2019-2029

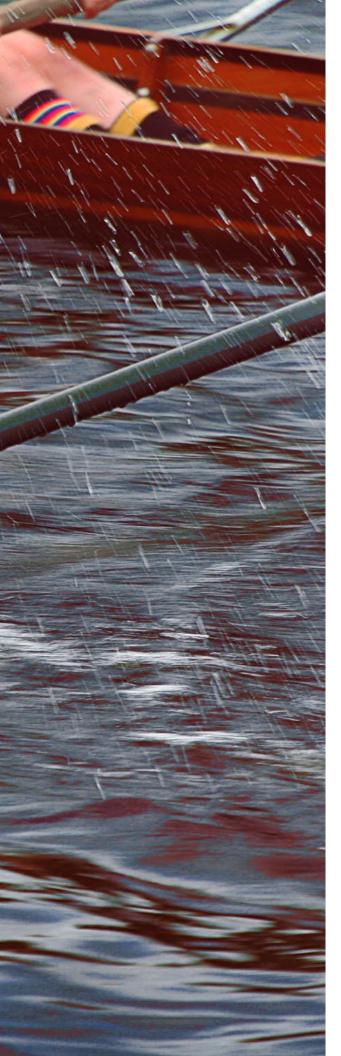
## CANADIAN STRATEGY FOR CANCER CONTROL

Doing together what cannot be done alone









### Canadian Strategy for Cancer Control 2019-2029

#### **TABLE OF CONTENTS**

- 4 Foreword
- 6 The Strategy at a glance
- 8 A cancer strategy for Canada
- **14** Refreshing the Canadian Strategy for Cancer Control for 2019–2029
- 16 The Strategy's priorities and actions
- **34** Supporting the Strategy
- 37 Priorities and actions specific to First Nations, Inuit and Métis
- **44** Putting the Strategy into action
- 48 Commitment to Canadians
- 49 References
- **52** Canadian Partnership Against Cancer Board of Directors
- **53** Canadian Strategy for Cancer Control External Advisory Committee

The Canadian Partnership Against Cancer was created by the federal government with funding through Health Canada. Since opening our doors in 2007, our sole mandate has been to move Canada's cancer strategy into action and help it succeed. In this publication, we share the Canadian Strategy for Cancer Control with Canadians and partners across the cancer landscape.

Visit cancerstrategy.ca to download the Canadian Strategy for Cancer Control 2019–2029.

ISBN 978-1-988000-39-8 (Print) ISBN 978-1-988000-38-1 (Online)

Production of this report has been made possible through a financial contribution from Health Canada.

# The Canadian Strategy for Cancer Control. Doing together what cannot be done alone.



Since its launch in 2006, the Canadian Strategy for Cancer Control has helped reduce the burden of cancer on Canadians— serving as a powerful tool for change and improvement.

However, the cancer landscape has changed significantly since the Strategy was first developed, presenting new opportunities as well as new challenges. While the Strategy's vision remains as relevant today as it was a decade ago, the Strategy itself has been modernized and refreshed to ensure it can continue to guide our collective efforts in the years ahead.

#### Leading the renewal

In our role as steward of the Strategy, the Canadian Partnership Against Cancer has led the modernization and renewal process. To inform our work, we went across the country to hear from Canadians about how cancer affects their lives and what they want from their national cancer strategy.

We heard from more than 7,500 people—from all provinces and territories and all walks of life. We spoke with Canadians leading and working in the cancer system, primary care, charities and cancer research organizations. We heard from people living with cancer and their families, and met with people who are underserviced by the health-care system. We consulted with provincial and territorial government leaders responsible for health-care policy and cancer care planning and delivery. We engaged with First Nations, Inuit and Métis governments, organizations and communities.

## Throughout these conversations we heard several messages loud and clear. The people of Canada:

- Believe the Strategy helps reduce the burden of cancer on Canadians;
- Expect equitable access to high-quality cancer care for all Canadians—no matter who they are or where they live;
- Want better resources to educate and support people to prevent cancer;
- Worry about the costs of cancer care and believe the sustainability of our health-care system is at risk;
- Believe a steward for the Strategy and resources to support its implementation continue to be needed for it to be successful.

We heard from **7,500** people from all provinces, territories and walks of life.

The Strategy's directions for 2019–2029 have been shaped by this input, along with learnings from 12 years of implementing its initiatives and national and international best practices.

First Nations, Inuit and Métis governments, organizations and communities helped shape the Strategy and developed distinct, Peoples-specific priorities and actions, which are presented for the first time in the Strategy. The focus on the priorities of First Nations, Inuit and Métis reflects Canada's commitment to reconciliation, the momentum of cultural competency and the partnerships that have been built across the country.

Importantly, as the Strategy evolves, so too must the role and focus of the Partnership as its steward. To address the challenges that lie ahead, the Strategy needs a steward that works with cancer systems to sustain improvements made in the first decade and to accelerate actions across Canada. Our focus is to drive measurable change from 2019 to 2029 where change is needed the most.

#### New priorities and actions

The refreshed Strategy is a visionary and ambitious plan for the cancer and broader health system. Building on its already robust foundation, the refreshed Strategy provides a focused set of priorities and actions that will address the current and persistent challenges in delivering quality care. These were developed and validated with leaders of cancer and health-care communities.

Success requires an active commitment by a large and diverse group of partners from the cancer and broader health communities to work together to deliver results. Some will already be active partners in the Strategy, while others will be new. We look forward to the next phase of work, which starts with making plans with our partners to achieve the Strategy's priorities and will include regular monitoring and reporting to Canadians on outcomes.

We are pleased to present the Canadian Strategy for Cancer Control 2019–2029 to the people of Canada. We thank the thousands of people who contributed to this process and are especially grateful to the members of the Strategy's external advisory committee and the leaders of provincial cancer agencies and programs, all of whom worked tirelessly to help guide and shape this work.

On behalf of the Partnership and our Board of Directors, we hope all Canadians will see themselves in the refreshed directions of the Strategy. As one patient said, "What's in this for me?" We have borne this challenge and purpose in mind throughout our work. We look forward to reporting to all Canadians on our collective progress as we fully realize the next decade's transformative opportunities.



**Graham Sher**Chair



**Cynthia Morton** CEO

## The Strategy at a glance

#### **PRIORITY 1**

#### Decrease the risk of people getting cancer

- 1 Help people to stop smoking or not start in the first place and live healthier lives.
- 2 Adopt proven practices known to reduce the risk of cancer.





#### **PRIORITY 2**

### Diagnose cancer faster, accurately and at an earlier stage

- Prioritize rapid access to appropriate diagnosis for those suspected of having cancer.
- 2 Strengthen existing screening efforts and implement lung cancer screening programs across Canada.

#### **PRIORITY 3**

### Deliver high-quality care in a sustainable, world class system

- 1 Set best practices and standards for care delivery and promote their adoption.
- 2 Eliminate low-benefit practices and adopt high-value practices.
- 3 Design and implement new models of care.



#### **PRIORITY 4**

### Eliminate barriers to people getting the care they need

- Provide better services and care adapted to the specific needs of underserviced groups.
- 2 Ensure rural and remote communities have the resources required to better serve their people.
- 3 Ensure care can be delivered between provinces, territories and federal jurisdictions when needed.



#### **PRIORITY 5**

## Deliver information and supports for people living with cancer, families and caregivers

- 1 Integrate the full spectrum of information and support services to ensure people are fully supported throughout the cancer journey.
- 2 Address the limited and unequal access to palliative and end-of-life care across Canada.
- 3 Support children, adolescents and young adults at key transition points in their unique cancer journeys.



#### Priorities and actions specific to First Nations, Inuit and Métis

Three priorities were identified by First Nations, Inuit and Métis. For each of these priorities, Peoples-specific actions were identified that help drive needed changes in outcome and experience for all First Nations, Inuit and Métis.

	FIRST NATIONS	INUIT	MÉTIS
PRIORITY 1 Culturally appropriate care closer to home	<ol> <li>Recognize and reflect the First Nations wholistic approach to health and wellness.</li> <li>Recognize and eliminate the impacts of racism within the system.</li> <li>Provide equitable access to basic health supports and cancer services.</li> <li>Provide more services closer to home and improve the journey for those who must travel to access care.</li> <li>Improve understanding of cancer and the cancer journey.</li> </ol>	<ol> <li>Provide equitable access to cancer services closer to home.</li> <li>Improve travel policies.</li> <li>Incorporate Inuit wholistic approaches to health and wellness in cancer care.</li> <li>Recognize and eliminate racism within the system.</li> <li>Improve access to basic health supports.</li> <li>Improve understanding of cancer and the cancer journey.</li> </ol>	<ol> <li>Provide equitable access to resources, programs and care across the cancer continuum.</li> <li>Create a wholistic system that is responsive to Métis culture.</li> <li>Recognize and eliminate racism within the system.</li> <li>Improve access to basic health supports.</li> <li>Improve understanding of cancer and the cancer journey.</li> </ol>
PRIORITY 2 Peoples-specific, self-determined cancer care	<ol> <li>Design and deliver         First Nations-determined         programs and services.</li> <li>Reduce jurisdictional         barriers.</li> <li>Improve communication,         navigation and coordination         across the system.</li> </ol>	Design and deliver     Inuit-driven programs     and services.      Improve coordination     and navigation of care.	<ol> <li>Design and deliver         Métis-determined         programs and services.</li> <li>Reduce jurisdictional         barriers and improve         communication, navigation,         and coordination.</li> </ol>
PRIORITY 3  First Nations-, Inuit-, or Métis- governed research and data systems	<ol> <li>Collect First Nations- specific data and set First Nations-specific indicators and targets.</li> <li>Invest in First Nations research capacity.</li> <li>Implement First Nations governance of the collection and use of data and research.</li> </ol>	Collect and report on Inuit-specific data.     Determine impact of environmental contamination on Inuit health, specifically cancer risk.	<ol> <li>Collect Métis-specific data and develop Métis- determined indicators and outcomes.</li> <li>Invest in Métis research capacity.</li> </ol>







The vision remains as clear and relevant today as it was in 2006 when the Strategy was first launched. The strength of the vision is how it is achieved: through collaborations and networks of clinicians, people living with cancer, communities and cancer agencies working together to build and deliver solutions to problems all Canadians share and none could solve on their own.

While implementation of the Strategy has resulted in significant benefit to Canadians over the last decade, to fully realize its vision, we must adapt it to modern stressors, influences and opportunities. With the world of science changing so rapidly and its impact on care so dramatic, we must stay true to the Strategy's vision while taking actions in priority areas to deliver sustainable change.

As the Strategy's steward, the Canadian Partnership Against Cancer (the Partnership) is grateful for the collective commitment by the cancer community, people living with cancer and their families to continue to value and implement the Strategy. Our collective, collaborative approach to making real change happen will ensure even more Canadians benefit from a high-quality, sustainable cancer system today and into the future.

#### Looking back: The Strategy from 2006 to 2019

The Strategy was developed by a visionary group of Canadians with diverse cancer experiences. Health professionals, researchers, academics, health system leaders and patient advocates worked together to create a coordinated pan-Canadian approach to reduce the burden of cancer<sup>a</sup> on all Canadians and the cancer system.

