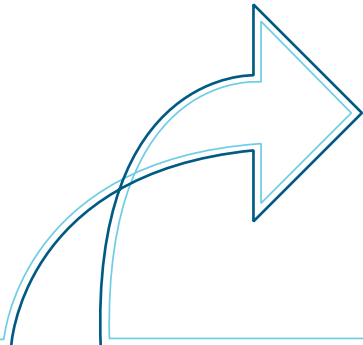




Changing Our FUTURE:

ALBERTA'S CANCER
PLAN TO 2030



Alberta
Government

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albertacancerplan.ca

Message from the Minister

A diagnosis of cancer forever changes a person's life. It impacts families, friends, work and education. Cancer creates a tremendous burden for patients and families and strains our health, economic and social systems.

Yet so many cases of cancer could be prevented and better treatments found if governments, the health system, our universities, families and communities work together in taking action against cancer. *Changing Our Future: Alberta's Cancer Plan to 2030* is about a better future, one where in 2030, Alberta will be a place where most cancers are prevented, more cases of cancer are cured and the suffering of people affected by cancer is dramatically reduced.

The Plan sets out an ambitious agenda for progress towards our vision. It builds on existing strengths and partnerships and draws on resources within the health sector and beyond to create a comprehensive and coordinated system of cancer prevention, screening, care and research. We're establishing *CancerControl Alberta* to better coordinate services in Alberta. We're also bringing together key stakeholders from across the spectrum of wellness, health care and clinical research to ensure that we create an integrated system in the province. Our risk of cancer is affected by an array of behavioural, social, economic, environmental and cultural factors that are not easily changed. That's why our approach to prevention will be comprehensive and support Albertans in making healthy choices.

Alberta has dedicated health professionals and a strong foundation on which to build. The Cross Cancer Institute and the Tom Baker Cancer Centre are centres of expertise that link to a network of other facilities and programs. We have research expertise within our universities and institutions and a solid base of organizations and programs aimed at prevention and wellness. We have foundations that raise awareness and funds. Cancer screening is a growing part of the system and people are being supported through primary health care in their communities and support services closer to home.

We need to bring all this together into an integrated system, set clear measures and targets and work together effectively. This is more than a vision; it's a commitment.



Hon. Fred Horne
Minister of Health

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- › *Changing Our Future: Alberta's Cancer Plan to 2030* Steering Committee
- › Expert Working Groups
- › Cross Cancer Institute, Tom Baker Cancer Centre, and other Cancer Care clinicians and researchers
- › The Alberta Cancer Foundation
- › The Provincial Advisory Council on Cancer
- › Alberta Health Services Patient and Family Advisory Group
- › Alberta Health Services staff
- › Alberta Health staff

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EXECUTIVE SUMMARY

CHANGING OUR FUTURE: ALBERTA'S CANCER PLAN TO 2030

Changing Our Future: Alberta's Cancer Plan to 2030 is a long-term, strategic plan for creating a high performing system of excellence for cancer care and prevention within the province. The Plan identifies current challenges and describes the transformative shifts needed by 2030 to realize Alberta's vision of becoming a place where most cancers are prevented, more cases of cancer are cured, and the suffering of people affected by cancer is dramatically reduced.

The Plan provides a comprehensive planning framework for ongoing development of programs, activities, and services related to cancer. As its strategies are implemented, Albertans will see a sustained and enhanced emphasis on prevention, screening and research. A broad spectrum of stakeholders from the wellness, primary health care and clinical research sectors will be engaged in creating a comprehensive and coordinated approach to prevention, screening, care and research.

Vision

By 2030, Alberta will be a place where most cancers are prevented, more cases of cancer are cured and the suffering of people affected by cancer is dramatically reduced.

Currently, one in two men and one in three women will develop cancer in their lifetimes, and one in four Albertans will die from cancer. If we do not make changes, a marked increase in the number of new cancer cases is expected. Alberta's aging population is expected to be the biggest factor behind this increase, followed by population growth.

There is reason for hope. About one-third of cancers can be prevented by avoiding the use of tobacco. Many other cancers can be stopped before they begin with healthy food choices, regular exercise and maintaining a healthy body weight. Research continues to identify new approaches for preventing and treating cancer, as well as for screening procedures that can detect cancers earlier, resulting in better outcomes.

Realizing Alberta's vision means addressing our challenges. Cancer care providers are in short supply. The need for care in the community and at home is growing and primary health care providers are being asked to take on increasingly complex and diverse roles. Factors that contribute to prevention are often beyond the health system's control. Then there's the cost of treatment, particularly rising drug costs, which places a burden on the health system and patients.

Changing our Future: Alberta's Cancer Plan to 2030 sets out a path where Albertans are active participants in their own well-being and make healthy choices that help prevent cancer, where stakeholders from many sectors work together on addressing the underlying issues that cause cancer, and research continues to develop better treatments and prevention strategies. The Plan also describes how screening, diagnosis, treatment and medical and psychosocial care will improve and become increasingly integrated to ensure patients receive the best possible seamless services.

STRATEGIES

Changing our Future: Alberta's Cancer Plan to 2030 sets out ten strategies for change. These strategies underscore the Plan's comprehensive vision and will guide the work going forward. The strategies identified below also include early priority action items. Implementation of these starting points for change will begin within one year.

1. Transform Alberta's approach to cancer by creating a comprehensive and coordinated system of prevention, screening, care and research involving stakeholders from across the wellness, health care and research spectrums. The focal point for this integrated system will be *CancerControl Alberta*. *CancerControl Alberta*, a new operating division within Alberta Health Services (AHS), will bring together AHS cancer facilities and programs under one umbrella and fully engage key stakeholders involved in cancer prevention, treatment and research.

- › Create *CancerControl Alberta* as a distinct division within AHS.
- › Bring together key stakeholders to support the implementation of *Changing our Future: Alberta's Cancer Plan to 2030*.

2. Support, engage and integrate primary health care providers in the delivery of cancer services in the home or community and to underserved populations.

- › Streamline and standardize the referral process to improve access to specialized cancer services.

3. Reduce the risk of cancer through coordinated and integrated prevention strategies.

- › Implement *Creating Tobacco-free Futures: Alberta's Strategy to Prevent and Reduce Tobacco Use*.
- › Focus on healthy eating and active living initiatives.
- › Develop a provincial approach to decrease incidence of skin cancers caused by sun exposure and artificial tanning.

4. Find cancer early by using robust data and appropriate screening activities.

- › Improve access to screening through a consistent population-based screening approach, the adoption of standard criteria and targeted investments.
- › Increase the participation of Aboriginal and ethnocultural communities in cancer screening.

5. Better integrate care to deliver cancer diagnosis, treatment and support services to Albertans.

- › Implement a provincial Advance Care Planning process to provide patients and families with the opportunity to define goals for their care.
- › Facilitate molecular testing of cancers linking new, evidence-based diagnostics with targeted treatments for individual patients.

6. Provide cancer patients, survivors, their families and caregivers with the best possible psychosocial, physical and supportive care throughout their cancer journey. Introduce palliative care early in the course of cancer treatment, where appropriate.

- › Implement a tool to screen for distress in cancer patients on a systematic, province-wide basis.

7. Focus Alberta's research efforts to better support breakthroughs in cancer prevention, cancer care and policy and attract and retain world class researchers and funding.

- › Coordinate cancer research in Alberta through the development of a strategic, long-term provincial cancer research plan.
- › Restructure clinical trial research units in Calgary and Edmonton to improve sustainability and increase patient participation.

8. Develop a strong cancer workforce to meet the needs of cancer patients and their families.

- › Further implement 'LEAN' processes to better utilize current staff and facility resources.

9. Manage health system infrastructure, including information, equipment, knowledge and technology to effectively support the delivery of best practices in cancer care to Albertans.

- › Take action on infrastructure to support Alberta as a leading centre for cancer care and research:
 - Construct a new ambulatory cancer building at the Tom Baker Cancer Centre.
 - Proceed with expanding radiation therapy and chemotherapy services at the Cross Cancer Institute.
 - Two new cancer facilities are underway. In Red Deer, the facility is under construction. In Grande Prairie, the cancer centre is in the design phase.

10. Develop a robust cancer surveillance and monitoring system.

- › Introduce a comprehensive approach for public health surveillance.

As implementation of *Changing Our Future: Alberta's Cancer Plan to 2030* proceeds, Albertans will be kept informed of its progress. Actions taken and future directions linked to the Plan will be made publicly available through the development of targeted action plans.



OVERVIEW

CHANGING OUR FUTURE: ALBERTA'S CANCER PLAN TO 2030

Purpose

*Changing Our Future: Alberta's Cancer Plan to 2030*¹ is a long-term strategic plan for creating a high performing system of excellence for cancer care and prevention within Alberta. As its strategies are implemented, Albertans will see a renewed and sustained emphasis on prevention, screening and research. Stakeholders from across the wellness, health care and research spectrums will work closely together. The result will be significantly fewer new cases of cancer and fewer people dying from cancer in the province.

The Plan identifies current challenges, describes the transformative shifts that need to take place by 2030 to achieve the long-term outcomes, and provides a planning framework for ongoing development of programs, activities and services related to cancer.

Changing Our Future: Alberta's Cancer Plan to 2030 is for health care teams, researchers, planners and every Albertan.

Envisioning the Future

Changing Our Future: Alberta's Cancer Plan to 2030 is about creating a better future, one where in 2030, Alberta will be a place where most cancers are prevented, more cases of cancer are cured and the suffering of people affected by cancer is dramatically reduced.

¹ *Changing Our Future: Alberta's Cancer Plan to 2030* is referred to as the Plan throughout the document.

