ENVIRONMENTAL SCAN:
Ontario Cancer Plan IV Review
June 2014

Report prepared by the Cancer Quality Council of Ontario (CQCO) as a backgrounder to jurisdictional and best practice trends in cancer plans, and to inform the joint CQCO-Cancer Care Ontario (CCO) review of the Ontario Cancer Plan IV.

Acknowledgements: Alexandra Piatkowski, Research Assistant, Farzana Haji, Policy Research Analyst, Jennifer Stiff, Manager, Nicoda Foster, Senior Policy Advisor, and Rebecca Comrie, Interim Director, Cancer Quality Council of Ontario Secretariat with guidance from the CQCO 2014 Programmatic Review Steering Committee and Working Group
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EXECUTIVE SUMMARY

The Cancer Quality Council of Ontario (CQCO) is an arm’s length advisory group that was established in 2002 to guide Cancer Care Ontario (CCO) and the Ministry of Health and Long-Term Care in their efforts to improve the quality of cancer care in Ontario. The CQCO’s mandate is to monitor and publicly report on the quality of cancer services in Ontario and to improve cancer system quality by identifying quality gaps in the system.

The Programmatic Review brings CQCO members, CCO’s Executive Team and senior staff, leading experts, patients, family members, and caregivers within the province together with international experts to review an existing or emerging cancer system program, analyze its effectiveness and make recommendations to CCO regarding future directions and improvements to the program. The topic of this year’s review is the Ontario Cancer Plan IV (OCP IV), with the objectives to review and validate the strategic objectives of the draft OCP IV and to provide recommendations on initiatives and considerations for implementation to CCO as they finalize the OCP IV. The output of the review will be a set of recommendations for the OCP IV that is presented to the CCO Executive and the CCO Board of Directors.

The purpose of this environmental scan is to highlight notable trends in cancer plans, to summarize best practice systems and strategies around the world, and to identify key success factors in building effective cancer systems. In this scan we review key components of cancer plans, including their structures, guiding principles and values, priorities, initiatives, and implementation, monitoring, and reporting strategies.

While some cancer plans are structured by levels of care, by strategy or policy, by guiding principles and values, or by type of cancer, the majority of cancer plans are structured by stage of the cancer journey. There are many important guiding principles and values present in cancer plans, including accountability, efficiency, equity, and transparency. Six themes have been identified for the OCP IV: quality of life and patient experience, sustainability, effectiveness, safety, transitions of care, and equity. The scan reviews the key strategic priorities and initiatives for each of these themes, based on jurisdictional cancer plans from around the world and evidence-based initiatives from the academic literature. The final section describes implementation, monitoring and reporting, and accountability strategies found within cancer plans, which demonstrate how these plans can be transformed into action.
1.0 BACKGROUND

1.1 CANCER QUALITY COUNCIL OF ONTARIO

The Cancer Quality Council of Ontario (CQCO) is an advisory group that was established in 2002 by the Ministry of Health and Long-Term Care (MOHLTC) and is quasi-independent to Cancer Care Ontario (CCO). It is set up to provide advice to CCO and the MOHLTC in their efforts to improve the quality of cancer care in the province. The CQCO is supported by a Secretariat housed within CCO.

The CQCO is a multidisciplinary group of healthcare providers, cancer survivors, family members and experts in the areas of oncology, health system policy, performance measurement, health services research and health care governance.

The CQCO has a mandate to monitor and report publicly on the performance of the Ontario cancer system and to motivate improvement by bringing national and international expertise to bear on quality improvement initiatives in Ontario. The CQCO works with CCO’s Board of Directors to assess cancer system performance and quality, identifying areas for improvement and advising on planning and strategic priorities. In 2010, the CQCO expanded its mandate to include international benchmarking of cancer system performance. More information can be found at www.cqco.ca.

The CQCO Programmatic Review is one of four key tools to achieve our mandate. The Programmatic Review brings CQCO members, CCO’s Executive Team, senior staff, Ontario clinical leads, patients, family members, and caregivers together with international and local experts to review an existing or emerging cancer system program, analyze its effectiveness and make recommendations to CCO regarding strategic directions and improvements.

Figure 1: CQCO Mission, Tools and Outcomes
The other three tools used by the CQCO are:

- The annual Cancer System Quality Index (CSQI), an interactive web-based reporting tool that tracks Ontario’s progress towards better outcomes in cancer care and highlights where cancer service providers can advance the quality and performance of care. A North American first, the CSQI was launched in 2005 and now in its tenth year, the CSQI presents overall Ontario context information including mortality and survival as well as a rolling snapshot of activity across 33 key indicators. The CSQI serves as a valuable system-wide monitor that allows us to track the quality and consistency of all key cancer services delivered across the spectrum of Ontario’s cancer system, from prevention through to survivorship and end-of-life care. More details can be found at: [www.csqi.on.ca](http://www.csqi.on.ca)

- An annual Signature Event that brings practice leaders, policy makers, providers, patient and family representatives together with international and national experts to provide practical solutions to address a quality gap and identify areas of opportunity to improve the quality of health services delivery within the Ontario context. More details can be found at: [www.cqco.ca/events](http://www.cqco.ca/events)

- The Quality and Innovation Awards, sponsored by the Quality Council, CCO, and the Canadian Cancer Society, recognize significant contributions to quality and innovation in the delivery of cancer care across the province of Ontario. More details can be found at: [www.cqco.ca/awards](http://www.cqco.ca/awards)

This year’s topic is unique because the focus is not one program, but the Ontario Cancer Plan IV (OCP IV), which guides the priorities and initiatives across CCO, advancing quality in the cancer system. The objectives of the OCP IV Review are to:

- Review and validate the strategic priorities of the draft OCP IV based on international, local, and internal expertise; and
- Provide recommendations to the OCP IV on initiatives and considerations for implementation to ensure the Plan encompasses leading practices and addresses CQCO’s quality dimensions.

