do so include working with our partners to establish the feasibility of developing consensus on a limited set of establish Canada-wide targets for risk reduction, which would serve as common goals to orient and assess the impact of our collective prevention efforts; aligning Partnership prevention investments with existing federal/provincial/territorial priorities, such as obesity prevention and tobacco control, to focus efforts and achieve greater impact; sustaining and expanding the CLASP initiatives to reduce chronic disease risks for a greater number of Canadians and Canadian communities; and linking the investments the Partnership has made in CAREX Canada and system performance monitoring to prevention behaviours, and using the Prevention Policy Directory to help drive healthier public policy implementation and evaluation.

(b) Desired outcome: Improve our understanding of the risk factor–biology interaction for cancer and other chronic diseases

One important opportunity to improve our understanding of the relationship between genetics, lifestyles and the environment to advance risk reduction is to continue to support the Canadian Partnership for Tomorrow Project. Sustaining this important initiative will include efforts to increase the number of research studies leveraging this laboratory, increasing researchers' capacity to mine this important data source and seeking additional funding partners.

Advancing excellence in patient care, services and support

Canadians, no matter where they live, should be able to count on high-quality cancer care when they need it. Quality and excellence should define the care patients receive through the care trajectory; that is, from the time they have routine screening or testing and/or are tested for a specific concern, through to diagnosis and active treatment, as well as community-based follow-up care, palliative care and in some cases end-of life care. In the current environment of significant fiscal constraint and steeply rising health care costs due in large part to an aging and growing population, it is more important than ever to realize any efficiency opportunities to support the delivery of quality cancer care across all jurisdictions in Canada.

(a) Desired outcome: Accelerate the uptake of high-quality cancer screening programs

Increasing the uptake of cancer screening is a shared priority across all provinces and territories in Canada. Across the country, screening participation is close to target rates for breast and cervical cancer, while colorectal cancer screening participation has historically been well below target rates. As described above, the Partnership, through the establishment of a pan-Canadian network to share evidence, data and knowledge, has accelerated the implementation of organized colorectal cancer screening, which will ultimately increase participation rates. Opportunities to continue to accelerate the uptake and quality of screening include routinely monitoring data and sharing knowledge across cancer screening programs to identify improvement priorities and uptake strategies.

(b) Desired outcome: Accelerate quality and safety initiatives in cancer patient care and services

Working with key partners on priority quality and safety issues, including provincial cancer agencies/programs, the Canadian Association of Provincial Cancer Agencies, Accreditation Canada, Canadian Patient Safety Institute, and professional associations like the Canadian Association of Medical Oncologists, the Canadian Association of Pathologists and the College of American Pathologists, the Partnership has laid the groundwork to contribute to a robust quality improvement program for cancer in Canada. This work relies on evidence-based approaches, the use of knowledge management tools as well as emerging theories about how best to influence the practice habits of individual practitioners. Opportunities to continue to accelerate quality, safety and excellence in care include developing a priority-setting framework to identify pressing, high-impact quality initiatives that can be used to influence practice approaches in all clinical areas; co-ordinating the development of evidence-based pan-Canadian standards in care and treatment in areas of defined need; use of methods that embed evidence and guidelines at the point of care such as supporting technology implementation that address priority quality issues (e.g., pathology, tele-radiology, surgery); and fostering a culture of quality improvement and evidence-based practice that is grounded in measurement of quality.

(c) Desired outcome: Improve the cancer journey for patients and families

Patients, survivors and their families are empowered to promote their health and well-being – with, through and beyond cancer – when supported by accessible, acceptable, affordable, comprehensive and co-ordinated services. Because optimal cancer care represents a balance of personal empowerment and support, the Partnership is providing leadership to change the focus of care. Partnership initiatives such as Integrated Person-Centred Care and Screening for Distress are addressing gaps in support needs and improving the way the cancer system enables people to be active and appropriately supported in their care.

Opportunities to continue to improve the cancer journey for patients and families include improving and reducing variation in access to supportive and palliative care by facilitating the implementation of best practices (including those for pain and symptom management); ensuring palliative skills are available across a wide variety of providers; co-ordinating the development of shared care pathways to improve transitions in care; investing in innovative, high-impact patient navigation models to improve transitions between the cancer system and primary care and the community; addressing the skills required and investing in online supports to reach those in rural and remote locations, those with mobility issues and/or to address personal preferences; and exploring opportunities and new partnerships to support cancer patients transitioning back to school and the workplace. Online tools such as those available across Canada from our partners (e.g., Canadian Virtual Hospice and the Canadian Cancer Society) and brought together in Cancer View Canada offer a further opportunity to support those going through a cancer experience.