By 2030, implementation of the Plan will have created a province where Albertans eat better, are physically active, smoke less, are UV smart, moderate their alcohol intake and live in communities that promote healthy lifestyle choices.

Albertans will have a very different view of cancer because they will build into their lives the understanding that many cancers can be prevented. They will participate in appropriate screening and early detection practices to identify and diagnose cancer sooner. For cancers that cannot yet be prevented, research will continue to identify new and innovative treatments and supports targeted to patient needs.

Changing our Future: Alberta's Cancer Plan to 2030 will bring together and advance the initiatives, resources and transformations necessary to realize this vision by:

- › Making Alberta a leading international destination for cancer researchers and cancer care providers;
- › Improving prevention strategies, screening, diagnosis, treatment and care;
- › Supporting Albertans in becoming active participants in their own well-being; and
- › Further reducing the use of and exposure to tobacco and tobacco smoke, which accounts for one-third of all cancer cases.

Changing our Future: Alberta's Cancer Plan to 2030 will be integrated with other initiatives. Through partnerships in related strategies, the cancer care community can support Alberta in taking action against cancer.

The Toll of Cancer in Alberta

At current projections, one in two men and one in three women will develop cancer in their lifetimes, and one in four Albertans will die from cancer. Part of this is due to our aging population – we're living longer and many cancers are slow to develop, only manifesting later in life. However, cancer isn't just a disease of the elderly; it affects children and people of all ages. In 2011, cancer was the second leading contributor to potential years of life lost for all ages, surpassed only by injury, which accounted for about 28 per cent of the total potential years of life lost versus cancer's 25 per cent.²

By 2030, the projected number of new cancer cases annually is 27,000, a 65 per cent increase since 2010.³ Alberta's aging population is expected to be the biggest factor behind this increase, followed by projected population growth.

² Alberta Health. December 2012.

³ Alberta Health Services, *Cancer Surveillance* (December 2012).

Unless this trend is reversed, the burden on families, the economy and the health system is going to be massive. There is reason for hope, however. About one-third of cancers can be prevented by avoiding the use of and exposure to tobacco and tobacco smoke. Many other cancers can be stopped before they begin with healthy food choices, regular exercise and maintaining a healthy body weight. For cancers that we don't yet know how to prevent, research will continue to identify new approaches, taking scientific discoveries and turning them into innovative treatments as quickly as possible. More screening is occurring and early detection is important in successful treatment of cancer cases. As well, other jurisdictions have reduced cancer rates. *Europe Against Cancer*, a program launched in 1985, focused on prevention, screening, education and training. It sought and achieved a 10 per cent reduction in cancer in several countries.⁴

What is Cancer?

Cancer is not one disease but many diseases. Usually, when cells in the body become old or damaged, they die and are replaced with new cells. Sometimes this orderly process goes wrong and the genetic material of a cell is damaged or changed. This produces mutations that drive cells to grow, divide, and invade nearby tissues and spread to other parts of the body. Cancer becomes much more common as we grow older, but approximately five to 10 per cent of cancers are entirely hereditary. There are more than 100 different types of cancer and no two cancers are exactly alike. Each individual cancer may respond to treatment differently, depending on its unique biology. The wide range of cancer treatments and services reflects this biological diversity.

Much is being done, but in order to be as successful as possible in our goals of preventing most cancers, curing more cases of cancer and reducing the suffering of people affected by cancer, we need to do more. Alberta has the resources and population to take strong actions, actions that will turn the tide against cancer.

The Challenges

By 2030, about one in six Albertans will be over 65 years of age, about double the proportion today. Alberta's population is projected to be anywhere from 4.5 million to 5.6 million by 2030, up from 3.6 million in 2010. In addition to the steady increase in the number of new cancer patients, driven in part by an aging and growing population, cancer care and service providers are facing a number of critical challenges and drivers for change that must be addressed. These include:

⁴ Canadian Strategy for Cancer Control, *A Cancer Plan for Canada: Discussion Paper* (July 2006).

Ensuring cancer workforce renewal. Cancer care professionals are in short supply. The demographics that are driving the number of cancer cases up are also reducing the cancer workforce as people near retirement. With long training times and international competition for trained and skilled people, cancer care professionals are not easily replaced.

Improved survival rates and changing roles of care providers. In the past, oncologists – cancer specialists – followed their patients from the beginning to the end of their cancer journey. With more patients surviving cancer, and a greater number of older patients, cancer often needs to be managed in conjunction with other health issues, such as chronic diseases. Those diseases are managed in the community, generally through primary health care providers. In addition, more cancer services are being offered directly within communities. Therefore, more health professionals and caregivers outside of specialized cancer service providers are required to have some understanding of cancer and cancer care.

Patient expectations. Patients are becoming more involved in their care. Today, patients not only learn about their condition from health care providers, but also gather information from a wide variety of media, online patient portals, and other patients. Education and availability of information have become key factors in patient care. In recognition of this trend, leading organizations are moving toward more patient-centered care, in which patients are true partners in their own health care.

Recognize and address the contributing factors beyond the health system. Health outcomes are the result of a complex interaction of many different factors. Education, employment, income, living and working conditions all contribute to the well-being of our population. Engagement by stakeholders who are not usually considered to be cancer stakeholders, such as employers, educators, or landlords, can significantly reduce the risk factors associated with cancer and chronic diseases.

Growing need for more effective population health initiatives. If the public were to adopt preventive steps that are already well researched and well known, cancer rates potentially could be halved. Determined, well-organized efforts are needed to more quickly disseminate research-derived knowledge, implementing it into policies and engaging Albertans into putting the knowledge to use. Again, the responsibility for knowledge exchange and better practices belongs not just to the health sector, but to all sectors connected to individual well-being.

Increasing treatment costs. Funding new and very expensive cancer drugs is also a challenge for governments, taxpayers and patients. Costs are increasing every year. New, high-priced drugs and therapies, some with limited effectiveness, will raise ethical challenges related to priorities for treatment. Alberta's health system provides drugs used in the direct treatment of patients with cancer and listed on the Alberta Cancer Drug Benefit Program to cancer patients free of

charge, as well as many other drugs administered in hospitals or clinics. However, the cost of supportive treatments taken by patients with cancer at home, such as anti-nausea medications, are the responsibility of the patient and can be very costly and are an additional burden at an already stressful time.

Causes of Cancer

Determining what causes cancer is complex. Research has shown some things are known to increase the risk of cancer, including tobacco use, alcohol consumption, sunlight, radiation, and chemical exposures. Other factors thought to play a role in cancer include certain environmental exposures, immune system issues, genetics, and age. While increased knowledge of risk factors means some cancers can be avoided, the causes of many cancers, in particular childhood cancers, are largely unknown.

Alberta's Provincial Expertise

Alberta has already demonstrated its commitment to addressing and managing the growing demand for cancer services through investments in new and existing facilities, the adoption of evidence-informed screening programs and treatments, work on streamlining care paths and funding research.

In Alberta today, the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary are provincial centres of oncology expertise and are linked respectively with the Universities of Alberta and Calgary. They provide community services and specialized care to patients, carry out research, develop standards and guidelines for therapy, and lend expertise to other cancer centres in the province. In conjunction with the Edmonton and Calgary sites, four associate cancer centres (located in Grande Prairie, Red Deer, Medicine Hat and Lethbridge) and 11 community cancer centres work together across the cancer control continuum, making it possible for many Albertans to receive treatment close to home.

This approach has enabled the expert knowledge available at the Tom Baker Cancer Centre, the Cross Cancer Institute, and the Universities of Alberta and Calgary, to be shared with cancer service providers across the province. Alberta's system has strong architecture from which to make Alberta a centre for prevention, treatment and research that makes a name for our universities and health system far beyond our borders and delivers leading edge treatment to Albertans.



CHANGING OUR FUTURE:

ALBERTA'S CANCER PLAN TO 2030

Vision and Principles

Changing Our Future: Alberta's Cancer Plan to 2030 is designed to dramatically reduce the number of new cancer cases and the number of people dying from cancer by 2030. The Plan sets out a path, one in which Albertans are active participants in their own well-being and make healthy choices that help prevent cancer, while recognizing that not all cancers can be prevented due to factors such as genetics, lifestyle, viruses and the environment. *Changing Our Future: Alberta's Cancer Plan to 2030* also aims to improve diagnosis, treatment, and care for people who need these services.

VISION

Our vision is that by 2030, Alberta will be a place where most cancers are prevented, more cases of cancer are cured and the suffering of people affected by cancer is dramatically reduced.

PRINCIPLES

All elements of the Plan will be aimed at turning Alberta's vision into a reality. Decisions and actions will be principle-based. The principles guiding the Plan will be:

People focused. The needs of people with cancer and the general population will come first, at both the individual and population level.

Collaborative. People, programs, organizations and institutions will work together and share information, knowledge and resources to ensure the most effective outcomes possible. Cancer control and population health will be the result of efforts well beyond those taken within the health system.

Actively led. Leaders within and beyond the traditional health system will focus their organizations on working together to lessen the burden of cancer and improve health.

Integrated. Initiatives aimed at reducing risk factors common to both cancer and chronic conditions such as cardiovascular disease, diabetes and respiratory conditions will be coordinated.

Research and knowledge driven. Research will be supported, its findings incorporated into initiatives and the knowledge shared to improve policy, patient care and cancer outcomes.

Accountable. Patients, people and organizations involved in cancer control efforts and implementing best practices will work together in creating a culture that is accountable and responsibly implements best practices.

Transformative. The strategies, policies and programs of the Plan will transform how cancer is addressed through innovative thinking and continuous improvement.