The previous Ontario Cancer Plan III had a timeline of 2011-2015, meaning that CCO is currently in the process of developing a new cancer plan for 2015-2019. Given the CQCO’s mandate, the Programmatic Review will bring international expertise and a quality lens to provide advice to CCO to finalize the OCP IV. The review will culminate in the OCP IV Review event, on June 23, 2014.

“Cancer control aims to reduce the incidence, morbidity and mortality of cancer and to improve the quality of life of cancer patients in a defined population, through the systematic implementation of evidence-based interventions for prevention, early detection, diagnosis, treatment, and palliative care. Comprehensive cancer control addresses the whole population, while seeking to respond to the needs of the different subgroups at risk.” Cancer plans may be implemented on a national, provincial/state, or regional level. This environmental scan will focus on plans implemented at a system level, so as to make the findings as relevant as possible to the OCP IV.
1.2 CQCO 2014 PROGRAMMATIC REVIEW: COMPONENTS
The CQCO 2014 Programmatic Review process has four main components:

- **Environmental scan** – literature/best practice search to identify key themes and topics. Sets the foundation and backdrop for the other inputs. *Answers: How have jurisdictions/systems structured their plans/strategies? What are the key and emerging priorities and initiatives for cancer plans? What are the key implementation strategies, levers, and tools for monitoring success of cancer plans?*

- **Current statement assessment** – *Answers: What is the current state of the cancer system? What has CCO accomplished from the current Ontario Cancer Plan III?*

- **Critical (self) Appraisal** – via key informant interviews and SWOT analysis. *Answers: How have we done so far in Ontario? What needs to change or be developed? Where are some opportunities for improvement?*

- **International Input** – experts to participate in the discussion and advise CCO on future recommendations. *Answers: What are the leading practices and innovations for the identified themes? What are considerations for implementing and monitoring the success of their themes?*

The output of the review will be a set of Recommendations for the OCP IV that is presented to CCO Executive and the CCO Board of Directors.

1.3 SCOPE OF ENVIRONMENTAL SCAN
The scope of the environmental scan included the following questions:

1. How have jurisdictions/institutions structured their cancer plans/health strategies?
   a. Are there common guiding principles and/or values that have been identified in plans/health strategies?

2. What are the key and emerging themes for cancer plans?
   a. What are the key priorities and initiatives to address the themes?

3. What are the key implementation strategies and levers and tools for monitoring success of cancer plans?
   a. How do system level organizations identify accountabilities/responsibilities for the priorities and overall plan?

1.4 METHODOLOGY OF RESEARCH
The environmental scan was a literature review that used systematic processes to identify and analyze existing best practices in cancer control from academic and grey literature.

1.4.1 Academic Literature
The review of academic literature was conducted using 7 online databases: EMBASE, Google Scholar, Medline, PAIS International, PubMed, The Cochrane Library, and Scopus. After conducting a keyword search in the 7 databases using the same search terms, listed in Figure 2, 483,367 articles were
retrieved. The 3 review steps conducted were a title review, an abstract review, and a full article review. The reasons for exclusion included duplicate articles, being unable to access the full text of articles, articles without a system-level approach, articles focusing on jurisdictions not applicable to Ontario, and editorials and non-peer reviewed journal articles. Another method used to find articles was “snowballing”, in which a search for references of previously obtained articles was conducted. After the literature search, a total of 112 articles remained, which were then analyzed for content. The academic literature review process is detailed in Figure 3.

**Figure 2: Search Terms used in Academic Literature Search**

<table>
<thead>
<tr>
<th>System and clinical integration</th>
<th>Sustainability and effectiveness</th>
<th>Quality of life</th>
<th>Person centred care along entire continuum</th>
<th>Equity</th>
<th>Safety</th>
<th>Communication, knowledge transfer and exchange</th>
<th>Embracing and leveraging technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitions of care</td>
<td>Outcomes</td>
<td>Every step of journey</td>
<td>Patient centred</td>
<td>First Nations, low socioeconomic status, inter-region, under/never screened, Adolescent and young adults</td>
<td>System-wide management</td>
<td>Infrastructure</td>
<td></td>
</tr>
<tr>
<td>Coordination and collaboration</td>
<td>Efficient</td>
<td>Patient experience</td>
<td>Person-driven</td>
<td>Equity dimensions</td>
<td>Physician level reporting</td>
<td>Integration</td>
<td></td>
</tr>
<tr>
<td>Continuity of care</td>
<td>Alignment of resources</td>
<td>Patient needs/desires</td>
<td>Primary care support</td>
<td>Health knowledge &amp; literacy, involvement in care</td>
<td>Adverse event reporting</td>
<td>Communication</td>
<td></td>
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<tr>
<td>Primary care engagement</td>
<td>Models of care</td>
<td>Physical and psychological support</td>
<td>Patient tools and navigators</td>
<td>Consistent care</td>
<td>Patient safety</td>
<td>New technology</td>
<td></td>
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<tr>
<td>Change drivers</td>
<td>Provider experience, supports, and resources</td>
<td>Self-management</td>
<td>Patient empowerment, education, and information</td>
<td>Evidence based care</td>
<td>Safety programs</td>
<td>Information flow</td>
<td></td>
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<tr>
<td></td>
<td>Personalized medicine</td>
<td>Individualized care</td>
<td>Communication</td>
<td>Community supports</td>
<td>Leverage data</td>
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**General Terms**