(d) Desired outcome: Accelerate the uptake of culturally appropriate cancer programs and services

Among Canada's First Nations, Inuit and Métis peoples, cancers tend to be discovered at more advanced stages, incidence is increasing faster and deaths from preventable cancers are higher than in the overall Canadian population. To help address these findings and facilitate meaningful and sustainable change, the Partnership's work has been guided by these communities in order to best reflect their needs and priorities. Based on the action plan developed by the Advisory Committee on First Nations, Inuit and Métis Cancer Control, priority opportunities include developing community-based health human resource skills and capacity, as well as raising community awareness; developing and implementing culturally responsive resources and services; improving access to programs and services in remote and rural communities; and improving capacity to identify cancer patients and developing and implementing culturally appropriate patient navigation strategies.

(e) Desired outcome: Maximize Canada's research investments in cancer to deepen our understanding of cancer and to improve care and services

Over 50 organizations across Canada contribute to the generation of new knowledge that informs how cancer is prevented, detected and treated. To maximize these organizations' collective investment in cancer research, the Partnership supports the Canadian Cancer Research Alliance, which works to improve the targeted generation of new knowledge and which recently released a strategic plan for cancer research in Canada. Opportunities to continue to maximize Canada's investment in cancer research include continuing to invest in the Canadian Cancer Research Alliance and identifying effective ways to improve access to cancer clinical trials across Canada.

Enabling co-ordinated, pan-Canadian cancer control

In a matter of four years, the Partnership has been able to establish relationships with pan-Canadian partner organizations representing cancer experts, patients, clinicians, system leaders and researchers at the national, provincial and territorial levels. It has also built unprecedented capacity to innovate and improve cancer control across the country, including leadership, skills, advisory networks, data and technology. The capacity building effort offers a robust vehicle to sustain existing initiatives as well as implement future high-impact opportunities to control cancer and other chronic diseases. It is critical to continue to improve and sustain this foundation.

(a) Desired outcome: Deepen performance measurement and reporting to support quality improvement and application of best practices

Unless it is clear how the cancer system is working, it is difficult to know where to start and what to focus on. The Partnership's annual System Performance Report has made great strides to improve Canada's ability to make in-depth provincial comparisons of quality across the entire continuum of cancer control, including the treatment patients receive against best practice standards, system capacity and supportive care and survivorship. Opportunities to support cancer care quality improvement in Canada through performance reporting include improving indicator measurement from pre-diagnosis to after treatment and palliative care, exploring international comparisons and best practices, and shining a light on best practices across Canada.

(b) Desired outcome: Improve best available tools to support knowledge transfer and exchange

Core to the Partnership's mandate is accelerating the adoption of existing cancer control evidence and knowledge. This goal reflected a significant need to reduce the "know-do" gap across the cancer control continuum, from applying what is known about risk reduction behaviours through to the supports cancer patients need in the palliative and end-of-life phases of care. Each of the Partnership's strategic initiatives has been designed to close this important gap. These initiatives include generating new knowledge (e.g., Canadian Partnership for Tomorrow Project); anticipating emerging knowledge and innovation (e.g., Anticipatory Science expert panels in screening); evaluating, synthesizing and disseminating existing knowledge (e.g., Cancer View Canada's Standards, Guidelines and Evidence repository and Canadian

Cancer Trials); facilitating the implementation of best practice (e.g., National Staging Initiative, CLASP, CAN-ADAPTE, CAN-IMPLEMENT projects and resources); and measuring and reporting on the status of cancer control (e.g., System Performance Initiative, cancer surveillance).

Opportunities to continue to improve the uptake of best available knowledge in cancer control include building on the Cancer View Canada platform as the go-to information, tools and collaboration hub for cancer control efforts in Canada; increasing the uptake and adoption of the suite of existing knowledge management tools, such as the Collaborative Group Spaces tool and the Prevention Policy Directory to support partners in their work; extending support for knowledge exchange networks; and exploring ways to intensify the Partnership's regional presence to facilitate knowledge exchange.

(c) Desired outcome: Improve access to best available data and evidence to inform and support practice, policy, investment and implementation decisions

Relative to that available for other diseases, data describing the status and impact of cancer control in Canada is a rich resource. Facilitating the transformation of existing cancer data into knowledge to support policy and practice decisions is critical to improving our ability to control cancer. At the same time, important gaps need to be addressed, such as tracking the pre-diagnosis period, diagnostic testing and late treatment effects. The Partnership's National Staging Initiative and Synoptic Surgery and Pathology projects are closing important data gaps along the cancer continuum and support practice and policy decisions. For example, the Synoptic Surgery Reporting project has shown the impact of providing clinicians with near-real-time information about trends in their own practice. Partnership initiatives such as the Cancer Risk Management modelling platform and the development of common methods through Surveillance and Epidemiology Networks are examples of leveraging comprehensive cancer data and transforming it into knowledge that supports decision-making.

Opportunities to continue to improve best available data and evidence include maximizing and facilitating the use of existing data sources (e.g., linkages between databases, data access strategies); building system capacity for data collection, quality, analysis and application; co-ordinating pan-Canadian standards for cancer control data collection, measurement and reporting; and increasing Canada's economic analysis capacity to forecast the long-term impact of controlling cancer.