The World Health Organization recommends that all countries put in place a cancer plan.¹ Canada became one of the first countries to do so with the launch of the Strategy. In 2006, Canada faced many challenges similar to those of other countries, including an aging population, increasing cancer rates, and rising costs of treatment and care. It had unique features as well. Canada's federated model means provinces and territories deliver the vast majority of health care services. This leads to duplication of efforts as each individually tackles common problems that could be better addressed together, while smaller provinces and territories rely on nearby provinces to deliver cancer care. The sheer size of Canada, with its diverse populations and remote communities, adds further complexities.

a The term burden of cancer refers to the impact of cancer on individuals and their families, communities and workplaces. For the country as a whole, the burden of cancer refers to the economic and societal impact of illness and death resulting from cancer.

The 2006 Strategy was designed to address these challenges and support the cancer systems in each province and territory by identifying areas where members of the cancer community could work together, leveraging each other's best practices, capabilities and approaches, to achieve outcomes they could not achieve alone. The Strategy addressed all aspects of cancer control: enhancing cancer prevention and screening, improving diagnosis and treatment, expanding the availability of palliative care and end-of-life care, and ensuring better quality of life for cancer patients.

With funding from Health Canada, the Partnership has served as steward of the Strategy since 2007. Since then, the Strategy has become a powerful tool for change and improvement,<sup>2</sup> serving as the catalyst for provincial cancer agencies and programs and other members of the cancer community to identify shared priorities and work across Canada on collective solutions.

In 2006, the Strategy presented a new approach to achieving change and progress across Canada's cancer systems. It was based on pan-Canadian networks

of cancer system leaders who partnered to focus on a set of common priorities. It also recognized the differences in resource capacity of larger and smaller provinces and territories, and the importance of identifying and moving best practices to parts of the country where they are needed.

While there were challenges in the early years of the Strategy's implementation, including an initial lack of clarity surrounding roles and responsibilities in its implementation and the long-term sustainability of investments, the partner network model has matured and received strong praise. It allows partners to contribute expertise and gain valuable knowledge from other jurisdictions and professions, and has helped drive needed policy and practice change. Importantly, it has generated greater levels of trust and expertise across the country and has resulted in momentum on common goals. Where partnerships were less successful, lessons were still learned and changes made to strengthen a unique approach to transforming cancer care across a federated health-care system.

#### 2006 to 2019: What the Strategy has achieved

- Policies and tools to help Canadians live healthier lifestyles and to create living environments that reduce the risk of getting cancer.
- Improved cancer screening for Canadians by implementing colorectal screening programs across the country, improved breast and cervical screening and the first steps toward lung cancer screening.
- Greater capacity across Canada to provide effective palliative and end-of-life care to patients with advanced cancer.
- Progress on advancing Peoples-specific cancer priorities in partnership with First Nations, Inuit and Métis governments, organizations and communities
- More active participation by patients, families and caregivers in conversations and decisions about their own cancer care.

- Introduction of clinical practice standards to reduce variations in the way people with cancer are diagnosed and treated so they have better outcomes.
- Creation of a landmark research database that collects health and lifestyle information from more than 300,000 Canadians to understand why some people get cancer and others don't.
- Standardized collection of data that show how much a cancer has spread to improve diagnosis and treatment for people with cancer.
- Collection of real-time data on patient symptoms to improve their care and link to needed services.

#### By the numbers: Reducing the burden of cancer

Canada has seen substantial improvements in reducing the burden of cancer since the launch of the Strategy in 2006. This progress reflects the collective efforts of health-care and cancer system partners across the country to achieve the Strategy's vision and improve outcomes for people living with cancer.

While the total number of people with cancer continues to increase due to the growing and aging population, the chance of developing and dying of cancer is decreasing.

#### From 2007 to 2018:

 More people are surviving cancer, with increases in survival rates for most cancers, including breast, colorectal and lung. Today, more than 65 per cent of people with cancer are alive five years after being diagnosed<sup>3</sup> and Canada has one of the highest cancer survival rates among high-income countries with universal health care.<sup>4</sup>

- The proportion of the population being diagnosed decreased for many cancers, including a 15 per cent decrease in lung cancers and a 17 per cent decrease in colorectal cancers.<sup>5</sup>
- Prostate cancer death rates dropped by 23 per cent.<sup>6</sup>
- Breast cancer death rates dropped by 22 per cent.<sup>6</sup>

Without these collective efforts, 75,000 more cancer cases and 50,000 more deaths would have occurred in Canada over 10 years.<sup>b</sup> Avoiding these new cancer cases has saved the health-care system \$5.2 billion in treatment costs over a period where an estimated \$50 billion was spent on treating cancer. It has also avoided more than \$20 billion in productivity losses due to death from cancer.<sup>7.8</sup>

b To put the avoided cancer cases and avoided deaths into context, between 2006 and 2016, there were two million people diagnosed with cancer and 900,000 deaths.

#### Addressing new opportunities and challenges

In the years since the Strategy was launched, opportunities and challenges have continued to emerge.

Exciting advances like genomics, targeted treatments and immunotherapy are creating treatment options for cancers that were once untreatable. The ability to deliver specialized care via telemedicine is steadily improving access to care in rural and remote communities. Routine vaccination of girls and boys against human papilloma virus (HPV) is preventing cervical, throat and other cancers. Advances in the ability to share and analyze data are providing new insights that have the potential to improve how cancer is managed.

Yet despite these advancements, patients, families and caregivers continue to experience many physical, psychosocial and spiritual challenges. The anxiety of waiting for a cancer diagnosis and the physical, emotional and financial impact of cancer treatment can be overwhelming, and cancer survivors often live with

the fear of a relapse. The health-care system's resources are often not sufficient to provide for all their needs, so communities and workplaces are called on to play bigger roles in supporting them.

As more Canadians develop cancer, people living with cancer, their families and caregivers, and the cancer system will experience the impact. Given that cancer is mostly diagnosed in older people and that the population continues to age, the number of cancer cases will continue to increase.<sup>10</sup>

Children, adolescents and young adults also get cancer, presenting unique challenges to them and their families. Cancer treatment can have life-long consequences for children and adolescents, and when a child is treated for cancer, particularly far from home, the whole family is affected.

In 2018, more than **200,000** people developed cancer in Canada—and this number is projected to climb to **277,000** by 2030.<sup>11</sup>

There are widening inequities across populations. Canadians who are part of underserviced populations° are disproportionately affected by cancer. People who are poor or who live in remote areas are still more likely to develop cancer than other Canadians, 12 and some provinces and territories have much higher cancer rates and more deaths from cancer than others. 13 First Nations, Inuit and Métis continue to experience a disproportionate burden of cancer and often face inequities and barriers in accessing care. 14-18

The promise of new, more effective therapies is tremendously exciting for patients and clinicians; however, the rising cost of complex cancer treatment and the sustainability of the health system are increasingly pressing issues. The cost of treatments such as chemotherapy and radiation therapy have tripled in less than a decade and continue to rise as new drugs become available. With many new and often expensive cancer therapies currently under investigation in clinical trials, there will be ongoing pressure on the system. These financial pressures will be further compounded by shortages of health-care professionals, unless new models of care<sup>d,19</sup> and other strategies to make better use of resources are made available.

Cancer care is a significant and growing part of the health-care system, but many sustainability issues and challenges experienced by patients are common to the entire system. Today's health care is moving to a person-centred continuum of care model in which cancer agencies are part of, and must be connected to, the broader health and wellness environment. As a result, any effort to solve problems in cancer care must address these problems across the system, whether by building healthier communities, improving access to primary care, lowering wait times, increasing adherence to quality standards, or expanding supportive community and palliative care. Similarly, the challenges of racism and cultural safety are not unique to cancer care and must be addressed throughout the health-care system.

A focus on cancer research is also critical as it leads to new innovations, treatments and potential cures for cancer. From new prevention programs, treatments and diagnostics to novel models of care, research leads to discoveries that move the system forward.

- c The term underserviced refers to the higher likelihood that individuals belonging to a certain population may find it more difficult to obtain needed care, receive less or a lower standard of care, experience different treatment by health-care providers, receive treatment that does not meet their needs, or be less satisfied with health-care services than the general population.
- d The term model of care broadly defines the way health services are delivered. It outlines best practice care and services for a person, population group or patient cohort as they progress through the stages of a condition, injury or event.

## Refreshing the Canadian Strategy for Cancer Control for 2019–2029

To address challenges and leverage new opportunities for the benefit of all Canadians, the Partnership launched an ambitious process to refresh and modernize the Strategy. The focus was to identify areas where a pan-Canadian approach has the potential to improve cancer outcomes over the next decade.

To inform this work, the Partnership conducted a comprehensive engagement process to ensure the refreshed Strategy is informed by the perspectives of the wider cancer community; people living with cancer and their families; the public; and First Nations, Inuit and Métis governments, organizations and individuals.<sup>20</sup>

The broad engagement process was based on a conviction that the success of the refreshed Strategy is dependent on the participation of a large and diverse group of partners from across the country, including all those who have contributed to the successes of the Strategy to date. New partners are being involved—including public health officials, primary care providers, and technology and private sector innovators—to design new solutions for emerging challenges.

More than 7,500 people provided input through an online survey, in-person sessions and written submissions.<sup>20</sup> Participants included patients, caregivers, the general public, health system and cancer community leaders, and people who are underserviced by the health system (such as recent immigrants, people who identify as LGBTQ2,<sup>e</sup> minority language communities, and rural, remote and northern residents).

First Nations, Inuit and Métis governments, organizations and individuals were engaged across Canada using

a parallel process to ensure separate, respectful and Peoples-specific priorities and challenges were understood and reflected in the Strategy. Engagement was guided by principles developed in collaboration with First Nations, Inuit and Métis elders and cancer survivors, governments, organizations and communities.

The Strategy reflects cancer community and government priorities and is firmly grounded in evidence. It is informed by an in-depth review of provincial and territorial cancer plans, published scientific literature, Canadian and international research on best practices related to developing impactful cancer plans, and the successes and challenges seen during the first decade of the Strategy's implementation.

The Strategy is also a key component of Canada's commitments to the United Nation's 2030 Agenda for Sustainable Development, including its commitment to reduce premature mortality from non-communicable diseases by one-third, promote mental health and well-being, and improve access to quality essential health-care services.<sup>21</sup>

For more information on the engagement process and what was heard, visit <u>cancerstrategy.ca</u>.



#### Identifying the Strategy's priorities and actions

One out of two Canadians will face cancer in their lifetime. <sup>22</sup> Our health-care system must be ready for the challenge and equipped to achieve the vision of a cancer strategy designed by and for Canadians. Many challenges, gaps and opportunities were identified through the engagement sessions and literature reviews.

Across all participant input, certain core themes were consistent, including:

- Strong support for a pan-Canadian cancer strategy and a dedicated steward to guide implementation;
- A desire for better resources to educate and support people to prevent cancer;
- A need to enable more equitable<sup>f,23</sup> access to highquality cancer care for all;
- A recognition of the challenges to the long-term financial sustainability of the cancer system if changes are not made.