- Cancer
- Cancer plan
- Cancer system
- System/system approach
- Cancer control
- Plan
- Program
- Goals
- Canada
- Priorities
- Initiatives
- Strategy
- Best practices
- [Guiding] principles
- Values
- Implement
- Monitor
- Accountabilities – initiatives and structure
- Responsibilities
- Comprehensive cancer control
- Provincial
- International
- Experts
- Jurisdictions
- Accountability – initiatives and structure
- Measurement strategies
- Diagnosis
- Treatment
- Structure
- Implementation
1.4.2 Grey Literature

The main focus of the grey literature search was to retrieve system-level cancer and non-communicable disease plans to summarize the work currently underway in other jurisdictions. The cancer plans were retrieved from the International Cancer Control Plan Portal (http://www.iccp-portal.org/cancer-plans), which is a resource for cancer control planning developed by the National Cancer Institute. As well, the documents included non-communicable disease (NCD) plans as these plans often involve similar health system-level objectives to cancer plans. Plans were excluded from the analysis when there was no English version available; this resulted in the inclusion of 109 cancer and NCD plans. The environmental scan analysis focused on jurisdictions that had similar health systems to Canada to gain an understanding of best practices from jurisdictions to have applicable examples. A list of the cancer plans analyzed, including their target audience and timeframe is in the Appendix. In addition, the scan included well-known health organizations, both Canadian and international. This search retrieved 47 reports on the subjects of the OCP IV themes. Documents and reports were excluded from analysis if the information was not relevant at a system level. The grey literature review process is shown in Figure 4.
2.0 CANCER PLAN STRUCTURES

The cancer plan structure determines how the plan is organized and which sections it contains, as well as how the jurisdiction will outline its strategic priorities.

Atun et al. conducted an in depth analysis of European cancer plans in “Analysis of National Cancer Control Programmes in Europe”. According to the article, successful cancer plans begin with a background and analysis of the population served, including demographics, epidemiology, and the current state of cancer, the cancer system, and cancer control. Other sections include governance and organization, incorporating changes required, quality assurance, performance management of the cancer system, funding sources, and resource allocation. The largest section of the plan is often service delivery, which includes the specific strategic objectives and initiatives of the plan. Finally, many jurisdictions describe monitoring, evaluation, and implementation strategies in the final sections of their plans, including details on information systems, specific indicators, milestones, timelines, targets, institution linkages, leadership and change management, and risk and mitigation strategies.

The vast majority of cancer plans (67 out of 109) are structured by stage of the cancer journey. The typical stages of the cancer journey are prevention, screening, diagnosis, treatment, palliative and end-of-life care, and recovery/survivorship. Many of these cancer plans contain other sections, such as awareness, quality of care, research and evaluation, equity, quality of life, patient experience, and communication.

Alternatively, some cancer plans are structured by type of strategy or policy. Four of the cancer plans analyzed are structured in this way: Malaysia, Fiji, and Florida and South Carolina in the United States. Types of strategies and policies include prevention and promotion, clinical management, increasing
patient compliance, action with non-governmental organizations, professional bodies, and other stakeholders, monitoring, research and surveillance, capacity building, and policy and regulatory interventions.\textsuperscript{70-73}

Another method to structure cancer plans is by levels of care. Cyprus is the only jurisdiction that has a cancer plan structured in this way. The three basic levels of care are primary, secondary, and tertiary.\textsuperscript{74}

Other cancer plans are structured by guiding principles and values. Six plans were structured in this way: Saskatchewan, Australia, Northern Territory (Australia), and Minnesota, South Dakota, and Utah in the United States. Typical guiding principles and values include equity, education, evidence-based, quality of life, safety, research, and evaluation.\textsuperscript{75-80}

Finally, 6 other cancer plans are structured by type of cancer: Albania, Washington (District of Columbia), New Jersey, North Carolina, Washington, and Western Australia. The plans are structured by the most common types of cancer in that jurisdiction, including lung, breast, colorectal, prostate, cervical, oral, and skin.\textsuperscript{81-86}

\textbf{3.0 CANCER PLAN GUIDING PRINCIPLES AND VALUES}

Guiding principles and values are typically stated at the beginning of a cancer plan with the purpose of guiding the vision of the plan and indicating which strategic objectives are of highest importance. Atun et al. also examines guiding principles and values present in jurisdictional cancer plans. The article highlights the following guiding principles and values:\textsuperscript{2}

- Accessibility
- Accountability
- Communication
- Coordination
- Effectiveness
- Efficiency
- Equity
- Governance
- Integration
- Patient-centred
- Patient safety
- Patient experience
- Quality
- Quality of life
- Research
- Sustainability

Many of the guiding principles and values identified in the academic literature are also found in the grey literature. Table 1 lists and defines guiding principles and values from cancer plans.
Table 1: Guiding Principles and Values in Cancer Plans