As new and significant evidence emerges in the detection and treatment of cancer, every health system in Canada can benefit from a pooling of Canadian expertise and resources to assess that evidence systematically. To date, the Partnership has struck multiple pan-Canadian expert panels to summarize emerging evidence in cancer screening. Opportunities to continue to support cancer system preparedness include summarizing the evidence and preparing for advances in personalized medicine; preparing for emerging screening modalities, such as the potential roll out of spiral CT screening for lung cancer; preparing for the impact of new prevention strategies such as HPV vaccination; and continuing to support the pan-Canadian Oncology Drug Review process.

(d) Desired outcome: Intensify communications and public outreach

The Partnership connects with partners and stakeholders at conferences and meetings; through strategic dissemination of reports, tools and resources; and online at www.partnershipagainstcancer.ca and www.cancerview.ca, among other vehicles. The Partnership recognizes that people who are not engaged in the day-to-day work of cancer control also need to know about the national strategy, the work underway across the country, how Canadians are contributing to taking action on cancer, and what more needs to be done to achieve the shared system goals referenced in Section 1.

Opportunities to intensify communications and public outreach include developing a strategy to engage in dialogue with the Canadian public on defined areas of need, and continuing to highlight the impact of the Partnership's collaborative work with partners through stakeholder communication, media, the Partnership website and Cancer View Canada portal.

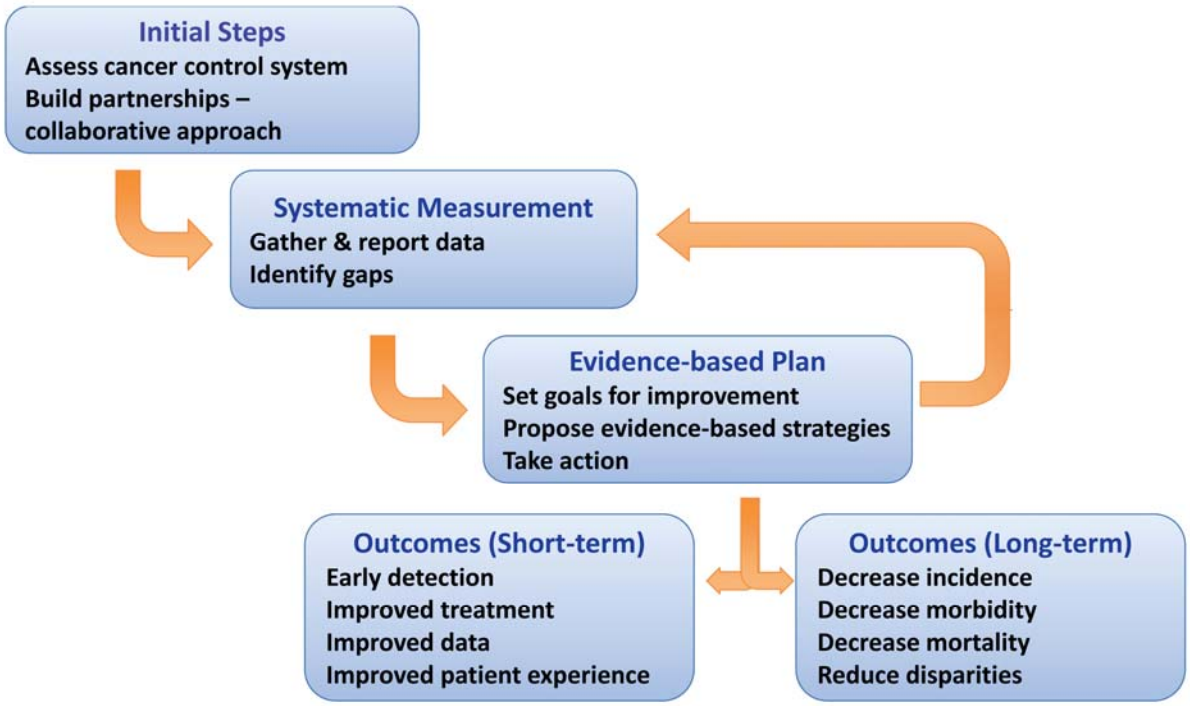
Conclusion and next steps

This discussion paper examines what could be achieved by renewing our commitment to working together to accelerate our ability to advance and sustain cancer control, and improve the situation of those living with cancer. It describes the impact to date of a pan-Canadian approach to cancer control and lays out the case for sustained action. It also presents a working strategic framework that outlines what we believe are the core functions of a pan-Canadian cancer control organization to catalyze and add value to federal, provincial and territorial efforts across the cancer control continuum to reduce the impact of cancer on Canadians.

The Partnership will use this discussion paper to seed and nurture conversations over the winter and early spring of 2011. In addition, written feedback will be accepted by the Partnership from mid-February to early April 2011. The objective is to gather input that will help refine, shape and validate Canada's highest impact priorities to control cancer that, over the next five years, will deepen our collective ability to take action on cancer for all Canadians.

Appendix 1: System performance and quality initiatives

The following diagram shows the link between system performance monitoring, quality initiatives and improved outcomes.



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