A set of selection criteria was then established to guide the identification of priorities and actions for the refreshed Strategy. The criteria helped identify priorities that address a significant need for people across all jurisdictions in Canada; require a coordinated, pan-Canadian effort to achieve results; and build on the comprehensive cancer plans developed by each of Canada's jurisdictions.

It was also determined that, where possible, the Strategy should address current and persistent inequities in care; leverage existing areas of Canadian excellence, research and evidence; and should show measurable results within a 10-year timeframe from 2019 to 2029.

#### How we will achieve the goals of the Strategy

Achieving the goals outlined in the refreshed Strategy also depends on the Partnership's active role as the Strategy's steward. Over the first decade of the Strategy's implementation, the focus was on developing pan-Canadian networks, building key infrastructure and supporting partner organizations (primarily cancer agencies and ministries of health) in driving forward the priorities outlined in 2006.

The Partnership and it partners have made significant progress on many of those priorities, however, due to the broad scope of the 2006 Strategy, much more still needs to be done. Working together to implement the Strategy over its first decade also revealed important lessons that will inform greater progress toward future goals.

Looking ahead, the Strategy and all those involved in its implementation need to focus on factors that drive change in a world of technology and fiscal constraint, including the promise offered by solutions like tele-medicine and artificial intelligence. We must all pay attention to priority areas where a pan-Canadian focus will help address the most urgent cancer control issues and drive measurable change for the benefit of Canadians.

To do this, the Partnership will engage with cancer leaders and a diverse array of partners to develop implementation plans and monitor progress on the priorities of the refreshed Strategy. We will learn from other countries and jurisdictions and use those learnings to inform planning and actions, and report regularly to Canadians on the progress being made.

f The World Health Organization defines equity as the absence of avoidable or unfair differences among groups of people, whether defined socially, economically, demographically, geographically or by other means of stratification. Equity in health means everyone should have a fair opportunity to attain their full health potential and no one should be prevented from achieving it.





#### **PRIORITY 1**



## Decrease the risk of people getting cancer

Up to 4 in 10 cancer cases can be prevented.<sup>24</sup> A number of protective interventions play a critical role in preventing cancer, including healthier lifestyles, healthier communities and reduced exposure to carcinogens at home and work.

Canadians place a high priority on supporting efforts to prevent cancer. The cancer community and sectors such as primary care, public health and workplace regulators have key roles to play in supporting healthier living, protecting Canadians from harmful chemicals and toxins, and expanding appropriate cancer vaccination programs.

The Strategy focuses on key priorities where coordinated, pan-Canadian actions can make the most impact on reducing the burden of cancer from 2019 to 2029: helping people to stop smoking or avoid smoking in the first place; supporting cancer prevention approaches and interventions that drive health and wellness and adopting practices proven to reduce the risk of cancer.

All of this work needs to be done in alignment with public health organizations across Canada to achieve the greatest benefit for Canadians.

#### **ACTIONS**

## 1. Help people to stop smoking or not start in the first place and live healthier lives

Not smoking reduces the risk for a number of diseases, including cancer. Smoking is responsible for more than 45,000 deaths each year in Canada, which is nearly 1 in 5 deaths in the country. For people who smoke, quitting is the single most important thing they can do to reduce their risk of lung cancer. For people already diagnosed with any cancer, quitting smoking can improve the effectiveness of treatment, because tobacco use interferes with the effectiveness of many cancer therapies.

Smoking also has a disproportionate impact on already underserviced communities. For example, two in three adults in Nunavut are smokers, and Inuit have one of the highest rates of lung cancer in the world.<sup>27</sup>



The Strategy calls for increased efforts to promote tobacco cessation and avoidance among the public and cancer patients. These efforts will support Canada's Tobacco Strategy and its four goals:

- Help Canadians quit tobacco;
- Protect youth and non-tobacco users from nicotine addiction;
- Work with First Nations, Inuit and Métis to develop appropriate approaches;
- · Strengthen science, surveillance and partnerships.

To be effective, policy changes and efforts to support smoking cessation and avoidance must consider socio-economic and other relevant contexts. They should also be responsive to cultural norms, such as respecting the ceremonial use of tobacco by First Nations. Finally, the Strategy calls for an ongoing focus on understanding the impact of other forms of inhaled substances, including vaping and cannabis smoking.

The Strategy also calls for continued focus on policies and enablers that promote healthier diets, safer levels of alcohol consumption, increased physical activity and safer sun practices. Broader policies should be pursued to reduce environmental exposures, including emission and industrial waste controls, and to support occupational health and safety.

"The challenges ahead are daunting.
To ensure Canadians are supported by high-quality cancer care—no matter where they live—we need to work smarter, more efficiently and together."

Provincial cancer leader

## EXAMPLES OF PARTNERS TO INCLUDE IN THIS WORK

Academic and research cancer community

Canadian Agency for Drugs and Technologies in Health

Canadian Association of Provincial Cancer Agencies

Canadian Cancer Society

Canadian Centre on Substance
Use and Addiction

Canadian Institute for Health Information

Canadian Lung Association and provincial associations

Canadian Public Health Association

Canadian Task Force on Preventative Health Care

First Nations, Inuit and Métis governments, organizations, communities and care providers

Health Canada

Indigenous Services Canada

Lung Cancer Canada

Patient groups

People living with cancer, families and caregivers

Provincial cancer agencies and programs

Provincial and territorial ministries of health

Provincial quality agencies

Provincial, territorial and municipal public health agencies

Public Health Agency of Canada

Research organizations, including the Canadian Cancer Research Alliance

Urban Public Health Network

World Health Organization



In 2017, **28,600** Canadians were diagnosed with lung cancer and **21,100** died of the disease. It is estimated that **85%** of those deaths were caused by smoking.<sup>28</sup>

## 2. Adopt proven practices known to reduce the risk of cancer

Several types of cancer, including some with a lower chance of survival, can be prevented through specific interventions like vaccination or surgical procedures. Promoting widespread availability and appropriate uptake of these interventions is a key action for cancer prevention in the coming years.

A large group of cancers (most notably cervical, but also anal, mouth and pharynx cancers) are caused by the human papilloma virus (HPV). The Strategy calls for moving toward elimination of these cancers through universal access to HPV vaccination programs for boys and girls. These efforts should be supplemented by secondary prevention strategies such as HPV testing for cervical cancer.

Vaccinations hold promise for preventing other types of cancer, such as vaccines against Hepatitis B to reduce the risk of liver cancer. The Strategy calls for focused efforts to determine the benefit of adopting these and other cancer preventative vaccinations based on the strength of available and emerging evidence across Canada.

The Strategy calls for these programs to be delivered in a way that is sensitive to cultural and social norms of certain communities in Canada, including First Nations, Inuit and Métis. Educating parents and culturally diverse communities about the value of these preventive interventions must occur in languages and settings where people feel safe and respected.

For select individuals, genetic testing can identify a higher cancer risk and help them take important steps to reduce their chance of getting cancer.<sup>29</sup> The Strategy calls for expanded access to genetic testing that has clear proof of benefit at the population level, including access to appropriate follow-up support. An example is screening for Lynch Syndrome, a hereditary type of colorectal cancer.<sup>30</sup>

In a few situations, preventive surgeries may be used to reduce the risk of certain types of cancer.<sup>31</sup> A notable example is the removal of the fallopian tubes during a hysterectomy, which has been shown to substantially reduce the risk of ovarian cancer. The Strategy calls for increased adoption of these types of proven preventive surgeries.

Greater understanding and uptake of evidence-based preventive interventions are a key part of the effort to reduce the risk of developing cancer.

"We need to start investing in keeping people healthy rather than addressing health problems downstream."

Primary care physician



#### **PRIORITY 2**



## Diagnose cancer faster, accurately and at an earlier stage

Identifying cancer as early and as accurately as possible is essential to saving lives and reducing the need for expensive treatments.

Cancer is frequently diagnosed when a patient presents with symptoms to a primary care provider or a hospital emergency department. The earlier symptoms can be identified, a diagnosis confirmed and treatment selected, the better the likely outcome for the patient. It is important to provide supports to primary care providers to assist in early detection, and to educate the public on the signs and symptoms of cancer. To support this, more data are needed to understand the gaps and issues that arise between when people first present to their doctor with symptoms to when their cancer is diagnosed.

Timely access to appropriate screening and diagnostic tests plays a critical role in reducing deaths from cancer by helping to catch cancers early. For example, the chance of survival for a person with colorectal cancer detected at stage I or II is more than eight times higher than when diagnosed at stage IV.<sup>32</sup>

Many people indicate that the stress and anxiety from the moment they discover a suspicious symptom or receive an abnormal screening result to the time they receive a confirmed diagnosis is often the most difficult part of their cancer journey. This should be addressed by prioritizing patients and coordinating access between diagnostic centres. The median time patients have to wait for a colonoscopy to investigate an abnormal colorectal cancer screening test ranges from 37 days to 88 days

across the country.<sup>10</sup> The Strategy calls for actions to minimize wait times and speed up the process to get to the final diagnosis.

#### **ACTIONS**

## 1. Prioritize rapid access to appropriate diagnosis for those suspected of having cancer

Patients should have quick and accurate follow-up to suspicious findings to determine if they have an urgent, life threatening illness such as cancer. 31 The Strategy calls for rapid access to the most appropriate in-person and virtual diagnostic tools and methods. These should include expanded use of effective technology such as telemedicine and apps that connect patients to primary care providers and specialists, and innovative models of service delivery such as rapid diagnosis clinics and mobile testing facilities. New models of clinical care are also needed, such as e-referral, to empower primary care providers and support a smoother flow of patients and information between primary care, diagnostic services and cancer specialists. Innovative approaches are needed to ensure that people in rural and remote communities without regular access to physicians are able to receive quality care. This includes making diagnostic services accessible by using technology to let patients be diagnosed and potentially treated closer to home.33



## 2. Strengthen existing screening efforts and implement lung cancer screening programs across Canada

Many people across the country are already participating in successful cancer screening programs for breast cancer, cervical cancer and colorectal cancer. The Strategy calls for the cancer community to continue to focus on ensuring the ongoing effectiveness of those programs. This includes continuing measures to ensure the right people are getting screened at the right time using the recommended methods, and eliminating barriers to a high uptake of screening, particularly in hard-to-reach communities. For these communities, proven strategies such as mobile screening for breast cancer, self-sampled HPV testing for cervical cancer and self-sampled stool tests for colorectal cancer should be pursued and expanded.<sup>34,35</sup>

In addition to strengthening existing screening programs, the Strategy calls for lung cancer screening programs to be implemented across the country. The evidence of the benefit of low-dose CT-based screening for high-risk individuals is clear: screening is associated with a 20 per cent reduction in deaths.<sup>36,37</sup>

The cancer system should vigorously pursue this opportunity to save the lives of thousands of people in Canada who die of lung cancer. A particular focus should be placed on ensuring lung cancer screening programs are implemented for the most at-risk communities, including working with First Nations, Inuit and Métis to develop and implement culturally appropriate screening programs.