<table>
<thead>
<tr>
<th>Guiding Principles and Values</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessibility, Timely</strong></td>
<td>• All individuals have access to quality care regardless of geographic location and socio-demographic factors</td>
</tr>
</tbody>
</table>
| **Accountability, Responsibility, Ownership** | • The responsible organizations for each objective accomplish their tasks and take ownership for their responsibilities  
  • Any inability to meet an objective is openly communicated |
| **Advocacy**                              | • The guiding organization supports community care in health organizations and advocacy for patient rights                                                                                           |
| **Community Involvement, Engagement, Participation** | • The entire population is engaged in the cancer plan  
  • Individuals and organizations play an active role in the plan                                                                                                                                 |
| **Comprehensiveness**                     | • The plan addresses every stage of the cancer journey                                                                                                                                                 |
| **Cultural Sensitivity**                  | • The plan recognizes the diversity of cultures present in the system  
  • The guiding organization works with organizations and individuals from a variety of cultures to ensure that their needs are represented in the plan                                                                         |
| **Education**                             | • Education concerning cancer care is a priority for the general public, clinicians, patients, and families                                                                                         |
| **Effectiveness**                         | • Each objective is connected to an outcome  
  • The success of objectives is continually measured using appropriate indicators                                                                                                                      |
| **Efficiency, Cost-effectiveness**        | • Resources are specifically dedicated to each area of the plan  
  • All resources are efficiently used                                                                                                                                                                |
| **Equity, Disparities, Social Determinants, Fairness** | • All aspects of the plan make an effort to address equity  
  • Priorities and initiatives concerning equity span the care continuum  
  • Equity is important in many other dimensions, such as patient-centred care, patient safety, quality of life, and accessibility  
  • The guiding organization works with community supports to address the social determinants of health                                                                                           |
| **Ethics and Respect**                    | • All stakeholders in the system are treated ethically and with respect                                                                                                                                  |
| **Evaluation, Research**                  | • The guiding organization continually conducts evaluation and research to determine the strengths and weaknesses of the plan  
  • The plan supports research in all areas of cancer care                                                                                                                                                |
| **Evidence-based, Data-Driven, Best Practices** | • All priorities, goals, and initiatives are based on the most recent data and literature  
  • Best-practices are implemented at each stage of the cancer journey                                                                                                                                    |
<p>| <strong>Feasibility</strong>                           | • The goals of the plan are realistic and are able to be accomplished in the timeframe provided                                                                                                         |</p>
<table>
<thead>
<tr>
<th>Guiding Principles and Values</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change, Transformation</td>
<td>• The guiding organization continually looks for ways to improve the plan throughout its mandate</td>
</tr>
<tr>
<td>Innovation, Creativity</td>
<td>• The plan utilizes new and creative initiatives to achieve its goals</td>
</tr>
</tbody>
</table>
| Integration                 | • Patient transitions are seamless and effective regardless of location or provider throughout the cancer journey  
• The cancer system and the community are integrated with services for other diseases |
| Knowledge and Information Sharing | • The plan addresses barriers to information sharing  
• Improving knowledge and information exchange with patients and families is a key priority |
| Leadership, Actively-led    | • The plan identifies accountability at all levels  
• These various organizations and individuals take accountability for their leadership roles |
| Outcome and Action Oriented | • The plan focuses on initiatives that will achieve the greatest impact |
| Partnerships, Collaboration, Cooperation, Collegiality, Teamwork, Team Building, Coordination, Communication | • Members of the guiding organization work together to ensure the objectives are being met  
• Responsibilities are delegated from the beginning of the plan and any changes are clearly communicated  
• Responsible organizations frequently communicate about the progress of the plan |
| Person-centred, Patient-centred, Patient Engagement, Patient Empowerment, People-focused, Consumer-focused, Responsive, Caring | • Patients are at the centre of care at all stages of the cancer journey  
• Patients are empowered through the use of education and self-management techniques to help other patients |
| Plan for the Future, Vision, Up to Date | • The plan considers timelines for the accomplishment of objectives and the future needs of the cancer system  
• The plan is continually analyzed to ensure that the most up to date practices are in place |
| Policies, Systems, and Environmental Change | • The plan focuses on changes and improvements that are system-wide and that will improve care for the most individuals possible |
| Quality, Excellence         | • Quality is present in all aspects of care and across the patient journey  
• Quality is continually measured at each stage of implementation |
### Guiding Principles and Values

<table>
<thead>
<tr>
<th>Guiding Principles and Values</th>
<th>Definition</th>
</tr>
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</table>
| **Quality of Life**          | - Quality of life is emphasized at every step of the patient journey  
                              - The patient’s needs are always the most important and all care decisions are made with the patient’s quality of life in mind |
| **Safety**                   | - Systems are in place to measure and report on patient safety, at the organizational and clinician level  
                              - Safety is a key component of education for clinicians |
| **Step-wise Approach, Pace-setting** | - Cancer plan priorities have sub-goals with exact timelines for each |
| **Sustainability, Continuity** | - The funding approach drives value and quality and is viable for the future  
                              - Evidence-based, sustainable care options are implemented  
                              - The system workforce is sustainable and practitioners are educated in best practices for all areas of care |
| **Transparency**             | - The public is made aware of the plan and its goals  
                              - Measurement results are reported to the public along with any changes or updates to the plan |

In Canada, cancer plans from Alberta, Manitoba, Newfoundland, Prince Edward Island, Saskatchewan, and the Canadian Partnership against Cancer have similar guiding principles, which include accountability, comprehensiveness, efficiency, ethics and respect, evidence-based, innovation, integration, knowledge sharing, leadership, partnerships, quality, sustainability, and transparency. Similarly in Europe, plans contain common guiding principles of accountability, community involvement, comprehensiveness, effectiveness, efficiency, equity, evidence-based, integration, knowledge sharing, partnerships, person-centred, quality, step-wise approach, sustainability, and quality of life.

In the United States, many different guiding principles and values are present in cancer plans. There is a high variation between the 50 different cancer plans. Common guiding principles and values include accessibility, accountability, advocacy, community involvement, comprehensiveness, cultural sensitivity, education, effectiveness, efficiency, equity, ethics and respect, evaluation, evidence-based, feasibility, innovation, integration, knowledge sharing, leadership, outcome and action oriented, partnerships, plan for the future, policies, systems, and environmental change, quality, quality of life, step-wise approach, sustainability, and transparency.