Strategies and Priority Actions

Changing Our Future: Alberta's Cancer Plan to 2030 has an ambitious and comprehensive vision. It reflects the best thinking of leading experts, organizations and groups involved in cancer services and health today. Realizing the vision will require all of their efforts and a clear blueprint for change. That blueprint includes ten strategies that, when implemented over time, will achieve Alberta's vision of preventing more cancers, curing more cases of cancer and reducing suffering in Alberta.

STRATEGIES FOR CHANGE

1. Transform Alberta's approach to cancer by creating a comprehensive and coordinated system of prevention, screening, care and research involving stakeholders from across the wellness, health care and research spectrum. This integrated system, *CancerControl Alberta*, will ensure that Alberta maximizes the return from its investments in cancer and realizes the benefits of being a focused member of the worldwide effort to fight cancer.
2. Support, engage and integrate primary health care providers in the delivery of cancer services in the home or community and to underserved populations.
3. Reduce the risk of cancer through coordinated and integrated prevention strategies.
4. Find cancer early by using robust data and appropriate screening activities.

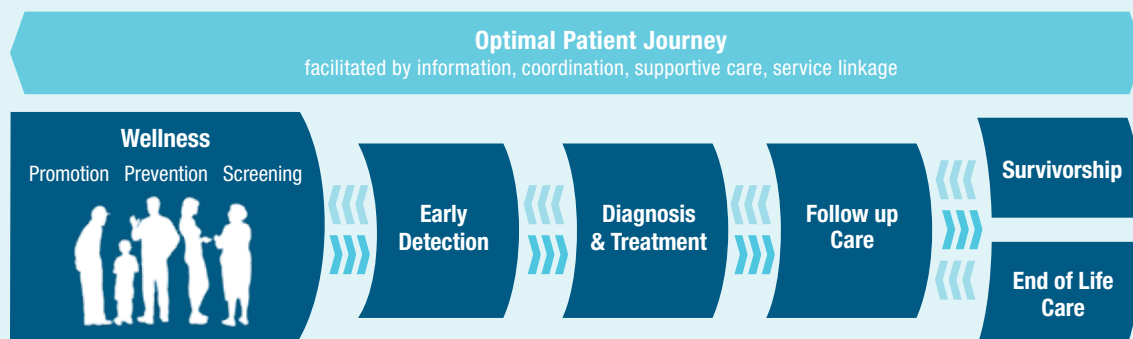
5. Better integrate care to deliver cancer diagnosis, treatment and support services to Albertans.
6. Provide cancer patients, survivors, their families and caregivers with the best possible psychosocial, physical and supportive care throughout their cancer journey and introduce palliative care early in the course of cancer treatment, where appropriate.
7. Focus Alberta's research efforts to better support breakthroughs in cancer prevention, cancer care and policy and attract and retain world class researchers and funding.
8. Develop a strong cancer workforce to meet the needs of cancer patients and their families.
9. Manage health system infrastructure, including information, equipment, knowledge and technology to effectively support the delivery of best practices in cancer care to Albertans.
10. Develop a robust cancer surveillance and monitoring system.

Details and next steps are provided for each strategy in the following section.

The strategies identified in the Plan are long-term in approach and will guide Alberta's actions for years to come. However, initial priorities for action have also been identified throughout the strategies. Implementation of these will begin within the next year.

The Cancer Control Continuum

The cancer control continuum describes the cancer journey. The first phase of the cancer control continuum concerns the health of the population as a whole, and uses evidence-based programs and best practices to improve health outcomes and reduce health disparities across the board. The remaining phases address individuals affected by cancer as they move through diagnosis, treatment and care to survivorship or end of life care. The continuum provides a framework for planning and determining where changes are needed in how cancer programs, services and activities are provided.



Strategies

Strategy One



STRATEGY ONE

Transform Alberta's approach to cancer by creating a comprehensive and coordinated system of prevention, screening, care and research involving stakeholders from across the wellness, health care and research spectrum.

The focal point for this integrated system will be CancerControl Alberta.

CancerControl Alberta, a new operating division within Alberta Health Services (AHS), will bring together AHS cancer facilities and programs under one umbrella and fully engage with key stakeholders involved in cancer prevention, treatment and research. CancerControl Alberta will be the face of Alberta's integrated cancer system and will play an important role in ensuring that Alberta maximizes the return from its investments in cancer and prevention.

Cancer prevention and care involve stakeholders from across the wellness, health care and research spectrum. Education, employment, income, living and working conditions all contribute to prevention. The process of dealing with cancer is a journey that engages patients and families, health care providers and support organizations. Researchers, innovation and health policy organizations, and governments play roles. Alberta needs to better connect everyone involved and create a comprehensive, coordinated and integrated system focused on cancer prevention, care and research if it is to be successful in transforming its approach and ensuring that *Changing Our Future: Alberta's Cancer Plan to 2030* is implemented. A cancer stewardship committee will be created to support action and ensure accountability in implementing *Changing Our Future: Alberta's Cancer Plan to 2030*.

This system will require focused effort and structure. By creating *CancerControl Alberta* as a division of AHS, Alberta will be able to better align and integrate AHS cancer facilities, programs and services. *CancerControl Alberta* will provide a focal point within AHS, as well as a destination for care providers and stakeholders in the broader system on issues around cancer.

CancerControl Alberta will promote the expertise at the Tom Baker Cancer Centre and the Cross Cancer Institute and ensure coordination and integration with all other provincial cancer provision sites. The strength of Alberta's cancer services will be enhanced by increasing coordination and integration of cancer services, under the umbrella of *CancerControl Alberta*.

In its operations, *CancerControl Alberta* should be the embodiment of the comprehensive and coordinated system of prevention, screening, care and research involving stakeholders from across the spectrum that must be engaged in *Changing Our Future: Alberta's Cancer Plan to 2030*. It will emphasize services in the community and expand the number and range of stakeholders involved in cancer prevention and support. Those stakeholders include cancer patients and their families as well as all Albertans.

CancerControl Alberta will support greater efforts at prevention, screening and early detection – as well as more accessible, high quality patient care services throughout AHS. It will promote the use of research on how best to deliver services and integrate prevention, screening and wellness in the continuum of wellness and care.

Provincial centres of expertise will be encouraged in all sectors impacting the health of the population such as social services, education, justice, municipalities and others. Provincial centres of expertise will be distinguished by:

- › a critical mass of expertise that is recognized as such both within the province and by other jurisdictions.
- › a concentration of interdisciplinary academics and specialists with highly-developed skills who are engaged in research and knowledge exchange.
- › a commitment to outward looking, interdisciplinary, future-oriented and innovative population health or patient care.



What Alberta will do:

- 1.1 **Priority Action: Create CancerControl Alberta as a distinct division within AHS, bringing together cancer facilities, programs and supporting services.**
- 1.2 **Priority Action: Bring together key stakeholders in a cancer stewardship committee to coordinate activities to support implementation of *Changing Our Future: Alberta's Cancer Plan to 2030*.** Participating partners will include Alberta Health, Alberta Health Services, *Changing our Future: Alberta's Cancer Plan to 2030* Steering Committee, the Alberta Cancer Foundation, the Provincial Advisory Council on Cancer, Alberta Innovates - Health Solutions, and the Universities of Alberta and Calgary. Key stakeholders involved in wellness and prevention from outside the health field will be included such as Alberta Education and Human Services.
- 1.3 **Priority Action: Maintain and build on the high level of provincial expertise at the Cross Cancer Institute in Edmonton and the Tom Baker Cancer Centre in Calgary and their relationships with the Universities of Alberta and Calgary.** The expertise required to establish Alberta as a leading centre for cancer care and research will be fostered by well resourced, well equipped world class facilities; the Cross Cancer Institute and Tom Baker Cancer Centre will continue to be the provincial leaders in Alberta's cancer care system.
- 1.4 **Support development of centres of expertise in sectors impacting the health of Albertans to:**
 - › provide expert knowledge and support to patients, families and clinicians, including primary health care providers.
 - › provide a strong evidence base for public and population health policy and programming decisions.
 - › plan and evaluate programs, set standards and develop guidelines for use across the system.
 - › support the system through education.
 - › help with problem solving and troubleshooting.
- 1.5 **Build on existing initiatives that are providing leadership for evidence-informed improvement in cancer care, such as the Cancer Strategic Clinical Network.**

STRATEGY TWO

Support, engage and integrate primary health care providers in the delivery of services in the home or the community and to underserved populations.



A distinguishing feature of the new system model will be a greater emphasis on primary health care providers and community services. Family Care Clinics and Primary Care Networks will be supported to deliver and target cancer-related services within communities and to underserved populations. With the additional support, community-based health and social service organizations will be expected to take on expanded roles in prevention, diagnosis, treatment and follow-up care of cancer patients. The support provided will include training, linkages to resources, tools and timely information on prevention and whole-person care.

Service delivery will not be limited to facility-based care and programs. Instead, the model will encompass a wide range of services delivered at home or in the community. It will ensure the use of technology such as Telehealth to support service delivery. Knowledge sharing, mentoring, guiding and troubleshooting will be strengthened throughout the cancer control continuum. Success will be measured by the degree to which integration, coordination and alignment are achieved amongst service providers, community service agencies and centres of expertise.

► What Alberta will do:

- 2.1 Community-based health and social service organizations will have expanded roles regarding prevention, diagnosis, treatment and follow-up care of cancer patients.**
- 2.2 Evidence-informed community interventions that target underserved populations will be created to ensure that goals for screening and modifying risk behaviours are met for all populations.**
- 2.3 Priority Action: Streamline and standardize the referral process to improve access to specialized cancer services.**

- 2.4 The services of community navigators will be utilized to facilitate access to the health care system.
- 2.5 The enrolment of vulnerable, minority and underserved populations in clinical trials will be encouraged to ensure that significant differences in their population groups are identified.
- 2.6 Research investigations and interventions aimed at reducing disparities and improving overall health will be supported.