Lung cancer kills more people than breast, colorectal cancer and prostate cancer combined.<sup>28</sup>

## **EXAMPLES OF PARTNERS TO INCLUDE IN THIS WORK**

Canada Health Infoway

Canadian Association of Provincial Cancer Agencies

Canadian Association of Radiologists

Canadian Cancer Society

Canadian Foundation for Healthcare Improvement

Canadian Institute for Health Information

Canadian Medical Association, Royal College of Physicians and Surgeons of Canada and College of Family Physicians of Canada virtual care task force

Canadian Nurses Association

Canadian Patient Safety Institute

Canadian Public Health Association

Canadian Task Force on Preventive Health Care

First Nations, Inuit and Métis governments, organizations, communities and care providers

Health Canada

Indigenous Services Canada

Institute for Safe Medication Practices Canada

Patient care organizations and professional associations

Patient groups

People living with cancer, families and caregivers

Primary care organizations

Provincial cancer agencies and programs

Provincial and territorial ministries of health

Technology leads in the provinces and territories

#### **PRIORITY 3**



## Deliver high-quality care in a sustainable, world-class system

Once a cancer is diagnosed, the best chance for a person's improved survival is access to evidence-based, high-quality treatments. Treatment decisions need to be based on rigorous evidence of clinical benefit, while respecting and incorporating the preferences and values of patients and their families.

In today's environment, there is an urgent need to balance delivery of high-quality care with ensuring cancer care is sustainable. There are growing pressures on the system, including increasingly expensive treatments and the cost of technology required to deliver care closer to home through digital solutions and virtual care. There is also a reliance on using specialists to deliver cancer care, a model that cannot be sustained from a financial or human resource perspective in many parts of Canada.

More is not always better when it comes to treating cancer, and not all tests and treatments will benefit all people. To ensure a sustainable cancer system for all people in Canada, it is critical to ensure low-benefit interventions are minimized and high-benefit tests and treatments are offered more widely.

#### **ACTIONS:**

## 1. Set best practices and standards for care delivery and promote their adoption

People with the same cancer and other similarities, such as age and cancer stage, will often receive different treatments depending on the preferences and practice choices of their clinicians and the policies and practices where they live.

The Strategy calls for reducing the differences in practice and service delivery between clinicians and jurisdictions by setting standards for high-quality care and promoting their adoption, along with other established best practices, such as consistent use of multi-disciplinary teams. The focus for 2019–2029 should be to expand the adoption of the most impactful standards and improvements in practice, to update or create necessary guidelines (including those that use information from genetic testing to determine the most effective treatment), and to measure and report on results.

In providing standards-based cancer care to First Nations, Inuit and Métis, efforts should be made to learn from these communities about community-led innovative models of care and to meaningfully engage these groups to ensure the delivery of care reflects cultural priorities and realities.

## 2. Eliminate low-benefit practices and adopt high-value practices

Evidence shows that many patients receive tests and treatments that are of little benefit and can cause more harm than good.<sup>38,39</sup> At the same time, the system is under pressure to approve and fund new drugs and technologies that can be of great benefit but are costly.





The Strategy calls for improvements to how existing drugs and treatments are regularly evaluated and assessed. Those that are found to be of limited value should be reduced or discontinued. This would allow resources to be invested to support innovative new drugs and technologies which, when proven, should be approved and efficiently and equitably delivered across the country.<sup>39</sup>

The Strategy also calls for decisions on what is high value versus low value to be more broadly informed through input from patients and the public.

#### 3. Design and implement new models of care

To drive better outcomes, it is vital to find more effective, efficient and sustainable ways to deliver care that drives better outcomes for patients. The Strategy calls for promising approaches to be investigated and, where effectiveness is proven, widely adopted. These may include the use of virtual care, patient navigators, GP oncologists (family physicians specializing in cancer care) and other models. They should complement the optimal use of primary care practitioners (including family physicians, nurses and nurse practitioners) and other community-based supports and their closer collaboration with cancer specialists.

Mastectomies performed as day surgery are as safe as when conducted as inpatient cases, and cost less. In spite of that rates vary considerably across Canada – from less than **2%** in Saskatchewan to **65%** in New Brunswick.<sup>12</sup>

## EXAMPLES OF PARTNERS TO INCLUDE IN THIS WORK

Accreditation Canada

 $C^{17}$ 

Canada Health Infoway

Canadian Agency for Drugs and Technologies in Health

Canadian Association of Provincial Cancer Agencies

Canadian Cancer Society

Canadian Foundation for Healthcare Improvement

Canadian Patient Safety Institute

**Choosing Wisely Canada** 

Clinical specialty organizations

First Nations, Inuit and Métis governments, organizations, communities and care providers

Health Canada

Pan-Canadian Collaborative on Health Equipment Procurement

Pan-Canadian
Pharmaceutical Alliance

Patient groups

People living with cancer, families and caregivers

Primary care organizations

Professional associations and organizations

Professional oncology associations

Provincial cancer agencies and programs

Provincial and territorial ministries of health

Regulatory bodies

Research organizations, including the Canadian Cancer Research Alliance

#### **PRIORITY 4**



## Eliminate barriers to people getting the care they need

While Canada has a universal health-care system, many underserviced groups and communities across the country do not benefit from the same access to high-quality care and supports. These disparities lead to higher risk of getting cancer for First Nations, Inuit and Métis; people with lower income; those living in rural and remote communities; and those living in northern and eastern provinces and territories. 15-18,27

There are also disparities in access to services such as screening. For example, cervical cancer screening rates for immigrant women are 25 per cent lower than for Canadian-born women. These inequities in risk and access lead to unacceptable differences in the burden of cancer, with people in certain underserviced communities both more likely to be diagnosed with cancer and less likely to survive it.

Addressing these inequities is an essential step to delivering better care to all people in Canada.

#### **ACTIONS:**

## 1. Provide better services and care adapted to the specific needs of underserviced groups

Although cancer is a disease that affects people across Canada, many people face barriers to accessing care. To provide equitable cancer care, the Strategy calls for the health care system to do a better job of adapting services to the specific needs of people of all socio-economic and cultural backgrounds, all age groups and all identities.

The Strategy also calls for more practical research to gain a deeper understanding of the barriers faced by specific groups. Effective ways to eliminate those barriers must be identified, and these practices must be shared and spread. This work must also be done in partnership with First Nations, Inuit and Métis governments, organizations and communities to ensure culturally relevant approaches and strategies.

Institutional racism and prejudice—disproportionately experienced by First Nations, Inuit, Métis, people of colour, LGBTQ2<sup>40</sup> people and other marginalized communities—can have a significant impact on people receiving cancer care. While fully addressing racism and prejudice will require broader societal efforts, their impact on care can be mitigated through education and training. To that end, the Strategy calls for all cancer care providers to receive comprehensive education and training to understand and provide culturally safe care that respects the values of their patients.



## 2. Ensure rural and remote communities have the resources required to better serve their people

Patients in rural and remote communities usually need to travel to urban centres to receive care. While not all services and treatments can be located in all communities, the Strategy calls for the adoption of innovations and enablers that allow cancer care to be provided closer to home (when it can be delivered safely), including the option to participate in clinical trials.

Regardless of where they live, patients will receive better care if their communities have the resources and knowledge needed to leverage virtual care technology. This creates shared care models between cancer specialists in major centres and primary care providers in local communities.

When patients do need to travel, everything possible should be done to minimize the disruption and anxiety this can cause. Innovative models developed by First Nations, Inuit and Métis communities, many of which are located in rural and isolated areas of Canada, may offer insights for other remote communities.

Approximately **20%** of people in Canada live in rural or remote areas.<sup>41</sup>

## **EXAMPLES OF PARTNERS**TO INCLUDE IN THIS WORK

 $C^{17}$ 

Canadian Association of Provincial Cancer Agencies

Canadian Cancer Society

Canadian Foundation for Healthcare Improvement

Canadian Heritage (National Anti-Racism Strategy)

Canadian Institute for Health Information

Crown-Indigenous Relations and Northern Affairs Canada

First Nations, Inuit and Métis governments, organizations, communities and care providers

Health Canada

Health professional organizations

Indigenous Services Canada

Local community groups

Local and regional public health organizations

Patient groups

People living with cancer, families and caregivers

Primary care practitioners and organizations

Provincial cancer agencies and programs

Provincial and territorial ministries of health

Public Health Agency of Canada

Research organizations, including the Canadian Cancer Research Alliance

Statistics Canada



## 3. Ensure care can be delivered between provinces, territories and federal jurisdictions when needed

Provincial and territorial borders can present additional barriers to accessing care close to home. For example, people living in provinces and territories with limited capacity to deliver cancer care should be supported by policies that enable them to seamlessly access services in other provinces.

The Strategy calls for expanded use of technology, funding arrangements and other enablers to allow cancer specialists in one province or territory to support health-care providers and patients in another province. When a highly specialized treatment is only available in one

or two locations in Canada, the Strategy also calls for provinces and territories to work together to make it accessible to all people across the country. This includes making it easier for patients to participate in clinical trials across provincial and territorial boundaries.

The Strategy calls for the development of more comprehensive data systems and performance measurement capacities to allow information to be easily shared across institutions and provincial jurisdictions. These systems will support monitoring of the burden of cancer on people and the country, evaluation of best practices, and coordinated action across the country.

"Health care providers need to be culturally sensitive and aware that people may not have family supports, a job or even access to nutritious food."

#### Cancer patient

78% of women who speak English or French in the home reported having a PAP test in the last three years, compared to 64% of women who do not speak English or French in the home.<sup>42</sup>



#### **PRIORITY 5**



## Deliver information and supports for people living with cancer, families and caregivers

The burden on people living with cancer and their families is not limited to the direct physical effects of the disease. People often have to deal with a wide range of emotional, psychological, social and practical challenges throughout their journeys.<sup>43</sup>

To respond to these challenges, health-care providers need to work with community and workplace partners to create a seamless system that helps people living with cancer, families and caregivers understand, access and navigate the range of services and supports they require. With this goal in mind, the Strategy calls for a greater focus on closing the care and support gaps that continue to affect patients undergoing treatment, survivors trying to find their "new normal," and individuals whose disease has progressed and who are near the end of life.

#### **ACTIONS:**

## 1. Integrate the full spectrum of information and support services to ensure people are fully supported throughout the cancer journey

The Strategy calls for a system where people living with cancer have seamless and integrated access to primary care, specialty care, community care, information and psycho-social support across their cancer journey. To enable this, providers need to work together, share their plans, collaborate with non-profit and community organizations, provide quality information resources and use an integrated electronic medical record system that patients can also access.

Cancer survivors, as well as their families and caregivers, face their own complex challenges as they transition in and out of care. The Strategy calls for the

provision of community-based services to help people more easily return to work, school and life. This requires a wide range of supports, including rehabilitation therapy, specialized mental health care, peer support, appropriate educational and employment services, and transportation and associated supports. These supports need to be accessible across the country (including in rural, remote and isolated parts of the country) and provided in a culturally sensitive manner. Partnership with First Nations, Inuit and Métis is critical to understanding and being responsive to community priorities.