The scan includes 8 plans from Asia: Bangladesh, China, Cyprus, India, Malaysia, Mongolia, Qatar, and Turkey. Accessibility, community involvement, effectiveness, efficiency, equity, evidence-based, integration, partnerships, person-centred, quality, safety, and sustainability are common guiding principles and values present in these cancer plans. Two countries in Africa, Kenya and Morocco, are included in the scan. These plans contain the common values of accountability, community involvement, cultural sensitivity, equity, evidence-based, innovation, integration, leadership, partnerships, quality, and sustainability.
Various health-related organizations, such as Public Health Ontario, the Canadian Foundation for Healthcare Improvement, the World Health Organization (WHO), the Australian Commission on Quality and Safety in Health Care, Accreditation Canada, the European Partnership for Action Against Cancer, Canada Health Infoway, and the Institute for Healthcare Improvement propose guiding principles and values in their strategic plans and reports. These include accountability, community involvement, efficiency, equity, ethics and respect, evidence-based, feasibility, integration, knowledge sharing, leadership, outcome and action oriented, partnerships, person-centred, plan for the future, quality, safety, step-wise approach, and transparency.1,106-129

4.0 PRIORITIES AND INITIATIVES IN CANCER SYSTEMS

There are 6 themes that have been identified through the critical appraisal process undertaken by CCO’s Planning and Regional Programs as key areas for objectives and initiatives in the OCP IV. These themes are quality of life and patient experience, sustainability, effectiveness, safety, transitions of care, and equity. This section summarizes system and provider level strategies for these themes from literature and cancer plans.

4.1 QUALITY OF LIFE AND PATIENT EXPERIENCE

Quality of life is a broad ranging concept comprised of a person's physical and mental health perceptions and their correlates, including health risks and conditions, functional status, social support, and socioeconomic status,130,131 while patient experience is defined more specifically as “the sum of all interactions, shaped by an organization’s culture, that influence patient perceptions across the care continuum.”132 This section will discuss the aspects of quality of life, patient engagement, patient-centred care, and patient experience. Box 1 details the common priorities for quality of life and patient experience in cancer plans.
Box 1: Quality of Life and Patient Experience Priorities in Cancer Plans

QUALITY OF LIFE AND PATIENT EXPERIENCE PRIORITIES

- Increase health literacy
- Openly inform and support the patient if something goes wrong
- Improve patient education and empowerment through methods such as health information, patient decision aids, coaching and question prompts, self-management education, self-help groups, and peer support
- Utilize surveys to measure the patient experience
- Involve multidisciplinary teams in patient care
- Empower patients to advocate for their rights
- Implement psychosocial referral protocols and patient distress screening
- Engage patients, survivors, caregivers and families to identify priorities for, and inform enhancements to, health system design, and workplace and community supports
- Improve quality of life of cancer patients and their families, including physical, psychosocial, and spiritual aspects
- Achieve the best possible quality of life for cancer patients and survivors through key areas such as rehabilitation, financial support, pain management, and psychosocial support
- Ensure proper follow-up with patients to assess needs and conduct quality of life surveys
- Develop optimal follow-up care pathways for survivors and people living with a diagnosis of cancer, including side-effect management and support research
- Implement specific policies for cancer survivorship
- Address poverty and improve financial assistance for survivors
- Ensure that palliative care begins at the time of diagnosis
- Enhance home care, social services, pain management, nursing, pharmacy, physiotherapy, occupational therapy, and complementary therapy for patients
- Implement mobile teams for screening, treatment, and palliative care

4.1.1 Quality of Life in Palliative Care and Symptom Management

Palliative care contributes to a patient’s quality of life as it focuses on physical and psychosocial symptom control and pain relief, and not the cancer itself. To achieve the best possible quality of life, palliative care should begin at the time of diagnosis, striving for continuity of care, support, early assessment and management of symptoms, and augmented physical well-being. Studies suggest that concentrating on the process of quality improvement and compliance with care principles, enhancing integrated access to palliative care, and having the primary palliative care team involved with care can lead to improved quality of life. For example, Norway seeks to have palliative care align with the WHO’s objective of “the relief of pain and other physical symptoms, together with measures targeted towards psychosocial and spiritual/existential issues”. As well, a study by the National Health Service (NHS) looked to optimize quality of palliative care and to reduce anxiety at the end of life, and embarked on a patient-led initiative, the Transforming End of Life Care in Acute Hospitals Program, Quality End of Life Care for All. The initiative contributed to a marked improvement in patient, family member, and caregiver satisfaction, which was measured through surveys. Further, it has been noted by several
sources that patients with advanced disease can still experience good quality of life, which can be addressed through psychosocial interventions and tools.\textsuperscript{135, 136}

Symptom management is an important component of palliative care, as managing patients’ symptoms greatly improves their quality of life.\textsuperscript{137} Firstly, research highlights the relationship between delays in diagnosis and treatment and patients’ quality of life and suggests that the longer the delay, the lower the reported quality of life will be.\textsuperscript{138, 139} Moreover, Fashoyin-Aje et al. suggest the value of all patients undergoing treatment being frequently screened for distress and referred to outside resources.\textsuperscript{139} For example, a study of patients with lung cancer showed that regularly completing pain assessments helps practitioners to more fully understand what the patient is experiencing and that health care professionals tend to underestimate the severity of the patient’s pain.\textsuperscript{140} Another intervention for symptom management involves oncology nurses partnering with their patients in symptom self-management to recognize, prevent, relieve, or decrease the timing, intensity, distress, and concurrence of symptoms.\textsuperscript{137} In this example, providers identified areas where this partnership can have the greatest impact on a person’s ability to manage their symptoms and maximize performance outcomes, considering factors such as physiological, psychological, comorbidities, and contextual patient characteristics.\textsuperscript{137} A final example of a symptom management tool is the Breast Cancer Symptoms subscale, which looks at quality of life to improve symptoms and emotional well-being for early stage breast cancer, resulting in significant improvement on the emotional section of the subscale.\textsuperscript{141}