Strategy **STRATEGY THREE**



Reduce the risk of cancer through coordinated and integrated prevention strategies.

Research into what works with regard to prevention and prevention strategies has shown that the choices people make are influenced by socio-economic conditions and environments. Key factors include education, employment, working conditions, healthy childhood development, and health services. Good health is derived from a variety of factors and influences, 75 per cent of which are not related to the health care delivery system.⁵

The best results in cancer prevention, therefore, are achieved when people, organizations and governments join together to address multiple causes. For example:

- › At a personal level, families and individuals can make healthy decisions related to exercise, diet, tobacco and alcohol use, and protection from UV radiation.
- › At an organizational level, schools and workplaces can establish nutrition policies, provide options for increased physical activity, and establish non-smoking policies.

⁵ Standing Senate Committee on Social Affairs, Science and Technology, Final Report of Senate Subcommittee on Population Health. *A Healthy, Productive Canada: A Determinant of Health Approach* (June 2009), p. 1.

- › At the primary care level, prevention programs can become a regular part of Primary Care Networks and Family Care Clinics, with primary health care providers supported by experts in prevention and behavioural change.
- › At the community level, municipalities and organizations can support quality education and employment, create pathways and bike lanes to encourage walking and cycling, and enlist planners and architects to help develop neighbourhoods that support healthy living.
- › At the public policy level, governments can support legislation, fiscal measures, taxation, incentives and organizational changes that address cancer risk factors.



What Alberta will do:

3.1 Integrate and leverage government programs, policies and partnerships in order to realize better outcomes regarding prevention, increase knowledge transfer, and implement and promote policies that make healthy choices easy choices for Albertans.

- › Assess key government policies and strategies to determine whether they support the Plan's vision of reducing the incidence of cancer (e.g., employing the *Health Impact Assessment for Public Policy Processes and Tools*).
- › Establish knowledge transfer mechanisms to improve the understanding of cancer prevention among key stakeholders in areas such as education, employment, transportation and municipal and community planning.
- › Alberta Health and Alberta Education will work together to continue to implement initiatives and strategies to teach children about healthy behaviours and values.

3.2 Build research components into cancer prevention, knowledge exchange and data/surveillance systems.

- › Support research into strategies to prevent the highest priority risk factors for cancer.
- › Develop mechanisms to access and refresh prevention data from local, provincial, national and international sources.

- › Support national partnerships and initiatives that bring together experts to help the cancer community understand the implications of new studies.
- › Establish targets and measures for prevention and screening, and ensure decision-makers are informed annually of the progress made.

3.3 Develop and implement comprehensive strategies for cancer prevention that encourage healthy lifestyles.

- › *Priority Action:* Focus on healthy eating and active living initiatives.
 - Reduce the risk of diet-related cancers and contribute to healthy weights.
 - Support Albertans to achieve recommended levels of physical activity and to contribute to healthy weights.
- › *Priority Action:* Implement *Creating Tobacco-free Futures: Alberta's Strategy to Prevent and Reduce Tobacco Use* to reduce the burden of tobacco-related cancers in Alberta.
- › Implement the Alberta Alcohol Strategy to reduce alcohol-related harm and increase public awareness of the link between alcohol consumption and cancer risk.
- › Increase school and youth-focused prevention programs, encouraging educational and health institutions and agencies to coordinate efforts to promote health through schools.
- › Implement culturally appropriate strategies to reach vulnerable populations that experience health disparities and limited access to health care. Align these strategies with related strategies and initiatives.
- › Develop and implement social marketing/social media initiatives to increase awareness of actions Albertans can take to lower their risk of getting cancer.
- › Evaluate public awareness on an ongoing basis in order to continually improve initiatives.
- › Align and leverage cancer prevention strategies with prevention strategies for chronic disease management; develop and encourage the use of consistent messages.

3.4 Increase the awareness and adoption of measures to help individuals protect their health.

- › *Priority Action:* Develop a provincial approach to decrease incidence of skin cancers caused by sun exposure and artificial tanning.
- › Continue to support the Alberta HPV Immunization program for girls and extend it to boys in order to address the risk of HPV-related oropharyngeal cancer.
- › Look at best practices in other jurisdictions to prevent HPV, HBV/HCV, and H. pylori infections, and develop Alberta-specific recommendations, particularly for vulnerable populations. Ensure that infrastructure to support these initiatives is present in rural communities.
- › Support research into awareness and effective health protection programs.

3.5 Strengthen the role of primary health care providers in reducing cancer risk.

- › Create a network of public health professionals, allied professionals, and physicians with expertise in preventive medicine to focus on cancer prevention and its integration with other preventable chronic diseases.
- › Incorporate prevention programs and services in Primary Care Networks and Family Care Clinics.
- › Increase the number of specialists with expertise in behaviour change and health promotion to support those providing primary care and other health care services.

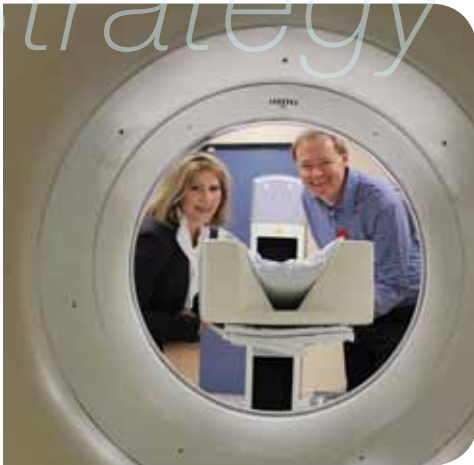
3.6 Strengthen health promotion across the continuum of care.

- › Coordinate projects and initiatives with experts in preventable chronic diseases.
- › Revise existing programs and interventions so that prevention and promotion approaches are linked.
- › Develop and apply key knowledge transfer strategies to ensure primary health care practitioners, schools and communities have the information they need to influence change.
- › Support research to study the factors and influences that support good health, from prevention to palliative care.

3.7 Prevent and control exposure to occupational and other environmental carcinogens.

- › Promote policies that encourage the reduction, substitution, containment or elimination of substances known to cause cancer.
- › Establish a surveillance system to identify occupational cancer cases in Alberta, using the information already available in administrative databases.
- › Support the development and use of the Canadian Workplace Exposure Database.

Strategy Four



STRATEGY FOUR

Find cancer early by using robust data and appropriate screening activities.

Population-based screening can find cancers early, when the chance of a cure is much better.

Alberta has screening programs in place for breast, cervical and colorectal cancer. Some programs use mobile screening units that travel from community to community and others use established facilities.

All of the programs are at different stages of implementation and are reaching between one-third and two-thirds of the target populations.⁶ For these screening programs to be more effective, the participation rates must increase. Effective screening programs are a critical component of a strong cancer care system. More emphasis and attention to screening will ensure early detection and increase survival rates.

In addition, particular focus is needed to reach people who are genetically predisposed to some cancers and those who may not have a family physician, including recent immigrants, ethnic minority groups including First Nations, Métis and Inuit peoples, and people living in poverty with limited access and comfort

⁶ During the two-year period between January 2009 and December 2010, 57 per cent of women aged 50 to 69 years participated in screening programs for breast cancer. Between January 2008 and December 2010, 68 per cent of women between the ages of 21 and 69 received a screening Pap test for cervical cancer. In 2008, 36 per cent of Albertans at risk participated in screening programs for colorectal cancer.

with screening programs. Work is underway to make use of electronic health records to contact Albertans in the target age groups, but this has not yet been implemented for all screening programs.



What Alberta will do:

4.1 *Priority Action: Ensure accessibility, quality and effectiveness of all cancer screening.*

- › Review and consolidate recent research on cancer screening, adapting existing programs based on the best research available.
- › Develop mechanisms to improve access to screening and follow-up for individuals without primary health care providers.
- › Improve access to screening through a consistent population-based screening approach, the adoption of standard criteria and targeted investments.

4.2 *Priority Action: Increase the participation of Aboriginal and ethnocultural communities in cancer screening.*

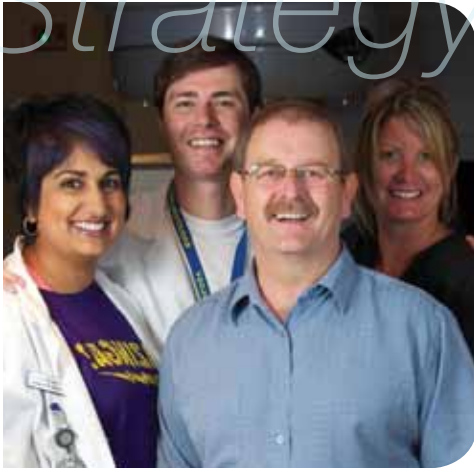
4.3 *Develop new methods to screen and detect major cancers.*

- › Support research into new technology and improved methods for early detection of cancers.
- › Ensure that Albertans have access through a number of sources for appropriate information about early signs of cancer, where to go for diagnosis and the timeframe during which treatment should be sought.
- › Develop a framework for the development of screening programs for cancers proven to benefit from screening, such as the provincial health screening strategy under development, and create an expert panel to provide advice to Alberta Health Services and Alberta Health on screening.
- › Identify groups experiencing increased incidence of cancer, and target initiatives to address health and service gaps.

4.4 *Strengthen the role of primary health care providers in the early detection and diagnosis of cancer.*

- › Develop programs that support primary health care providers to detect cancer and identify unscreened patients.
- › Support and implement education for primary health care providers, their patients and the community on the risks and benefits of cancer screening.