The Partnership's Living With Cancer: A report on the Patient Experience shows that people want to be empowered with tailored, understandable information about their cancer and treatment options and support services that focus on the physical, emotional and practical concerns that they, and their families, face after a cancer diagnosis.<sup>10</sup>

To inform future directions, the Strategy calls for cancer system partners to collect patient-reported outcomes and experience measures in various clinical and community settings. This information should be used to provide more comprehensive person-centred care that recognizes the broader economic and societal burdens of cancer and the factors that affect quality of life of patients and their caregivers.



### 2. Address the limited and unequal access to palliative and end-of-life care across Canada

Palliative care is not just about planning for end of life—it is about planning for excellent care throughout a person's cancer journey. Palliative care is an approach that improves the quality of life of people facing life-threatening illness, as well as that of their families, through the prevention and relief of suffering by means of early identification and treatment of pain and other physical, psychosocial and spiritual challenges. Currently, access to early and integrated palliative or end-of-life care varies dramatically from large urban centres to rural and remote communities.

The Strategy calls for early integration of palliative care in all cancer care settings. This should include providing education, training and other supports to a broad range of care providers in institutional and community settings to help them integrate palliative care into services they provide. The Strategy also calls for the provision of resources and other supports to ensure high-quality, person-centred end-of-life care is provided to patients in the setting of their choice across Canada, including expansion of services delivered in the home.

"The palliative care team made the biggest difference in my mother's journey. They had the time to support her. The change in her comfort level was huge and immediate."

#### Family caregiver

## EXAMPLES OF PARTNERS TO INCLUDE IN THIS WORK

 $C^{17}$ 

Canada Health Infoway

Canadian Association of Provincial Cancer Agencies

Canadian Association of Psychosocial Oncology

Canadian Association of Social Workers

Canadian Cancer Society

Canadian Cancer Survivor Network

Canadian College of Naturopathic Medicine

Canadian Foundation for Healthcare Improvement

Canadian Hospice and Palliative Care Association

Canadian Institute for Health Information

Canadian Mental Health Association

Canadian Virtual Hospice

Community-based organizations

First Nations, Inuit and Métis governments, organizations, communities and care providers

Health Canada

Mental Health Commission of Canada

Pallium Canada

Patient groups

People living with cancer, families and caregivers

Physical and psychosocial rehabilitation groups

Primary care practitioners and organizations

Provincial cancer agencies and programs

Provincial and territorial ministries of health

Psychosocial oncology organizations

Rehabilitation organizations and hospitals

Research organizations, including the Canadian Cancer Research Alliance

Young Adult Cancer Canada



One third of people reported a wait time of more than a year to get help for difficult physical, emotional or practical concerns after completing cancer treatment.<sup>12</sup>

## 3. Support children, adolescents and young adults at key transition points in their unique cancer journeys

For children and teenagers who have cancer that persists or returns in adulthood, the Strategy calls on the pediatric and adult systems to work collaboratively to introduce supports and processes that enable smoother transitions to adult cancer care. The Strategy also calls for expanded access to a wide range of integrated services to address the unique challenges faced by children and their families as well as adolescents and young adults living with cancer.<sup>44</sup>

These should include fertility counselling, mental health services, peer support, psychosocial assistance and rehabilitation support services geared toward their unique needs.

All aspects of family life—from employment to housing to family structure and stability—can be dramatically altered by the experience of caring for a child with cancer, particularly when the child is treated far from home. For this reason, the Strategy calls for ensuring that assistance and support extend to a child's family and caregivers, especially for those living in rural and remote locations.

Data suggests **14%** of cancer patients who die in acute-care hospitals are not referred for palliative care services.<sup>45</sup>



## Supporting the Strategy

## THROUGH RESEARCH, KNOWLEDGE SHARING, DATA AND TECHNOLOGY

Canada is fortunate to have a strong cancer research community, rich data resources and the knowledge-sharing infrastructure to ensure learning and best practices are shared across the country. The following key enablers will ensure the Strategy's impact.

#### Transforming research into improved care

Canada is home to outstanding hospitals, universities and research centres, and has an international reputation for scientific excellence and leadership. Canadian researchers are dedicated to accelerating the discovery of new ways to prevent, treat and cure cancer. The Strategy calls for continued support for high-calibre research to improve outcomes for all people in Canada.

In addition to basic research (which is essential to driving innovation and discovery) and clinical research (which tests potential treatments on patients), a much stronger focus needs to be placed on translational research. This type of research identifies the types of interventions and approaches that can improve the use of evidence to promote the most effective health practices associated with the prevention of cancer.

Clinical trials are critical to understanding how treatments work in humans; however, not everyone has access to trials. The Strategy calls for an improved understanding of the barriers in the current clinical trial system so that trials can be more inclusive, with faster and better enrollment processes. This includes a specific commitment to increase the diversity of participants and facilitate First Nations, Inuit and Métis access to trials.

Doing so will help to promote clinical trials both as a treatment option and an important mechanism for Canadians to access the latest cancer-focused innovations and standards of care. The Strategy also calls for improving the availability of resources for Canadian clinical trial researchers and for raising the global profile of Canadian capabilities.

Recognizing the need for the development of a shared vision for Canadian cancer research that moves the country forward, the Strategy calls for better integration of research into clinical care settings. This would increase collaboration among clinicians and researchers, and opportunities to learn from the experience of every person living with cancer.

Through its alignment with the Canadian Cancer Research Alliance, the Strategy also calls for researchers and funders to mobilize the necessary resources, infrastructure, and pan-Canadian and international partnerships to attract, retain and support emerging and established researchers. Their work is critical to answering the biggest questions about cancer risk factors and treatment and to finding effective ways to translate research evidence into improved cancer prevention and care for Canadians.





## Maximizing the impact of health system data to drive change

Although a significant amount of data are collected in Canada on cancer patients and their treatment, it is not being used to its full potential to improve patient care and outcomes.

There are currently many barriers to accessing data, and it is often difficult to link together different data sets—such as clinical, social/demographic and patient experience data—to inform solutions for better quality and equitable care. The Strategy calls for increased efforts by data custodians and policy makers to eliminate those barriers so that Canadians can benefit fully from the rich data sets available. A national health data strategy is required.

When data are readily available, there are opportunities to increase its use by clinicians to improve care and its use by policy makers and administrators to enhance service planning. The Strategy calls for the integration of high-quality and relevant cancer and health system data into clinical decision-making. This will allow cancer specialists and other health-care providers to use the data to routinely review their practices, compare them against benchmarks and standards, and make improvements in

care. The Strategy also calls for the integration of data into policy and planning decisions so governments and administrators of cancer and health-care organizations can use it to improve services and deliver higher quality person-centred care.

## Making use of advances in artificial intelligence and related technologies

Canada has developed world-leading expertise in artificial intelligence, which can be harnessed to deliver more targeted and effective cancer care. The Strategy calls for further efforts to support the appropriate use of artificial intelligence to analyze health-related big data sets and real-world evidence to identify opportunities to improve cancer care. The Strategy also calls for increased focus on the evidence-based application of artificial intelligence and related technologies to analyze test results more efficiently and accurately. This will help to address human resource capacity issues and improve the outcomes and the patient experience. Jurisdictions should collaborate wherever possible in their procurement efforts to acquire new technologies and solutions. This will drive cost savings, support consistency across technology platforms, and standardize data collection and reporting.

## Improving information flow among providers and between providers and patients

The use of digital health technologies (e.g., electronic health records, virtual care technologies) has accelerated across Canada, supported by the efforts of Canada Health Infoway and its partners, including provincial and territorial governments and health-care organizations. However, a few core challenges remain. One is that too many separate systems are still in use within a single community or even in a single hospital, hampering seamless care delivery. Another is that many underserviced communities—especially in rural and remote areas—do not have access to digital health tools, adding to their already unequal access to cancer care.

The Strategy calls for the adoption of tools and processes that help unlock the value of patient information and improve its transfer among health-care providers, particularly specialists and primary care. It calls for patients, families and caregivers to be able to better access the information they require to make decisions that align with their needs, values and preferences. The Strategy also highlights the need for confidentiality of patient and medical records and calls for collaboration with First Nations, Inuit and Métis communities, organizations and governments to ensure appropriate data governance.

#### Leveraging technology

#### Improving the experience of people living with cancer

People living with cancer have to make frequent visits to hospitals and clinics for tests and procedures. There, they interact with many providers for treatment and follow up and are often overwhelmed with information about their condition. Digital tools, such as patient portals, online assessment tools, and collaboration and social mediabased tools, can vastly improve their experience and reduce the anxiety associated with a cancer journey.

#### Advancing care delivery

Cancer care in major cancer centres is often state-of-theart. However, other parts of the cancer system, especially community-based facilities, have not moved beyond manual processes, paper records and faxes. There are many opportunities for technology to support community and home-based care, improving both the patient experience and system sustainability. For example, telehealth can extend services to rural and remote communities where there may be a shortage of local specialists. In addition, smart sensors, Bluetooth-enabled devices and cancer-specific smartphone apps can improve the ability of patients to monitor their own care and communicate online with their care team, avoiding unnecessary visits to hospital emergency departments.

#### Supporting research

Diagnostic and assessment information, treatment data, medication information and outcomes data are just some examples of the information collected every time a person with cancer interacts with the health-care system. Increased capacity to analyze data, including the use of artificial intelligence, has the potential to improve understanding of what works for which patients under what circumstances. Harnessing the value of these rich data sets requires a focus on technology and analytics.



First Nations, Inuit and Métis continue to experience poorer cancer outcomes than other people in Canada, and face inequities and barriers in accessing care (especially culturally appropriate care). 15-18.27 Some of the challenges are similar to the burden experienced by other underserviced, remote, rural and isolated communities in Canada; however, there are historical and contemporary realities that amplify those faced by First Nations, Inuit and Métis. Significant effort and investment must be made to close the gaps in cancer care and outcomes between First Nations, Inuit and Métis and other people in Canada.

First Nations, Inuit and Métis partners have been working with the Partnership, cancer agencies, provincial and territorial governments to better understand the burden of cancer, develop distinct Peoples-specific cancer priorities and cancer strategic plans, and implement practice and policy changes to improve the continuity and cultural safety of care across the country.

Building on that effort, the Partnership worked with First Nations, Inuit and Métis Elders, governments and Advisors; National Indigenous Organizations; and other partners, including knowledge holders, families, cancer survivors and community leaders, to develop an engagement approach to refresh the Canadian cancer strategy. The approach is grounded in reconciliation, and is both distinctions-based and Peoples-specific.

#### Peoples-specific priorities and actions

Priorities identified and the actions required are Peoples-specific and represent what we heard through the engagement process. These are an important element of the refreshed Strategy, and have helped to shape the overall Strategy's approach to better supporting underserviced people. The three Peoples-specific plans in the Strategy are significant – both because of the need to address significant barriers facing First Nations, Inuit and Métis and also because Peoples-specific priorities were largely absent in the original 2006 Strategy. While there is commonality across priorities and actions among and between First Nations communities, Inuit communities and Métis communities, there are also significant differences.