4.1.2 Quality of Life in Survivorship and Rehabilitation

Quality of life is a key component of cancer recovery and re-integration into daily life. Effective interventions focus on promoting healthy lifestyle behaviours and addressing psychosocial concerns and distress in order to improve physical functioning, psychosocial well-being, and quality of life for survivors.\textsuperscript{142} Examples of survivorship strategies include: access to services to meet a broad range of needs such as symptoms, side-effects, sexual health needs, fatigue, sleep health, and hormonal balance; support during transitions; treatment summaries and follow-up care plans; models of care and service coordination; active engagement in self-management; survivorship education for health care providers; promotion of survivorship issues; and research and evaluation.\textsuperscript{142}

Another significant factor for quality of life in cancer survivors is rehabilitation. The most important components of rehabilitation leading to improved quality of life are psychosocial support and supportive care.\textsuperscript{143} Evidence suggests that rehabilitation programmes that are site-specific and face-to-face lead to the greatest improvements in quality of life.\textsuperscript{144}

4.1.3 Patient-reported outcomes

Patient-reported outcomes (PROs) contain information retrieved from patients on a health condition and the management of the condition.\textsuperscript{145, 146} Information retrieved from PROs can include patient’s health-related quality of life, adherence to medical treatment, treatment satisfaction, and additional health care elements and the end results.\textsuperscript{145} PROs seek to determine the patient’s perspective of their symptoms as well as their functional status.\textsuperscript{147} They are considered essential for system redesign, quality improvement, and resolving questions around unsuitable care. PROs also provide evidence for cost-benefit analyses and improve decision-making at all levels.\textsuperscript{148} Assessing and incorporating patient
preferences and self-reporting have been shown to be a key component of improving patients’ quality of life. 149 Specifically, PROs can be single or multiple item measures focusing on one aspect of quality of life.150 Research suggests that computerized measurement of patients’ symptoms positively impacts patient-clinician communication.135,149 Technological approaches such as this can offer the patient an opportunity to participate more fully in the clinical process, allowing information gathering and follow-up to occur at a convenient location and time.135,149 In addition, oncology care pathways can incorporate supportive care principles, such as comprehensive symptom and emotional well-being assessments to improve patient outcomes.135,149

4.1.4 Patient Engagement
Patient engagement and activation have been called the next ‘blockbuster drug’. 151 Based on Coulter’s definition, engagement can occur with patients and families when an individual is receiving direct care and patients or the public can be involved in improving health services through policy planning and process improvements.152 Activation is the “patient’s willingness and ability to take independent actions to manage their health and care”, the interventions designed to increase activation, and the patient’s resulting behaviours.153 At the direct care level, they can be engaged to collaborate on treatment plans and at the system level they can participate on planning committees, provide input into staff training to share the lived experience, and organizations can create positions for patients and family members.154 Narratives are seen as extremely important for providers and staff working in healthcare to provide the patient perspective.154

Carman et al. presented a continuum of engagement which includes three types of engagement moving from lower to higher levels of engagement including consultation, involvement and partnership, and shared leadership.155 These are crosscut by the three levels in which engagement occurs: the patient, organization, and design and policy-making.155 At the patient level, this could range from receiving information about a diagnosis, to being asked about their preferences, to treatment decisions being made based on their preferences, medical evidence and clinical judgment. The ability for providers to engage at the highest level requires a number of skills and resources.156 Parsons et al. introduced a number of ‘domains’ of patient engagement in primary care, which included areas of understanding patient and provider responsibilities, assessing needs and wants of engagement, accounting for the contextual factors of the consultation such as time and resources and available training and informational support.156 At the organization design and governance level, this could move across the continuum for example having organization-wide surveys to ask patients about their care experience to hospitals involving patients as advisors to patients co-leading safety and quality improvement committees.156 At the policy-making level, engagement could range from a public agency conducting focus groups to ascertain opinions about an issue to patients recommending research priorities used to make funding decisions to patients having equal representation on an agency that makes decisions about how to allocate resources.155

i. Health Literacy and Education
Health literacy has been defined as the “ability to read, understand and act upon health information, essential skills for making appropriate health decisions”.157 Informed patients are significantly more likely to engage in preventive behaviours such as screening, healthy eating and exercise and manage
their conditions, while less activated patients are three times more likely to have unmet medical needs and unnecessary hospital visits. In Australia, the Clinical Excellence Commission has developed a patient engagement strategy designed to empower patients to ask for assistance if they do not feel they are receiving adequate care. Finally, cultural factors are also important to create social environments and mutual trust and language comprehension, which encourage engagement.

**ii. Shared-decision-making**

Shared decision-making is the “process by which patients and clinicians jointly review the best medical evidence as well as patients’ preferences and values.” The Ontario Medical Association supports the premise that physicians should “share decision-making with patients about all aspects of their health care.” Studies have shown that patients who are actively involved in decision-making have the greatest long-term clinical benefits such as quality of life goals. There is evidence to suggest that patients participating in shared decision-making are associated with lower treatment costs because patients choose less intensive services. System-level programs in the United States and United Kingdom have been developed to guide and support institutions in the implementation of shared decision-making, focusing on the use of decision aids, education for staff and patients, and ensuring sustainable results in culture transformation.

### 4.1.5 Patient-Centred Care

The Institute of Medicine defines patient-centred care as, “providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions”. The Institute for Healthcare Improvement separates patient-and family-centred care into the following four levels: environment, organization, microsystem, and the individual’s care experience. The fundamental attributes of patient-centred care at the point of care are the patient’s involvement and the individualization of care, which are dependent on the involvement of patients and families, receptive and responsive health professionals, and an integrated healthcare environment.

The participation of patients and families, as well as receptive and responsive health professionals, can be perceived as direct-level care, whereas the integrated healthcare environment can be examined at an organization and system-level. Direct-level care requires communication that focuses on identifying and responding to a patient’s thoughts and emotions regarding their illness and to reach a consensus about the illness, treatment, and roles for both the patient and physician. On the other hand, at the organization and system-level, strategic vision that informs policy is more of a priority. This involves utilizing interventions, such as a balanced scorecard, to inform quality improvement.