Strategy Five



Better integrate care to deliver cancer diagnosis, treatment and support services to Albertans.

Cancer care is a complex journey with a number of stages, each of which may involve many different procedures. Cancer care is further complicated by the reality that cancer has more than 100 different types and can be extremely challenging to diagnose and treat. Care at every level and stage has to be coordinated and services need to be complementary and collaborative for the process to work.

The diagnostic process begins when a person has symptoms or an abnormality is found that raises suspicion of cancer. Typically further tests are done, including imaging and blood tests and sometimes exploratory surgery. The diagnostic process can involve primary care physicians, radiologists, pathologists, and surgeons or other specialists.

Once diagnosed, three major cancer treatments exist:

- › Surgery to remove cancer from the body. This usually takes place in urban hospitals.
- › Radiation therapy provided by teams of radiation oncologists, radiation therapists, medical physicists, and nurses. This treatment is provided at facilities built for this purpose.
- › Systemic therapy, which is the umbrella term for using drugs to kill cancer cells or halt their growth.

Patients sometimes elect to undergo non-traditional therapies, most of which have not been tested comprehensively to know whether they work against cancer. Complementary or alternative treatments have not been addressed in *Changing Our Future: Alberta's Cancer Plan to 2030*.

Challenges in the system include the following:

- › *Primary health care professionals need support to take on a greater role in caring for cancer patients.*

The primary care physician is usually the first point of contact in the diagnostic process for cancer and directs patients to the tests and specialists they need.

This places a significant and sometimes added responsibility on primary care physicians to be familiar with all types of cancer symptoms, the latest advances in diagnosis, clinical care pathways and the most appropriate specialists for referral. This will become even more important in the future as more cancer services move into the community.

› *Wait times are too long.*

Cancer treatment generally involves a series of steps, with wait intervals between each treatment or event. Although the precise relationship between the time that treatment starts and deterioration in outcome has not been determined, prolonged wait intervals have been linked to decreased survival for some cancers, reinforcing the need for shorter wait times.

› *The cost of drugs is rising.*

Provincial costs for cancer drugs are rising rapidly. New drugs are being introduced to the market and they are increasingly expensive. As well, more patients are required to use drug treatments for a longer period of time.

› *Research is needed into new tools to diagnose and treat cancer.*

To correctly diagnose and stage cancer, accurate pathology testing and diagnostic procedures are critical. Province-wide adoption of validated checklists will help ensure concise, standardized reporting that includes all data needed for accurate staging, treatment, and prognosis of cancer. New and evolving diagnostic and treatment technologies are creating opportunities for quicker, more precise diagnosis and treatment, offering improved outcomes. Supports are required to ensure new knowledge is translated to practice quickly and effectively.

› *Knowledge and expertise needs to be shared.*

As treatment options change and more people are living with cancer, cancer centres need to adopt a more collaborative approach with patients and their families, acute care hospitals and primary health care providers. For example, increased understanding of the needs of cancer survivors has prompted the development of medical and psychological support to help patients manage the short- and longer-term effects of cancer.

› *Personalized medicine is emerging as a new treatment modality.*

Personalized medicine is a targeted approach used for treating cancer based on the genetic and molecular differences among cancers of the same type within different individuals. This approach relies on the use of key biological markers (biomarkers) to predict which individuals will have better outcomes than average or who aren't likely to respond to a treatment. While promising, much more research needs to be done to develop precise treatments.



What Alberta will do:

- 5.1 Utilize the focus provided by having *CancerControl Alberta* as a distinct division for cancer services provided within AHS to better integrate services across the care spectrum.**
- 5.2 Continue the development of integrated care models for all major cancers, ensuring the right information is available for use by oncologists and other health professionals.**
- › *Priority Action:* Implement a provincial Advance Care Planning process to provide patients and families with the opportunity to define goals for their care.
 - › Expand primary health care capacity and expertise to manage cancer by:
 - Strengthening the working relationships among primary health care providers and teams of secondary care and tertiary care providers.
 - Improving the tools and guidelines available to physicians and other professionals responsible for diagnosis, treatment, follow-up, support, survivorship and education.
 - › Continue development of the Cancer Strategic Clinical Network, to provide leadership and evidence-informed improvements across the cancer control continuum.
 - › Develop strong links among screening, diagnostic and treatment services through referral protocols and transition mechanisms.
 - › Develop systems to support fast-track referral and links from primary health care to specialist care if symptoms suggest a recurrence or progression of the disease.
 - › Invest in education and training for additional health care professionals from all relevant health disciplines.
 - › Ensure physicians, other health professionals, and the general public are familiar with the concepts of personalized medicine and understand how personalized medicine can be incorporated into health decisions.
 - › Support the delivery of cancer treatments at home when appropriate.
 - › Work with health innovators to translate research findings into innovative practice.

5.3 Strengthen quality and safety systems supporting evidence-informed cancer care.

- › Develop a provincial quality and safety action framework for cancer care.
- › Continue to develop mechanisms that support information flow across the cancer continuum.
- › Increase awareness among the public and health care providers about standards for effective cancer treatment and quality care. This includes creating networks for various cancers so providers can share knowledge and best practices about patient safety, including medication safety.
- › Implement rigorous pathology standards to ensure appropriate treatments are provided to cancer patients.

5.4 Priority Action: Facilitate molecular testing of cancers linking new, evidence-based diagnostics with targeted treatments for individual patients⁷.

- › Partner with relevant stakeholders such as universities and Genome Alberta to further explore the potential of personalized medicine in cancer care.
- › Identify new genetic and molecular markers with tumour bank specimens linked to patient treatments and outcomes.
- › Introduce high quality molecular testing into cancer pathology services.
- › Increase capacity for timely assessment of new health technologies and integration into the cancer system.

5.5 Monitor and evaluate new, evidence-informed developments in cancer care on an ongoing basis and establish mechanisms for timely integration into the health system.

- › Establish effective mechanisms for acquiring and sharing knowledge about promising innovations in cancer care, and incorporate them into clinical practice standards and guidelines.
- › Create a patient/practitioner communication system that is proactive in updating the patient and assists patients and practitioners in talking about a range of issues.
- › Continually assess current and new technologies, including drugs, to support policy decisions that maximize benefit for and value to Albertans.

⁷ Implementation of these targeted approaches will ensure more accurate diagnosis and avoid ineffective therapies, toxicities and the expense of treatments that do not benefit the individual. This may offset the additional cost of new technologies.

Strategy Six



STRATEGY SIX

Provide cancer patients, survivors, their families and caregivers with the best possible psychosocial, physical and supportive care throughout their cancer journey. Introduce palliative care early in the course of cancer treatment where appropriate.

A diagnosis of cancer often comes with fear, uncertainty, and physical, social and psychological distress. Yet cancer patients should be able to enjoy life to the fullest. This means participating in the experiences that make life meaningful: work, play, relationships and spiritual endeavours. To do so, those affected by cancer may need symptom relief, counselling, education, and other supports.

The Cross Cancer Institute and the Tom Baker Cancer Centre have specialized staff available to provide follow-up care, including psychosocial oncology and spiritual support to inpatients and outpatients. Other provincial cancer centres (Grande Prairie, Red Deer, Medicine Hat and Lethbridge) each have a psychosocial professional who can offer support. However, many rural and remote areas do not have ready access to these professionals.

In certain cases, the provincial cancer centres assess the patient upon discharge to anticipate the support needed and convey this information to the patient and primary care physician. If the patient is discharged to palliative care, the cancer centre typically facilitates contact with community palliative care services. Often, however, arrangements for follow-up care are made by the patient and informal caregivers.

Particular attention must be paid to mental distress. About 35 to 45 per cent of all patients experience distress during their cancer journey, but not all patients are screened for distress. While Alberta Health Services is a leader in this regard with the program *Screening for Distress, the 6th Vital Sign*, many primary health care professionals are not sufficiently trained to deal with mental distress. They often need to consult with experts on cancer-related medical issues, including cancer-specific follow-up guidelines and patient-specific plans.

As the numbers of survivors increase, patients must not feel that they have been abandoned. Oncologists must adequately communicate patient needs for supportive care, primary health care professionals must provide consistent follow-up care, and patients themselves must communicate any changes in their health after discharge from the centre. Patient caregivers also need support, although it is worth noting that an increasing number of cancer patients do not have informal caregivers.

There are resources to assist patients post-discharge. Community cancer support networks link the provincial centres of expertise with community-based services. They provide support in the areas of psychosocial care, palliative care, nutrition and rehabilitation. Additional programs funded and operated by non-profit cancer organizations, such as the Alberta Cancer Foundation and the Canadian Cancer Society, also help improve the quality of life for people living with cancer and their families. Additional community resources that could play a larger role in supporting cancer patients and their families include:

- › Community and volunteer organizations
- › Transportation and accommodation services
- › Medical supply and equipment providers
- › Specialized palliative and end-of-life consultants
- › Bereavement services
- › Pharmacy crisis intervention services
- › Religious and spiritual organizations

PALLIATIVE CARE

Palliative care can make the end of the cancer journey as respectful and supportive as possible. Optimal palliative care requires comprehensive and standardized symptom assessment wherever palliative patients reside, whether at home, in long-term care, supportive living, acute care, or cancer care settings. While some rural or remote areas are equipped to provide palliative care, they often have limited access to oncology expertise. Therefore, building capacity through the use of various technologies to support community practitioners is an important priority.

Palliative care that is integrated into treatment of cancer can improve quality of life and even increase survival if initiated early in the course of the disease. It can:

- › Relieve symptoms that may delay treatment or lead to premature termination of treatment;

- › Relieve treatment-related symptoms that often complicate post treatment rehabilitation; and
- › Prepare patients and families to deal with unexpected challenges.