A culturally appropriate approach that addresses the needs of individuals can only be offered through Peoples-specific programs and services. This can be achieved through innovative approaches where Peoples-specific leadership is demonstrated through self-determined health programs and services that meet the needs of communities.

Successful examples that have been applied or could be adapted to support the delivery of cancer care include the First Nations Health Authority in British Columbia, the Inuulitsivik Midwifery Services in Nunavik (Quebec) and the efforts of Métis Nations towards delivery of health-care services.

Three priorities were identified by First Nations, Inuit and Métis:

- Culturally appropriate care closer to home
- Peoples-specific, self-determined cancer care
- First Nations-, Inuit- or Métis-governed research and data systems

For each of these priorities, Peoples-specific actions were identified that will help drive needed changes in outcome and experience for all First Nations, Inuit and Métis.

## First Nations priorities and actions



#### **PRIORITY 1**

Culturally appropriate care closer to home



#### **ACTIONS**

- 1. Recognize and reflect the First Nations wholistic approach to health and wellness. Cancer care needs to establish systems that incorporate a wholistic<sup>g</sup> First Nations understanding of physical, mental, spiritual and emotional health and wellness, including the importance of connection to the land and of the impact of trauma.
- 2. Recognize and eliminate the impacts of racism within the system. Health-care providers should receive training on community realities and cultural safety and be supported to implement behavioural changes for culturally safe care. First Nations patients and their families should be informed about how to report incidents of receiving culturally unsafe care.
- **3. Provide equitable access to basic health supports and cancer services.** Affordable healthy food, clean water, up-to-date medical equipment and appropriate telecommunications infrastructure should be available in all communities, and the disproportionate impact of environmental destruction to the health of First Nations

communities should be recognized and addressed.

Geographical and financial barriers should not create inequities in accessing services, including timely diagnosis, traditional healing and supports, and primary care. Support for health-care providers, particularly community-based nurses, is required in all communities.

4. Provide more services closer to home and improve the journey for those who must travel to access care.

For those who must travel to receive care, the journey should not impose an economic burden and wholistic supports, such as mental health and emotional supports, should be available. Travel policies should be designed to support a positive, seamless experience.

- **5. Improve understanding of cancer and the cancer journey.** In an effort to improve use of services and to reduce anxiety, education should be provided to First Nations patients, families and caregivers about the cancer journey and the services available to them.
- "You have to be made to feel comfortable that you have the prerogative to choose traditional supports without having to prove to anyone what the value or effectiveness is."

g This spelling of wholistic is preferred by many First Nations, Inuit and Métis people because it better represents the idea of the whole person.



#### **PRIORITY 2**

Peoples-specific, self-determined cancer care

#### **ACTIONS**

- 1. Design and deliver First Nations-determined programs and services. Investments should be made in First Nations communities and health-care providers to support the design and delivery of self-determined programs and services. This should include quality improvement initiatives, with indicators such as the experience of people living with cancer and community knowledge.
- **2. Reduce jurisdictional barriers.** Provinces, territories and the federal government must work with First Nations governments and communities to reduce barriers to care created by provincial and territorial borders.
- 3. Improve communication, navigation and coordination across the system. Investments should be made to improve communications (including navigation services and technology use) and develop stronger partnerships with First Nations governments, organizations and communities.



#### **PRIORITY 3**

First Nations-governed research and data systems

#### **ACTIONS**

- 1. Collect First Nations-specific data and set First Nations-specific indicators and targets. The cancer system should be measured using First Nations-determined indicators and outcomes. First Nations-specific data can also contribute to a better understanding of trends and disparities in First Nations cancer care.
- **2. Invest in First Nations research capacity.** Investments must be made in people and in flexible, responsive research opportunities.
- **3. Implement First Nations governance of the collection and use of data and research.** Data collection and research should be done in close partnership with First Nations, follow First Nations research principles and ethical processes (OCAP®), and be governed by First Nations.

In 2015-16, **15%** of First Nations adults reported that they had personally attended a Residential School and **49%** reported having at least one parent who attended. More than half of First Nations adults with chronic health conditions who had attended Residential Schools felt that it had negatively impacted their health.<sup>46</sup>

## Inuit priorities and actions



#### **PRIORITY 1**

Culturally appropriate care closer to home



- 1. Provide equitable access to cancer services closer to home. Most Inuit must travel multiple days to access cancer services. Improvements to telehealth, including improved network bandwidth, would facilitate pre-operative calls, post-treatment follow-up, and the transmission of health records and data. Improved and consistent access to health-care providers would reduce delays in diagnosis. Inuit should have equitable access to drug therapy regardless of their location.
- **2. Improve travel policies.** Appointment times and travel requirements should be improved and streamlined to minimize time away from family supports. Wholistic supports, including escorts while travelling, should be available to patients, and travel should not pose a significant financial burden.
- **3. Incorporate Inuit wholistic approaches to health and wellness in cancer care.** Wholistic approaches are needed that recognize the impact of trauma on illness, are responsive to regionally specific Inuit culture, and recognize the importance of language and country foods to health and healing.



#### 4. Recognize and eliminate racism within the system.

To work towards eliminating the significant impact of racism on cancer services, health-care providers should receive training to better understand the realities of Inuit communities and culturally appropriate communication while being supported to implement the changes needed to create a culturally safe system.

- **5. Improve access to basic health supports.** Basic health supports, including affordable healthy foods and adequate housing, should be present in every community and available to all Inuit.
- **6. Improve understanding of cancer and the cancer journey.** Fear and stigma associated with cancer can create barriers to accessing services. Education about the cancer continuum, including the cancer journey and available services, should be provided.
- "Doctors often make recommendations on dietary changes after a diagnosis without taking into account food scarcity."



#### **PRIORITY 2**

Peoples-specific, self-determined cancer care

#### **ACTIONS**

- 1. Design and deliver Inuit-driven programs and services. Investments in Inuit health-care capacity should be made to support the implementation of self-determined programs and services to improve service provision. Recognition and compensation for informal community care should also be provided.
- 2. Improve coordination and navigation of care.

  Communication, navigation and coordination should be improved to create a more person-centred system.

  Access to case management, navigators and interpreters, as well as training and supports for these roles, is important for communities.

Only three of the **25** communities in Nunavut have a full-time physician.<sup>33</sup>



#### **PRIORITY 3**

Inuit-governed research and data systems

#### **ACTIONS**

#### 1. Collect and report on Inuit-specific data.

An Inuit-specific report card showing key metrics, such as wait times to diagnosis and travel times, should be created to track progress and demonstrate trends and disparities in care.

2. Determine impact of environmental contamination on Inuit health, specifically cancer risk. The connection between environmental contaminants and the higher risk of cancer in the North needs to be examined, including the effects of contamination on Inuit health and food supply. Increased awareness, stronger policies and mitigation options to protect the land are also needed.

## Métis priorities and actions



#### **PRIORITY 1**

Culturally appropriate care closer to home



## 1. Provide equitable access to resources, programs and care across the cancer continuum.

Equity in funding and resources to reduce the financial burden is essential. Accessible services should cover the entire continuum, including access to timely diagnosis. For Métis in rural and remote areas, improved travel processes and access to supports are required.

2. Create a wholistic system that is responsive to Métis culture. Care should reflect a wholistic Métis understanding of health and wellness, including recognition of the impact of trauma on illness. Access to traditional and psychosocial supports should also be improved.



#### 3. Recognize and eliminate racism within the system.

To work towards eliminating the significant impact of racism on cancer services for Métis, Health care providers should receive training in Métis-defined cultural safety to understand community realities and to work better with traditional practitioners.

#### 4. Improve access to basic health supports.

Basic health supports, including healthy food, clean water, affordable transportation, medications and adequate housing, should be available to every Métis.

**5.** Improve understanding of cancer and the cancer journey. To reduce barriers to accessing services, education and navigation should be provided to patients and their families throughout the cancer continuum, from screening to end-of-life care or survivorship.



#### **PRIORITY 2**

Peoples-specific, self-determined cancer care



- 1. Design and deliver Métis-determined programs and services. Investments should be made in communities and in Métis health-care providers to facilitate the design and delivery of programs and services. This requires sufficient and sustainable funding to support relationship building between the cancer system and Métis governments and communities.
- 2. Reduce jurisdictional barriers and improve communication, navigation, and coordination.

Provinces and territories need to work in partnership with Métis governments and communities to reduce jurisdictional barriers to care, clarify jurisdictional responsibility for services, and implement flexible, person-centred policies.



#### **PRIORITY 3**

Métis-governed research and data systems

#### **ACTIONS**

### 1. Collect Métis-specific data and develop Métis-determined indicators and outcomes.

The cancer system should be measured using Métisdetermined indicators and outcomes, with the results used to improve accountability. Collecting Métis-specific data can help demonstrate trends and gaps in Métis cancer care. To effectively collect data, safe spaces for self-identification must be created.

**2. Invest in Métis research capacity.** Investments should be made in people as well as in funding opportunities that are accessible and responsive to Métis organizations and governments.

"I think back to the trauma I went through as a child and wonder whether that is related to me having cancer."

# Putting the Strategy into action

Bringing the Strategy to life and fully realizing its benefits for Canadians requires an active and enduring commitment by the cancer community to work together. This commitment is key to delivering on the Strategy's refreshed priorities and actions.

#### Partners in implementation

Governments, organizations and individuals involved in the refreshed Strategy's development are central to its implementation. These include federal, provincial and territorial ministries of health; cancer agencies and programs; primary care providers; researchers; technology and innovation organizations; health-care professionals; cancer charities and patient groups; and people living with cancer and their families.

Ongoing engagement with First Nations, Inuit and Métis governments, organizations and communities is also critical to supporting the development of self-determined, Peoples-specific implementation plans.

Many organizations listed as partners within the Strategy's priorities and actions have been actively involved in the successful implementation of the Strategy since 2006, while others are new partners. All play vital roles in ensuring we are able to address new challenges and opportunities. Cancer agency and ministry leaders have demonstrated a remarkable commitment to working with the Partnership in the refresh of the Strategy and are integral to its implementation.

The priorities and actions outlined in the Strategy are designed to align with the shared priorities of the federal, provincial and territorial health-care systems and of Canadians, and will be put into action across the country in several ways. At the pan-Canadian level, there is work to be done to embed cancer priorities into the work of federal departments and federally funded pan-Canadian health agencies.

The Partnership and cancer agencies and programs will work with cancer specialists and primary care providers, provincial and territorial ministries, and regulatory colleges to map and deliver new models of care. This work will provide advice to the ministries of health regarding barriers and potential incentives to bringing personcentred and financially sustainable changes into practice.

These are just some examples of the work ahead. It is important to note that Strategy partners will include organizations and institutions across the country involved in cancer planning and delivery, and to acknowledge that partners not traditionally engaged in the cancer community, such as primary care, must be involved to drive change. Moreover, the voices of people living with cancer, families and the public will continue to inform the implementation of the Strategy from 2019 to 2029.



#### The role of the steward

Given the shared ownership of the Strategy and the federated nature of Canada's health systems, Canadians and leaders of the cancer system believe that a Strategy steward continues to be a critical enabler of coordinated, pan-Canadian action. The Partnership has effectively filled that role since 2007 and, with our many partners, has built an active series of networks that have changed the pace of cancer care reform in Canada.