**i. Measuring Outcomes**

Both direct-level care and organization and system-level care benefit from measurement and outcomes of patient-centred care. Patient-centred care can be researched through qualitative, quantitative, and real-time measurements, which can inform and improve guidelines and processes. For instance, the Patient-and Family-Centred Care Methodology and Practice developed by the University of Pittsburgh Medical Centre (UPMC), has resulted in improved patient experience, decreased staff turnover, and operational cost savings throughout the UPMC hospitals. In addition, the Model of Care Initiative in Nova Scotia is an example of a patient-centred approach that achieved improved outcomes by utilizing staff resources, knowledge and skills, supporting technology and information and
process improvements, leading to patients continually receiving high quality care.\textsuperscript{172} Both measures resulted in shorter average length of stays and fewer readmissions, repeat readmissions, medical errors, and adverse events.\textsuperscript{172}

4.1.6 Patient Experience

The King’s Fund states that “patient experience means putting the patient and their experience at the heart of quality improvement.”\textsuperscript{132} This definition highlights the application of the patient’s feedback for quality improvement activities. Evaluating patient experience with care has been a major focus of research, and plays an important role in quality-of-care reforms and also in improving health care services overall. In most jurisdictions, surveys are used to measure patient experiences and satisfaction with health care. Patient satisfaction surveys attain ratings of satisfaction with care, while patient experience surveys gather information from patients on their interactions with providers and the health system.\textsuperscript{173} For example, the Picker Institute uses 8 dimensions in the Ambulatory Oncology Patient Satisfaction Survey which contribute to the patient’s experience: respect for patients' values, preferences and expressed needs; coordination and integration of care; information and education; physical comfort; emotional support and alleviation of fear and anxiety; involvement of family and friends; continuity and transition; and access to care.\textsuperscript{174} Patient experience and satisfaction surveys tools help decision-makers within organizations monitor the quality of care provided, but to create a fuller picture, hospitals and care providers have begun using qualitative approaches to gather data on patient experiences for quality improvement purposes.\textsuperscript{175} Iversen et al. also found in Norway that qualitative comments by patients provided a more in-depth understanding and exploration of the patient’s experience and helped to reaffirm the quantitative findings.\textsuperscript{176}

4.2 SUSTAINABILITY

A sustainable healthcare system is one that has the ability to maintain or serve the health needs of present and future generations.\textsuperscript{177} It includes reducing the incidence of cancer through prevention, screening to detect cancer earlier, and delivering high quality, evidence-based services in a way that is cost efficient and optimizes roles of providers and patients and families.\textsuperscript{177} It is enabled by measurement of patient-, provider-, and system-related outcomes, ongoing evaluation, and funding models.\textsuperscript{177} This section will speak about sustainability in terms of prevention, screening, assessing value, care plans and models of care, and access. Box 2 lists common sustainability priorities in cancer plans.
Box 2: Sustainability Priorities in Cancer Plans

SUSTAINABILITY PRIORITIES

- Reduce the prevalence of tobacco smoking through public policies, smoking cessation programs, and quit lines\(^2\)-\(^{101}, 127\)-\(^{129}\)
- Reduce the prevalence of obesity and overweight\(^2\)-\(^{101}, 127\)-\(^{129}\)
- Increase the consumption of vegetables and fruits and the level of physical activity in the population\(^2\)-\(^{101}, 127\)-\(^{129}\)
- Reduce the prevalence of harmful use of alcohol through public policies and cessation support\(^2\)-\(^{101}, 127\)-\(^{129}\)
- Reduce exposure to and strengthen surveillance of environmental carcinogens arising from the environment, workplaces and radiation\(^2\)-\(^{101}, 127\)-\(^{129}\)
- Reduce the burden of cancer causing infections, including Human Papilloma Virus (HPV) and Hepatitis C Virus (HCV)\(^5, 8\)-\(^{11}, 22\), \(^35\), \(^87\), \(^100\), \(^127\)-\(^{129}\)
- Support health promotion programs in workplaces and schools\(^2\)-\(^{24}, 31\)-\(^{50}\), \(^127\)-\(^{129}\)
- Use social media and social marketing to raise awareness about cancer prevention and strengthen cancer prevention research\(^2\)-\(^{24}, 31\)-\(^{50}\), \(^127\)-\(^{129}\), \(^155\)
- Increase screening rates and raise awareness for population-based screening programs\(^2\)-\(^{24}, 31\)-\(^{50}\), \(^127\)-\(^{129}\), \(^155\)
- Provide information to health professionals regarding who should be offered screening and provide information to target groups so that they do not request screening unnecessarily\(^100\)
- Invest in more genetic consultants, genetic counselors and laboratory staff to strengthen genetic services, enhance healthcare professional skills, target high risk individuals, and raise awareness about genetic services for cancer screening and early detection\(^18\)
- Ensure sustainable use of cancer care resources and appropriately plan for the future\(^2\)-\(^{24}, 31\)-\(^{50}\), \(^127\)-\(^{129}\), \(^156\)
- Ensure the sustainability of the cancer care workforce through capacity planning and increased recruitment and education\(^9\)-\(^{12}, 60\)-\(^{65}\)