Palliative care relies on an interdisciplinary approach to care that addresses psychosocial issues, advance care planning and symptom management. Palliative care services would also benefit from the use of evidence-informed tools for optimum communication of patient needs, and from better communication among necessary disciplines for planning timely and responsive care.

Improved communication and coordination of care between health care facilities and the community would ease the transition of care for patients who are no longer able to benefit from cancer treatment. As well, patients, families and community health care providers would be able to better navigate the system if they were more aware of programs, services and community-based options for care.

What Alberta will do:

6.1 Augment capacity for psychosocial oncology and support services for patients and their families.

- › *Priority Action:* Implement a tool to screen for distress in cancer patients on a systematic, province-wide basis.
- › Increase the ability of the workforce to provide psychosocial support, making special efforts to recruit and train individuals from different ethnic and cultural minority groups.
- › Provide patients, caregivers and families with resources on healthy coping skills and mechanisms.
- › Monitor and manage all distressing symptoms before, during and after treatment in an integrated fashion.
- › Develop ways for cancer survivors and their families to routinely rate their satisfaction with cancer services.
- › Increase professional awareness of issues relating to cancer survivorship.
- › Ensure optimal independence and function for cancer survivors through interdisciplinary teams to assess and address social- and job-related needs.
- › Support research on survivorship issues and the translation of research findings into clinical practice.

6.2 Engage cultural and community organizations as partners in developing culturally appropriate support services. Continue to improve access to quality palliative care that provides symptom control and relief, and emotional, spiritual, cultural and social support for patients with cancer and their families.

- › Develop and implement a provincial framework for palliative care services to ensure integrated and comprehensive services are provided when needed.
- › Develop systems to allow all cancer patients to receive palliative care services at home or as close to home as possible.
- › Support research into palliative care for cancer patients.
- › Develop and implement public awareness initiatives to build understanding and acceptance of care at the end of life.
- › Develop programs and support existing programs that support the health and well-being of caregivers.

6.3 Implement an integrated care model of palliative care to adequately control symptoms and to reduce suffering.

- › Monitor and manage symptom burden (from the disease and treatment combined) as an alternative method to assessing symptoms through patient-reported outcomes.
- › Identify best practice models, such as those for the Canadian Hospice Palliative Care Associations or the International Association for Hospice and Palliative Care, as a guide for providing quality palliative care in all relevant settings.
- › Encourage partnerships among cancer centres, hospitals, hospices, long-term care, primary care, health teams, cultural and community organizations, and other providers to share innovative ideas and best practices (e.g., train the trainer model).
- › Include evidence-informed, effective palliative and end-of-life curricula in the faculties of medicine, nursing and other health professions using Canadian and international guidelines for hospice palliative care.
- › Equip oncology teams to provide patients with information about where to access quality palliative care in their communities.
- › Train primary care physicians to deal with complex cancer survivorship issues.

6.4 Organizations that provide cancer services should establish partnerships with the voluntary sector to ensure their services are complementary.

- › Ensure that partnerships are built between the voluntary sector and rural and remote as well as urban communities to provide knowledge and expertise in palliative care.
- › Build partnerships between cancer care services and cultural and community organizations that can assist in meeting the needs of cancer patients and survivors.



STRATEGY SEVEN

Focus Alberta's research efforts to better support breakthroughs in cancer prevention, cancer care and policy and attract and retain world class researchers and funding.

Cancer research includes basic research (on the biological mechanisms underlying cancer), epidemiological research (identifying the factors that increase or decrease the risk of developing cancer) and research related to clinical and health services, and population health. It looks at the entire cancer continuum, helping us to better answer questions such as how cancer starts and progresses, the causes of different types of cancer, and the best strategies for prevention, early detection, treatment and palliative care.

Ultimately, research alone will not cure cancer, but research can ensure decision-makers, health professionals, and patients have timely access to evidence-informed information that is easily understood and ready to incorporate into practice and policy. Therefore, research will play an essential role in reducing the incidence and impact of cancer in Alberta.

The effectiveness of Alberta's cancer research programs depends on:

- › Engaging more people in cancer research.
- › Better coordinating and integrating research into health promotion, disease prevention and disease treatment in order to achieve the most effective and efficient cancer care system possible.

- › Coordinating and consolidating data repositories and biobanks to eliminate duplication and let researchers devote their time to research rather than building and maintaining research infrastructure.
- › Increased collaboration and coordination of cancer research funders. Currently, the Alberta Cancer Prevention Legacy Fund, the Alberta Cancer Foundation and other provincial agencies and foundations fund research. More partnerships and better coordination would improve cancer research in Alberta and better support provincial researchers.

High-quality, internationally recognized quality biomedical cancer research is already conducted in Alberta; however, there is a need for more social, behavioural, environmental, and psychological research. By expanding Alberta's research capacity, the province's ability to determine and evaluate methods of preventing cancer, improve access and reduce wait times for screening, diagnosis, treatment and palliative care services, and rehabilitation and support activities will be strengthened.

Furthermore, if we are to deliver more cancer programs, services and activities in the community, we will need additional research to inform actions in this area. Most people receive information about healthy living and disease prevention in their communities. They are also screened and diagnosed for cancer in their communities, often in the office of their local doctor. However, treatment for cancer is often not community-based. To help bring treatment closer to patients, more research is needed on how to best integrate cancer treatment and care into the community.

Research must also be better integrated into practice. Many cancers could be controlled if we applied what is already known, not only in the areas of prevention and screening, but also in the areas of diagnosis, treatment, and supportive and palliative care. New knowledge is emerging at a rapid rate in areas like genomics, although there continue to be substantial delays between discovery and application. Mechanisms need to be in place throughout the cancer continuum to ensure that new knowledge is quickly implemented in areas where the evidence indicates it can have the best effect.

Finally, more support is needed for clinical trials. Alberta has a track record of success in clinical trials. In general, Alberta patients enrol in clinical trials at rates that significantly exceed the national average. Alberta clinicians are leading several national and international studies. However, clinical trials in Alberta are facing challenges similar to those faced across Canada, including falling participation rates, financial shortfalls, increasing complexity and an onerous regulatory environment.⁸

⁸ Canadian Cancer Research Alliance, *Report on the State of Cancer Clinical Trials in Canada* (Toronto, 2011), pp. 14-23.

Cancer Research

In recent decades there have been many discoveries about cancer, and each discovery has provided a better understanding of how normal cells become tumours and how tumours grow, invade, and metastasize. Yet, each new discovery has also led to additional questions. While increased knowledge of risk factors means some cancers can be avoided, the causes of many cancers remain largely unknown. Cancer is complex and Alberta's research community includes many scientific and clinical disciplines looking at the challenges it presents, including natural sciences, medical sciences, social sciences and clinical and population health disciplines.



What Alberta will do:

- 7.1 Priority Action: Coordinate cancer research in Alberta through development of a provincial cancer research plan that is strategic and long-term.** Alberta Health, Alberta Enterprise and Advanced Education, Alberta Innovates – Health Solutions, Alberta Health Services, *CancerControl Alberta* and the Alberta Cancer Foundation will be involved in its development.
- › Ensure the provincial cancer research plan considers the research-related work of key organizations involved in cancer research.
 - › Coordinate with government and philanthropic cancer research funders to align activities with priorities identified in the provincial cancer research plan.
- 7.2 Recognize and support the important role in research played by the Cross Cancer Institute and Tom Baker Cancer Centre and the Universities of Alberta and Calgary, including the benefits of having cancer care professionals within the province who provide both clinical and academic roles.**
- 7.3 Develop a comprehensive research workforce strategy.**
- › Attract and develop the best and brightest cancer researchers.
 - › Attract researchers in a range of domains to cancer research.
 - › Increase capacity for all researchers to be part of knowledge transfer initiatives.
 - › Establish strong links with universities and other partner organizations, nationally and internationally.

7.4 Improve research infrastructure.

- › Define the core health research facilities needed in Alberta for cancer research.
- › Develop a provincial strategy that coordinates core cancer research facilities, including biobanks and databases, and decreases duplication.
- › Support the Alberta cohort of the Canadian Partnership for the Tomorrow Project, a national longitudinal cancer research study.

7.5 Support and integrate knowledge exchange opportunities across the cancer continuum.

- › Develop clear mechanisms to foster a culture of evidence-informed practice among clinicians and all health practitioners. This includes networks that will engage the public and increase the flow of knowledge.

7.6 Enhance the availability of leading and innovative treatments through research.

- › *Priority Action:* Restructure clinical trials research units in Calgary and Edmonton to improve sustainability and increase patient participation.
- › Support ongoing development of an efficient provincial clinical trial system that will provide the evidence needed to improve practice.
- › Develop ways to increase patient participation and enrolment in clinical trials, including educating the public about the importance of clinical trials and their role in the discovery of potential new cancer treatments.
- › Develop partnerships to prepare for new treatments and therapies in areas such as diagnostic pathology, molecular genetics and imaging biomarkers.
- › Enhance capacity for assessment of new health technology and supports to enable timely integration into the cancer system.

Strategy Eight



STRATEGY EIGHT

Develop a strong cancer workforce to meet the needs of cancer patients and their families.

Alberta is already experiencing shortages in the cancer workforce and needs oncologists, medical physicists, radiation therapists, oncology pharmacists and others, including oncology nurses, pathologists, oncology social workers and cancer epidemiologists.⁹ Good candidates can be difficult to recruit and the training needed for these positions can take many years.