In addition to expanding the reach and membership of these networks, the Partnership will work with cancer agencies and other partners to develop and adapt robust implementation plans as needed, and meaningful measures of impact, which will be used to monitor progress towards targets and to report back to Canadians.

The delivery of high-quality care and supports for Canadians experiencing cancer depends on the daily efforts of hundreds of organizations and thousands of people. Providing effective cancer care is a shared responsibility that extends beyond the boundaries of any one organization or the specific domain of the health and social sectors.

As the steward of the Strategy, the Partnership has found time and again there is no shortage of passion or shared priorities across provincial and territorial boundaries and across organizations that deliver cancer care and related supports and services. Yet in practice, despite best intentions, organizations and health-care sectors revert to working in isolation or with a focus on only one part of the challenge. The Strategy imagines a future where shared efforts leverage all these efforts to make Canada a world leader in cancer care.

#### Leading the Strategy from 2019 to 2029

Based on the Partnership's experience working with partners across the country for more than a decade, we know that critical supports are required to achieve the Strategy's shared goals today and through 2029. As steward, the Partnership will lead this work by:

## Setting a shared vision through a refreshed strategy for cancer control

 Overseeing and reporting on the Strategy's implementation efforts against shared measures of success

## Establishing bold targets and reporting to Canadians on collective progress

- Supporting partners to set common measures, build data collection capacity and make data-informed decisions
- Reporting to Canadians on progress and impact of priorities

#### Driving shared action and supporting aligned activities

- Seeking and sharing promising and proven best practices from anywhere in the world to improve care in Canada
- Calling organizations to action on their key mandated priorities and working to remove barriers to their progress
- Aligning and integrating work across all organizations in the cancer system to make faster progress and reduce duplication
- Promoting a pan-Canadian culture of innovation and mobilizing technology to support the efforts of partners
- Mobilizing and increasing action among partners to advance the priorities of Canadians
- Advancing best policy and practice solutions across the country for the benefit of all

## Leading select actions outside the provincial and territorial health-care delivery systems

- Identifying shared priorities that require pan-Canadian action
- Identifying and applying promising and best practices from within Canada and beyond to benefit the parts of the country and the populations that need support

## Monitoring progress of the Strategy

Canadians expect the Strategy to help reduce the burden of cancer across the entire cancer journey, while ensuring that publicly funded cancer services deliver value for money.

Collecting and using data is key to knowing if progress is being made. Tracking the progress of the Strategy from 2019 to 2029 requires that partners work together to set targets, measure against them and report to Canadians. This will enable measurement and monitoring of the growing impact of the Strategy and its related efforts to reduce the burden of cancer in Canada. As steward of the Strategy, the Partnership is accountable for ensuring results are monitored and reported, including providing Canadians with an annual update on the collective progress toward the Strategy's priorities.

The Partnership will also work closely with First Nations, Inuit and Métis on data issues. For any data collection, information systems and data-sharing with First Nations, Inuit and Métis, it is essential that the cancer community abide by the relevant principles of information governance, including the principles of Ownership, Control, Access and Possession (OCAP®), Inuit research principles and Métis research protocols.

"We need to push ourselves to deliver optimal care with existing resources. This requires new and innovative thinking and ways of working."

Health system administrator

# Commitment to Canadians

The long-term vision of the Canadian Strategy for Cancer Control is that fewer Canadians develop cancer, more people survive it and those with cancer have a better quality of life. To achieve this vision, we need to collectively ensure that everyone in Canada has equitable access to the highest quality cancer prevention, diagnosis, treatment and support services, and that care at every step is delivered with a person-centred approach that is sustainable for future generations.

This Strategy has a much broader reach than the cancer system: it provides leadership to tackle system-wide issues. Solutions that are tested and shown to improve outcomes for individuals and the cancer system should be considered and applied more broadly across the health system, including in the treatment of other chronic diseases.

Delivering results for Canadians depends on moving forward together. Working collaboratively, we can all help the Strategy deliver on its promise of better outcomes for Canadians and a better cancer system.

The Canadian Strategy for Cancer Control.

Doing together what cannot be done alone.



#### **REFERENCES**

- World Health Organization. National cancer control programmes: policies and managerial guidelines [report on the Internet]. 2nd edition. Geneva, Switzerland: World Health Organization; 2002 [cited 2019 Mar 28]. Available from: <a href="http://www.who.int/cancer/publications/nccp2002/en/">http://www.who.int/cancer/publications/nccp2002/en/</a>.
- 2. Office of Audit and Evaluation. Evaluation of the Canadian Partnership Against Cancer activities 2012–2013 to 2015–2016 [Internet]. Ottawa, ON: Health Canada and the Public Health Agency of Canada; 2016 [cited 2019 Mar 27]. Available from: <a href="https://www.canada.ca/en/public-health/corporate/transparency/corporate-management-reporting/evaluation/2012–2013–2015–2016-canadian-partnership-against-cancer-activities.html">https://www.canada.ca/en/public-health/corporate/transparency/corporate-management-reporting/evaluation/2012–2013–2015–2016-canadian-partnership-against-cancer-activities.html</a>.
- 3. Ellison LF. Progress in net cancer survival in Canada over 20 years. Health reports. 2018;29(9):10–8.
- Allemani C, Matsuda T, Di Carlo V, Harewood R, Matz M, Niksic M, et al. Global surveillance of trends in cancer survival 2000–14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. Lancet. 2018;391(10125):1023–75.
- Statistics Canada. Table 13-10-0111-01: Number and rates of new cases of primary cancer, by cancer type, age group and sex [online database]. Statistics Canada; 2019 [updated 2019 Apr 3; cited 2019 Apr 3]. Available from: <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310011101">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310011101</a>.
- 6. Statistics Canada. Table 13-10-0392-01: Deaths and age-specific mortality rates, by selected grouped causes [online database]. Statistics Canada; 2019 [updated 2019 Apr 16; cited 2019 Apr 16]. Available from: <a href="https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039201">https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039201</a>.
- 7. Canadian Partnership Against Cancer. Estimating the economic impact of the Canadian Strategy for Cancer Control: A technical note [web page]. Toronto, ON: Canadian Partnership Against Cancer; 2019 [updated 2019 Apr 29; cited 2019 Apr 29]. Available from: partnershipagainstcancer.ca/economicimpact.

- 8. de Oliveira C, Weir S, Rangrej J, Krahn MD, Mittmann N, Hoch JS, et al. The economic burden of cancer care in Canada: a population-based cost study. CMAJ Open. 2018;6(1):E1-E10.
- 9. Canadian Partnership Against Cancer. Cervical cancer screening in Canada: environmental scan [Internet]. Toronto, ON: Canadian Partnership Against Cancer; 2017 [cited 2019 Apr 9]. Available from: <a href="https://www.partnershipagainstcancer.ca/topics/cervical-cancer-screening-environmental-scan-2017/">https://www.partnershipagainstcancer.ca/topics/cervical-cancer-screening-environmental-scan-2017/</a>.
- Canadian Partnership Against Cancer. Living with cancer: a report on the patient experience Toronto, ON: Canadian Partnership Against Cancer; 2018 [cited 2019 Mar 28]. Available from: <a href="http://www.systemperformance.ca/report/living-with-cancer-patient-experience/">http://www.systemperformance.ca/report/living-with-cancer-patient-experience/</a>.
- 11. Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian cancer statistics 2015. Special topic: predictions of the future burden of cancer in Canada. Toronto, ON: Canadian Cancer Society; 2015 [cited 2019 Apr 3]. Available from: <a href="http://www.cancer.ca/~/media/cancer.ca/CW/cancer%20information/cancer%20101/Canadian%20cancer%20statistics/Canadian-Cancer-Statistics-2015-EN.pdf?la=en">http://www.cancer.ca/~/media/cancer.ca/CW/cancer%20information/cancer%20101/Canadian%20cancer%20statistics/Canadian-Cancer-Statistics-2015-EN.pdf?la=en</a>.
- 12. Canadian Partnership Against Cancer. The 2018 cancer system performance report. Toronto, ON: Canadian Partnership Against Cancer; 2018 [cited 2019 Apr 3]. Available from: <a href="https://www.systemperformance.ca/report/2018-cancer-system-performance-report/">https://www.systemperformance.ca/report/2018-cancer-system-performance-report/</a>.
- Canadian Partnership Against Cancer. The 2017 cancer system performance report. Toronto, ON: Canadian Partnership Against Cancer; 2017 [cited 2019 Mar 28]. Available from: <a href="http://www.systemperformance.ca/report/2017-cancer-system-performance-report/">http://www.systemperformance-report/</a>.

- 14. Health Council of Canada. Empathy, dignity, and respect: creating cultural safety for Aboriginal people in urban health care. Toronto, ON: Health Council of Canada; 2012 [cited 2019 Apr 9]. Available from: <a href="http://publications.gc.ca/pub?id=9.698021&sl=0">http://publications.gc.ca/pub?id=9.698021&sl=0</a>.
- 15. Inuit Tapiriit Kanatami. Inuit & cancer: fact sheets.
  Ottawa, ON: Inuit Tapiriit Kanatami; 2012 [cited 2019
  Apr 9]. Available from: <a href="https://www.itk.ca/inuit-cancer-fact-sheets/">https://www.itk.ca/inuit-cancer-fact-sheets/</a>.
- 16. Withrow DR, Pole JD, Nishri ED, Tjepkema M, Marrett LD. Cancer survival disparities between First Nation and non-Aboriginal adults in Canada: follow-up of the 1991 census mortality cohort. Cancer Epidemiol Biomarkers Prev. 2017;26(1):145–51.
- Mazereeuw MV, Withrow DR, Nishri ED, Tjepkema M, Vides E, Marrett LD. Cancer incidence and survival among Métis adults in Canada: results from the Canadian census follow-up cohort (1992–2009). CMAJ. 2018;190(11):E320-E6.
- 18. Beben N, Muirhead A. Improving cancer control in First Nations, Inuit and Métis communities in Canada. Eur J Cancer Care (Engl). 2016;25(2):219–21.
- NSW Agency for Clinical Innovation. Understanding the process to develop a model of care: an ACI framework. Chatswood, NSW: Agency for Clinical Innovation; 2013 [cited 2019 Apr 10]. Available from: <a href="https://www.aci.health.nsw.gov.au/\_data/assets/pdf\_file/0009/181935/HS13-034\_Framework-DevelopMoC\_D7.pdf">https://www.aci.health.nsw.gov.au/\_data/assets/pdf\_file/0009/181935/HS13-034\_Framework-DevelopMoC\_D7.pdf</a>.
- 20. Canadian Partnership Against Cancer. Refreshing the Canadian strategy for cancer control: patient, public and stakeholder engagement summary report. Toronto, ON: Canadian Partnership Against Cancer; 2019 [cited 2019 Apr 29]. Available from: cancerstrategy.ca/engagementsummary.
- United Nations. Transforming our world: the 2030 agenda for sustainable development [Report]. New York, USA: United Nations; 2015 [cited 2019 Apr 10]. Available from: <a href="https://sustainabledevelopment.un.org/post2015/transformingourworld">https://sustainabledevelopment.un.org/post2015/transformingourworld</a>.