As well, the field of oncology in medicine is highly specialized and very complex. Its practitioners are attracted to and most effective within world class facilities, heading up teams of other highly specialized professionals. This is a two-way proposition: high quality care and reputation of the Cross Cancer Institute and Tom Baker Cancer Centre is tied to being able to attract and retain the elite in the field.

The increased complexity of cancer treatments is also fuelling demand for a cancer workforce with specialized skills. In addition to the prevention and detection of new or recurrent cancers, cancer survivors may require treatment for secondary health problems and side effects like chronic pain, infertility and depression, and the late effects of cancer treatment, some of which may not appear until many years after treatment.

Vacancies tend to mean longer hours for remaining staff, increasing the potential for errors and lower quality of care. The struggle for resources creates tensions between cancer professionals and their colleagues in other areas of the health system (e.g., surgeons, emergency physicians and primary health care providers). Workforce shortages make it more difficult to plan and implement improvements, collect and report data, conduct research, and put new knowledge into practice. All of these factors have an impact on patient outcomes and emphasize the importance of a strong cancer workforce.

⁹ Canadian Partnership Against Cancer, *The Cancer Workforce Scoping Study: A Report from the Front Lines of Canada's Cancer Control Workforce* (Toronto, 2010), p. 4.

Better use needs to be made of health care professionals, as in some situations, specialists provide care that could be provided by primary care practitioners, advanced practice nurses, or pharmacists. More research is needed to understand the contributions of allied health disciplines such as physiotherapy, pharmacy, psychology, social work, dietetics, occupational therapy, radiation therapy, audiology, and speech pathology to patient outcomes and improved quality of life.

Professional education and training programs also need to be better aligned with demand for health professionals across the cancer continuum and new models of care, including the provision of services in the community and continuing education for professionals taking on new roles. Some populations, such as First Nations, Métis and Inuit peoples, and recent immigrants, are experiencing rising cancer rates and/or disparities in terms of treatment, support and outcomes. Recruitment strategies should be designed to increase representation of these groups in the cancer workforce. The workforce needs across the cancer continuum must also include consideration of volunteers and community organizations that provide much needed comfort and support to patients and their families.



What Alberta will do:

8.1 Address future workforce needs.

- › Examine existing databases and identify gaps in data and information related to determining workforce needs.
- › Define the roles and skills needed to provide cancer care and treatment across a variety of sites and settings.
- › Develop workforce models to understand how to make the best use of the current cancer workforce and plan for the future.
- › Conduct research on issues of compensation, benefits, work-life satisfaction and career development for cancer professionals to enhance recruitment and retention of staff.

8.2 Implement initiatives to optimize use of health professionals across the province.

- › *Priority Action:* Further implement 'LEAN' processes to better utilize current staff and facility resources.
- › Build primary health care capacity in the community to enable delivery of less complex cancer services closer to home.

- › Support staff to understand changing treatments and developments and how they impact cancer service delivery.
- › Develop leaders at all levels through training and succession planning.
- › Develop a strategy to recruit candidates from at-risk populations into nursing and other health programs and help graduates establish practices in urban and rural at-risk communities.
- › Encourage and use advanced practice providers in cancer care.

8.3 Provide cancer-focused education and training, based on the concept of integrated care.

- › Develop interdisciplinary education models, and consider incentives for professionals to pursue post-graduate education in areas where there is a shortage of expertise.
 - Work with universities to understand the needs of primary care physicians in managing cancer.
- › Liaise with provincial and national licensing bodies on credentialing and scope of practice.
 - Expand the scope of primary health care providers to include greater shared responsibility with specialists for patients with cancer.
- › Recruit well-trained professionals to meet cancer workforce needs.
- › Offer distance learning and web-based education to members of the cancer workforce.
- › Introduce a provincial curriculum on cancer orientation for volunteers.
- › Highlight cancer-related careers in high school and post-secondary institutions.
- › Work with post-secondary institutions (faculty and curriculum development) to incorporate oncology knowledge into undergraduate curriculum and to provide post-graduate oncology certificate programs.
- › Implement a provincial approach to establish and monitor health professional training quotas and specialist training positions.

STRATEGY NINE

Manage health system infrastructure, including information, equipment, knowledge and technology to effectively support the delivery of best practices in cancer care and prevention to Albertans.



Cancer infrastructure plans need to align with other health infrastructure plans. Cancer infrastructure also needs to consider technology infrastructure in communities and planning that encourages healthier lifestyles and avoidance of risk factors such as UV exposure in playgrounds.

Current cancer care facilities are overcrowded and renovations have been made and are planned to respond to immediate service demands, but the tendency to focus on immediate service demands has made it difficult to achieve optimal functionality. Infrastructure planning for cancer needs to be integrated with planning in the larger health system and consider information on service delivery, patient volumes and clinical advancements. This information has not always been available when cancer infrastructure and resource plans were developed.

At the same time, planning for virtual infrastructure (information technology) must be considered hand-in-hand with that for capital infrastructure. Technologies to support treatment in the home and community are possible now, but they depend on virtual infrastructure and network-related hardware that are not available in all parts of the province. For more cancer services to move into homes and the community, technology must be available to both patients and their care providers, including the integration of information systems for cancer into the provincial health information system to ensure that the right information moves with patients as they progress along the cancer continuum.

Reducing the demand for cancer services begins with health promotion and prevention, which have not traditionally been considered in health or other infrastructure planning. Infrastructure planning must address prevention from a number of different angles – for example, constructing playgrounds to reduce exposure to harmful UV rays, building communities and transportation systems that encourage active lifestyles, and reducing environmental and equipment hazards for workers.



What Alberta will do:

9.1 Ensure the right infrastructure is in place to provide safe, quality cancer care.

- › *Priority Action:* Construct a new ambulatory cancer building at the Tom Baker Cancer Centre to address the need for services.
- › *Priority Action:* Proceed with expanding radiation therapy and chemotherapy services at the Cross Cancer Institute.
- › *Priority Action:* Two new cancer facilities are underway. In Red Deer, the facility is under construction. In Grande Prairie, the cancer centre is in the design phase.
- › Continue to invest in strategies to capture quality data to support infrastructure planning and service delivery.
- › Conduct an infrastructure review to determine the current capacity, inventory and condition of dedicated and shared cancer facilities.
- › Develop an updated cancer infrastructure plan that dovetails with a province-wide master infrastructure/workforce plan and considers opportunities for integration and for mapping of cancer services to geographic integration plans.
- › Develop comprehensive, integrated IM/IT plans that support cancer care and consider building other plant-related equipment, networks, hardware and software, information control centres and cancer-specific operating equipment.
- › Develop and implement a comprehensive plan for retirement and replacement of critical treatment equipment such as linear accelerators.
- › Establish space standards and best practices to ensure consistency of services for all cancer facilities, including community cancer clinics.
- › Explore opportunities to provide comprehensive community services in one location.
- › Review population growth and the need for additional community cancer centres in the province on an ongoing basis.
- › Support the development of data and information technology systems, such as electronic health records, and the linkage of the many current and future different databases to manage the vast amounts of information required for personalized medicine. Ensure all personal data, including genetic information, is secure.
- › Expand Telehealth and virtual monitoring capabilities into community clinics and homes, so community care providers and patients can access information to make informed decisions and assist in self-managed care.

9.2 Make appropriate use of technological advances to enable connectivity, share useful information, provide access to accurate, timely and reliable information, and enable access to appropriate services.

- › Create analytical and planning tools (such as dashboards) that use real-time data about service availability and demand to create a flexible and responsive system that makes best use of available resources.
- › Implement integrated, province-wide information solutions to support timely and appropriate cancer care decisions and treatment, capacity management and monitoring requirements for all integrated cancer care pathways. These should align with the Health System Information Technology Five Year Plan (2011-2016) and the joint Alberta Health/Alberta Health Services Plan to Improve Access.
- › Develop “technology/patient care maps” linked to standard care pathways that will facilitate the use of new technologies to diagnose and treat cancer.
- › Integrate cancer information systems into the overall health information system to enable management of patients with co-morbidities in primary, community and acute care facilities.

STRATEGY TEN

Develop a robust cancer surveillance and monitoring system.

Cancer surveillance refers to the monitoring of cancer trends over time at the population level. It considers health determinants such as where people live, where they work, and lifestyle choices. Trends may include information on incidence, mortality, prevalence and survival of all forms of cancer. For example, cancer surveillance may provide answers to questions on what parts of Alberta have the highest rates of lung cancer. Cancer surveillance also considers the impact trends can have on the health care system and helps evaluate whether cancer programs are having the desired effect.



Surveillance helps increase people's knowledge about cancer and helps researchers, clinicians and policymakers understand the ways in which cancer can be controlled in both clinical and public health settings.

Alberta has strong methods of collecting population demographics and cancer registry statistics, and this data helps inform decisions across the province. However, there are few established processes for collection of data related to patients who may be at a high risk of developing cancer or having a recurrence of cancer. Similarly, Alberta does not have a way to assess whether there is an increased risk associated with certain chemical exposures, occupations or industries. Improvement of Alberta's cancer system depends on better processes for the interpretation and dissemination of relevant surveillance, monitoring and outcomes information to the appropriate stakeholders.

What Alberta will do:

10.1 *Priority Action:* Introduce a comprehensive approach for public health surveillance.

10.2 Make Alberta cancer surveillance data available, accessible, and useful.

- › Strengthen the cancer surveillance and monitoring system to provide data needed for cancer prevention programs.
- › Integrate the cancer surveillance system with other chronic diseases systems.
- › Develop a provincial occupational disease surveillance system which includes cancer and focuses on priority issues as they emerge.
- › Establish mechanisms to identify populations with health disparities so that these disparities can be addressed.

10.3 Monitor trends over geographies and time.

- › Monitor trends in risk behaviours and other risk factors to evaluate and improve cancer prevention programs.
- › Monitor trends in cancer screening to identify communities where screening rates are low.
- › Monitor trends in cancer incidence, mortality, survival, stage distribution and other indicators to support all aspects of the cancer control continuum, and identify inequities in the system. Disseminate this information to relevant stakeholders for action.

10.4 Share surveillance information with stakeholders

- › Integrate cancer surveillance information into other population health information to increase understanding of the total health of the population and its variation over geography and time.
- › Investigate potential clusters of cancer cases using the Alberta Health/Alberta Health Services guidelines, and disseminate results to stakeholders for appropriate action.
- › Improve collaboration with other portfolios in Alberta Health Services, ministries, universities, and provincial, national and international cancer agencies to support and advance cancer surveillance activities and research.
- › Develop knowledge exchange mechanisms for effective uptake and use of surveillance information.

10.5 Improve patient surveillance

- › Develop and implement a system to monitor adherence to and effectiveness of care pathways.

Performance Measures

Changing our Future: Alberta's Cancer Plan to 2030 seeks to prevent most cancers, cure more people, and reduce the suffering of those affected by cancer. As actions are implemented to achieve these outcomes, the province will drive quality and accountability through a set of cancer performance measures specific to Alberta's cancer field and according to international approaches and available evidence.

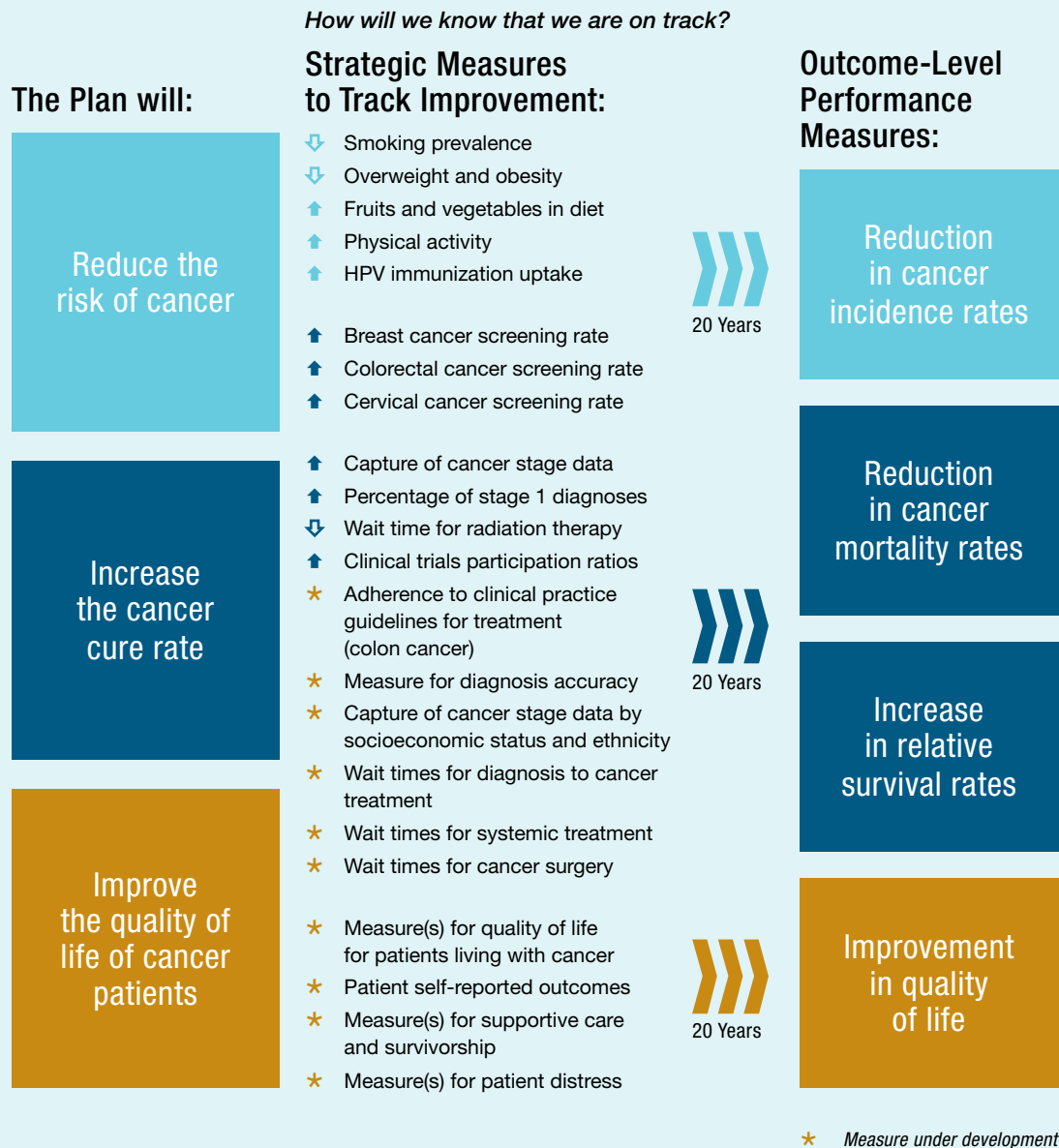
The set of measures selected covers the major areas of the cancer control continuum, rather than matching specific actions in this Plan. They are strategic, long-term, knowledge-based, comparable, and meaningful in the provincial context. Many are comparable inter-provincially and internationally. Finally, they are feasible to evaluate and report.

Work of the Canadian Partnership Against Cancer (CPAC) System Performance Initiative contributed to the development of *Changing our Future: Alberta's Cancer Plan to 2030's* performance measures. CPAC is an independent organization funded by Health Canada to accelerate action on cancer control for all Canadians. It works with national and provincial partners to identify performance indicators, collect and analyze data, and produce results and interpretations on key performance domains.

Some measures, such as the cancer surveillance statistics for incidence, mortality and survival, are long-term measures of performance. They convey how well Alberta's health system is doing to reduce cancer, increase the cure rate, and improve the quality of life for people living with cancer. These measures can be compared to those of other provinces and countries. Other performance measures, such as cancer screening rates, are shorter-term strategic measures to track the effectiveness of activities over time. They help determine whether there is a need for change in cancer control policies.

The following figure illustrates the connection between the Plan's outcomes, strategic measures and outcome-level performance measures.

Outcomes, strategic measures and outcome-level performance measures for Changing our Future: Alberta's Cancer Plan to 2030.



Conclusion and Next Steps

Changing Our Future: Alberta's Cancer Plan to 2030 sets out an ambitious agenda for progress. It builds on existing strengths and partnerships and draws on resources within and beyond the health sector to reduce the incidence and mortality of cancer in Alberta, and improve the survival and quality of life of Albertans affected by cancer.

The Plan identifies the transformative shifts required to ensure a greater role for prevention and screening. It acknowledges that people's exposure to risk factors is generally the result of an array of behavioural, social, economic, environmental and cultural factors that are not easily changed. That is why the Plan proposes a comprehensive approach to prevention, one that supports Albertans in making healthy choices.

The Plan also supports the need for evidence-informed decision-making at every stage of the cancer continuum. For that reason, Alberta will develop a provincial cancer research plan that is strategic and long-term.

CancerControl Alberta will provide a focal point for cancer services in the province. The strategies in the Plan also outline a greater role for primary health care in the delivery of cancer services, which will require more involvement from community-based physicians, nurses, and other health care providers in every stage of cancer service delivery. In their enhanced roles, primary health care providers will have the support of local organizations and both direction and support from oncology experts. As a result, cancer patients will be able to receive high quality care as close to home as possible.

Implementation of *Changing our Future: Alberta's Cancer Plan to 2030* will be the responsibility of all partners – government, health care institutions and providers, community-based organizations, schools, universities, businesses and others. Together we will address the gaps in the system. Together we will ensure evidence drives our decisions. Coordinated action at every level – individually, organizationally, clinically, and within the community and government – will ensure we turn the tide against cancer.

Changing our Future: Alberta's Cancer Plan to 2030 will create a new future:

For Albertans:

- › Patients and families will come first, moving to a system where patients are increasingly active partners in their own care and can access many services closer to home.

- › There will be a greater role for health promotion and prevention as emphasis is rebalanced from a focus on cancer care to prevention, screening, treatment and research.
- › Stakeholders outside the health system will be engaged in the battle against cancer.

For cancer care providers and other stakeholders in wellness:

- › In addition to cancer centres of expertise and cancer community clinics in place today, the cancer system will extend into primary health care.
- › Primary health care practitioners will have an expanded role in providing care, and targeted training and supports will be in place for interdisciplinary teams, primary health care practitioners, and other staff in the health system.
- › There will be strong connections between cancer centres of expertise and enhanced knowledge and expertise in other sectors, such as within the education system to support the teaching of healthy living in schools.

For organizational roles and service provision:

- › Rather than various approaches across the province, there will be a coordinated provincial approach to diagnoses and treatment of common cancers.
- › Infrastructure planning for cancer will be aligned with that for the overall health system.
- › The findings from cancer research will move quickly and effectively into practice. For example, research will enable a personalized medicine approach to help ensure that care is tailored to an individual's genetic profile and is as effective as possible.

Implementation of initial priority action items identified in the Plan will begin immediately and it is expected that all initial priorities will be implemented within two years. The creation of *CancerControl Alberta* to bring together facilities and services and the establishment of a cancer stewardship committee for key stakeholders to support the Plan will ensure accountabilities for the longer term actions and priorities are assigned and understood. Further details on actions taken and future directions linked to the Plan will be made publicly available through the development of targeted action plans.

Select Resources

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