- 22. Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian cancer statistics 2018. A 2018 special report on cancer incidence by stage. Toronto, ON: Canadian Cancer Society; 2018 [cited 2019 Apr 3]. Available from: <a href="http://www.cancer.ca/en/cancer-information/cancer-101/canadian-cancer-statistics-publication/">http://www.cancer.ca/en/cancer-information/cancer-101/canadian-cancer-statistics-publication/</a>.
- World Health Organization. Health equity
  [web page]. Geneva: World Health Organization;
   2019 [cited 2019 Apr 10]. Available from: <a href="https://www.who.int/topics/health\_equity/en/">https://www.who.int/topics/health\_equity/en/</a>.
- 24. Poirier AE, Ruan Y, Volesky KD, King WD, O'Sullivan DE, Gogna P, Walter SD, Villeneuve PJ, Friedenreich CM, Brenner DR. The current and future burden of cancer attributable to modifiable risk factors in Canada: summary of results. Prev Med. 2019;122:140-7.
- Canadian Cancer Society. Smoking causes 1 in 5 of all deaths, costs \$6.5 billion in healthcare in Canada each year: study [web page]. Toronto, ON: Canadian Cancer Society; 2017 [updated 2017 Oct 16; cited 2019 Mar 29]. Available from: <a href="http://www.cancer.ca/en/about-us/for-media/media-releases/national/2017/cost-of-tobacco/?region=on#ixzz5jqszFCJQ">https://www.cancer.ca/en/about-us/for-media/media-releases/national/2017/cost-of-tobacco/?region=on#ixzz5jqszFCJQ</a>.
- 26. US Department of Health and Human Services. The health consequences of smoking: 50 years of progress. A report of the surgeon general. Atlanta, GA: Reports of the Surgeon General; 2014 [cited 2019 Mar 27]. Available from: <a href="https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html">https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html</a>.
- Young TK, Kelly JJ, Friborg J, Soininen L, Wong KO. Cancer among circumpolar populations: an emerging public health concern. Int J Circumpolar Health. 2016;75:29787.
- 28. Canadian Cancer Society. Why tobacco control is important [web page]. Canadian Cancer Society; 2019 [cited 2019 Mar 29]. Available from: <a href="http://www.cancer.ca/en/get-involved/take-action/what-we-are-doing/tobacco-control/?region=on">http://www.cancer.ca/en/get-involved/take-action/what-we-are-doing/tobacco-control/?region=on</a>.
- 29. Zhang L, Bao Y, Riaz M, Tiller J, Liew D, Zhuang X, et al. Population genomic screening of all young adults in a health-care system: a cost-effectiveness analysis. Genet Med. 2019.

- 30. American Cancer Society. Understanding genetic testing for cancer 2017 [updated 2017 Apr 10; cited 2019 Apr 10]. Available from: <a href="https://www.cancer.org/cancer/cancer-causes/genetics/understanding-genetic-testing-for-cancer.html">https://www.cancer.org/cancer/cancer-causes/genetics/understanding-genetic-testing-for-cancer.html</a>.
- 31. The Society of Gynecologic Oncologists of Canada (GOC). GOC statement regarding salpingectomy and ovarian cancer prevention. Ottawa, ON: GOC; 2011 [updated 2011 Sep 15; cited 2019 Mar 19]. Available from: <a href="https://g-o-c.org/publications/goc-position-statements/archived-statements/">https://g-o-c.org/publications/goc-position-statements/archived-statements/</a>.
- 32. Cancer Research UK. Bowel cancer survival statistics [web page]. London, UK: Cancer Research UK; 2016 [updated 2016 Oct 5; cited 2019 Apr 10]. Available from: <a href="https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/bowel-cancer/survival#heading-Three">https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/bowel-cancer/survival#heading-Three</a>.
- 33. Cherba M, Healey Akearok GK, MacDonald WA. Addressing provider turnover to improve health outcomes in Nunavut. CMAJ. 2019;191(13):E361-E4.
- 34. Mema SC, Yang H, Elnitsky S, Jiang Z, Vaska M, Xu L. Enhancing access to cervical and colorectal cancer screening for women in rural and remote northern Alberta: a pilot study. CMAJ Open. 2017;5(4):E740-E5.
- 35. Duffy SW, Myles JP, Maroni R, Mohammad A. Rapid review of evaluation of interventions to improve participation in cancer screening services. J Med Screen. 2017;24(3):127–45.
- 36. National Lung Screening Trial Research T, Aberle DR, Adams AM, Berg CD, Black WC, Clapp JD, et al. Reduced lung-cancer mortality with low-dose computed tomographic screening. N Engl J Med. 2011;365(5):395–409.
- 37. Emmons KM, Colditz GA. Realizing the potential of cancer prevention: the role of implementation science. N Engl J Med. 2017;376(10):986–90.
- 38. Canadian Institute for Health Information.
  Unnecessary care in Canada. Ottawa, ON: CIHI; 2017
  [cited 2019 Mar 29]. Available from: <a href="https://www.cihi.ca/en/unnecessary-care-in-canada">https://www.cihi.ca/en/unnecessary-care-in-canada</a>.

- 39. Mitera G, Earle C, Latosinsky S, Booth C, Bezjak A, Desbiens C, et al. Choosing Wisely Canada cancer list: ten low-value or harmful practices that should be avoided in cancer care. J Oncol Pract. 2015;11(3):e296-303.
- 40. Government of Canada. Government of Canada initiatives to support LGBTQ2 communities and promote diversity and inclusion [web page]. Ottawa, ON: Government of Canada; 2017 [updated 2017 Nov 28; cited 2019 Apr 10]. Available from: <a href="https://pm.gc.ca/eng/news/2017/11/28/government-canada-initiatives-support-lgbtq2-communities-and-promote-diversity-and">https://pm.gc.ca/eng/news/2017/11/28/government-canada-initiatives-support-lgbtq2-communities-and-promote-diversity-and</a>.
- Statistics Canada. Population and dwelling count highlight tables, 2016 census [online database].
   Statistics Canada; 2016 [updated 2019 Feb 20; cited 2019 Apr 26]. Available from: <a href="https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=703&S=87&O=A">https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=703&S=87&O=A</a>.
- 42. Canadian community health survey. Statistics Canada; 2018.
- 43. Fitch M, Zomer S, Lockwood G, Louzado C, Shaw Moxam R, Rahal R, et al. Experiences of adult cancer survivors in transitions. Support Care Cancer. 2018.
- 44. CanTeen Australia. The economic cost of cancer in adolescents and young adults. Sydney, NSW: CanTeen Australia; 2017 [cited 2019 Mar 27]. Available from: <a href="https://www.canteen.org.au/youth-cancer/resources/economic-cost-cancer-adolescents-young-adults/">https://www.canteen.org.au/youth-cancer/resources/economic-cost-cancer-adolescents-young-adults/</a>.
- 45. Canadian Partnership Against Cancer. Palliative and end-of-life care: a cancer system performance report. Toronto, ON: Canadian Partnership Against Cancer; 2017 [cited 2019 Apr 26]. Available from: <a href="https://www.partnershipagainstcancer.ca/topics/palliative-and-end-of-life-care/">https://www.partnershipagainstcancer.ca/topics/palliative-and-end-of-life-care/</a>.
- 46. First Nations Information Governance Centre. National report of the First Nations regional health survey phase 3: volume one. Ottawa, ON: First Nations Information Governance Centre; 2018 [cited 2019 Apr 26]. Available from: <a href="https://fnigc.ca/rhs3report">https://fnigc.ca/rhs3report</a>.

### Canadian Partnership Board of Directors - 2019/2020

Name	Position	
Dr. Graham Sher Chair	Chief Executive Officer, Canadian Blood Services	
Helen Mallovy Hicks Vice-Chair	Partner and Global Valuation Leader, PricewaterhouseCoopers LLP	
Julien Billot	Corporate Director	
Ewan Clark	Legal Counsel, Cox & Palmer	
Darren Dick	Director of External Relations, Schulich School of Law, Dalhousie University	
Karen Herd	Deputy Minister, Manitoba Health, Seniors and Active Living	
Matt Herman	Assistant Deputy Minister, Population and Public Health, British Columbia Ministry of Health	
Abby Hoffman Observer	Assistant Deputy Minister, Strategic Policy Branch, Health Canada	
Dr. Eshwar Kumar	Medical Officer, New Brunswick Cancer Network, Department of Health	
Dr. Jean Latreille Observer	Directeur du Programme québécois de cancérologie	
Dr. Victoria Lee	President and Chief Executive Officer, Fraser Health Authority, British Columbia	
Mary Catherine Lindberg	Health Consultant	
Crystal Nett	Associate Vice President, Strategy, Saskatchewan Polytechnic	
Mary O'Neill	Corporate Director	
Dr. David Sabapathy	Deputy Chief Public Health Officer, PEI Department of Health and Wellness	
Andrea Seale	Interim Chief Executive Officer, Canadian Cancer Society	
Cheryl Smith	Reeve, Rural Municipality of St. Laurent	
William Young	Senior Partner, Monitor Clipper Partners	
Jeff Zweig	Chief Executive Officer, Mosaic Forest Management	

### The Canadian Strategy for Cancer Control External Advisory Committee

Name	Role	Title
Mel Cappe	Co-Chair	Professor, School of Public Policy and Governance, University of Toronto; Former member of the Canadian Partnership Against Cancer Board of Directors
Cynthia Morton	Co-Chair	Chief Executive Officer, Canadian Partnership Against Cancer
Dr. André Corriveau	Public health	Chief Public Health Officer, Department of Health and Social Services, Government of the Northwest Territories
Karen Herd	Provincial deputy minister	Deputy Minister, Manitoba Health, Seniors and Active Living
Claudia Hernandez	Patient/family advisor	Patient and Family Advisor
Abby Hoffman	Federal government representative	Assistant Deputy Minister, Strategic Policy Branch, Health Canada
Lynne Hudson	Patient advocacy organization	President and Chief Executive Officer, Canadian Cancer Society
Dr. David Jaffray	Technology leader	Executive VP Technology and Innovation, University Health Network
Dr. Eshwar Kumar	Canadian Partnership Against Cancer Board of Directors representative	Medical Officer, New Brunswick Cancer Network, Department of Health
Dr. Francine Lemire	Primary care leader	Executive Director and Chief Executive Officer, College of Family Physicians of Canada
Dr. Malcolm Moore	CAPCA representative	Former President, BC Cancer Agency
Dr. Geoff Porter	Cancer clinical leader	Surgical Oncologist, QEII Health Sciences Centre
Andrea Reed	Staff Lead	Executive Director, Strategy, Canadian Partnership Against Cancer
Dr. Stephen Robbins	Research community	Scientific Director, CIHR Institute of Cancer Research Board of Directors Co-chair, Canadian Cancer Research Alliance
Dr. Simon Sutcliffe	Cancer clinical leader	Chief Medical Officer, Qu Biologics