4.2.1 Prevention

i. Modifiable Risk Factors

Prevention is considered an important component of sustainability as it aims to reduce cancer incidence, thereby increasing the efficient use of cancer resources through population health. Most prevention strategies are focused on modifiable risk factors.\(^178\) Obesity, physical activity, smoking, red and processed meat intake, vegetable and fruit intake, whole grains, energy density, sodium intake, and alcohol, have all been linked to cancer and other chronic diseases.\(^178\) A number of cancer plans contain interventions to reduce these risk factors. For example, in the UK, the NHS launched the “Let’s Get Moving” program in primary care, which uses a multi-pronged approach including supporting patients to set and monitor their physical activity and a website which allows patients to search for various forms of physical activity in their area.\(^9\) Tobacco smoking is another modifiable risk factor, where significant work has been done to reduce rates.\(^179, 101, 127\)-\(^{129}\) Evidence suggests creating a central body with the responsibilities of taxation and regulation, legislation, enforcement, promotion and support for smoking
cessation, mass media, community interventions, surveillance, and research is an effective strategy.\textsuperscript{180, 181}

**ii. Environmental Exposures**

An additional prevention priority is to reduce exposure to environmental carcinogens arising from the environment and to strengthen surveillance of carcinogens and mitigate exposure.\textsuperscript{11-32, 35-40, 60, 65, 100, 101}

For example, occupational cancers represent a small portion of all cancers, however they are very preventable through strategies such as multi-sectorial approaches and partnerships, developing and implementing risk screening tools, tailoring risk communication about primary prevention to local circumstances, and monitoring, evaluating, and reporting on progress.\textsuperscript{182} Another environmental factor is ultra-violet exposure, for which legislation can be enacted such as Ontario’s *Skin Cancer Prevention Act (Tanning Beds)*, 2013, which banned the use of tanning beds by youth under 18 years of age.\textsuperscript{183}

### 4.2.2 Screening

Screening relates to sustainability as it can detect cancer at an earlier stage, meaning that it may be easier to treat or cure and has the potential to improve quality of life and decrease costs.\textsuperscript{184} There are many strategies to raise awareness about population-based screening programs and to increase screening rates, including client reminders, small media, one-on-one education, deployment of nurse practitioners, financial incentives, and provider-based interventions such as screening reminders and recalls such as letters.\textsuperscript{184, 185, 186} Also, methods that reduce barriers to individuals participating in screening are valuable, such as the Faecal Occult Blood Test (FOBT) kit, which can be mailed to individuals.\textsuperscript{186} This technique reduces the need for individuals to travel in order to get screened, and has already been implemented in jurisdictions such as Ontario, Ireland, and Australia.\textsuperscript{186} Another important factor for screening is genetics. Jurisdictions can invest in more genetic counselors and laboratory staff in order to strengthen genetic services, to enhance healthcare professional skills, to target high risk individuals, and to raise awareness about genetic services for cancer screening and early detection.\textsuperscript{18}

### 4.2.3 Assessing Value

Sustainability also includes using cancer care resources efficiently and ensuring value of priorities and initiatives from a quality of life, outcome, and cost perspective.\textsuperscript{11, 20} Specifically, quality of care and appropriateness can be strengthened by monitoring adherence to guidelines in order to decrease unnecessary referrals, diagnostic procedures, or treatments.\textsuperscript{187} It is also important that only those who need to be screened are screened in order to get the best value from population-based screening programs. For example, Ireland and Norway provide information to health providers regarding who should be offered screening, provide information to target groups so that they do not request screening unnecessarily, and monitor and report on performance of radiologists.\textsuperscript{100} Other tools which can improve efficiency include Electronic Medical Records (EMRs), telehealth, drug information systems, diagnostic imaging systems, changes in provider compensation, restructuring clinical decision making, increasing efficiency of service delivery, and large-scale system performance assessment.\textsuperscript{187, 188} As well, benefits evaluation, which involves creating a conceptual model for understanding the quality, use and net benefits of a strategy, is a way to move forward with assessing new projects and programs.\textsuperscript{189-194}
4.2.4 Care Plans and Palliative Care
Palliative care plans can help to reduce health system demands by shifting care from acute to primary and homecare settings. Evidence suggest that early introduction of palliative care services leads to meaningful improvement in the experiences of patient and family caregivers by emphasizing symptom management, quality of life, and treatment planning.\(^\text{195}\) For end of life care, Skrabek suggests that a more integrated approach which aims to decrease hospitalization near the end of life will result in cost savings in the long term.\(^\text{187}\) A study which surveyed patients showed that patients, especially those with advanced cancer, want to understand their chances and treatment options and to participate in decisions about their care and generally want to spend as much time as possible in a home-like environment with family and friends.\(^\text{195}\) The study also found that patients who have end-of-life conversations with their clinicians as early as possible have a greater chance of receiving palliative care and the type of care they prefer.\(^\text{195}\)

4.2.5 Access
Access to care is vital, as delays create bottlenecks in the system and can contribute to inefficiencies; therefore, decreasing wait times is a key priority.\(^\text{187}\) To improve access, organizations can identify and reduce disparities to enhance population health and to reduce health system demands.\(^\text{187}\) One study suggests that centralized, electronic registries can supply information to patients so that they know the length of time until they will be seen and organizations can target specific regions or populations that experience wait time disparities.\(^\text{187}\) It is also important to integrate variables such as volume, clinical space, physical availability, and services offered, which can improve wait times and reduce complaints.\(^\text{196}\) Another key factor in access, highlighted in the literature, is capacity planning to ensure long term efficiency of cancer services through increased recruitment and education.\(^\text{9-12, 60-65}\) To accomplish these goals, it is important to set out the best available information on future capacity and demand plans to support service, financial and workforce planning.\(^\text{11, 14}\)

4.3 EFFECTIVENESS
Effective care is considered from the patient perspective and the scientific perspective to reduce the gap between the best established evidence and the care provided, allowing patients to receive timely, evidence-informed services in an appropriate location leading to optimal outcomes.\(^\text{63, 197}\) The following section details key effectiveness strategies such as performance management and evidence-based care. Box 3 outlines effectiveness priorities in cancer plans.
Box 3: Effectiveness Priorities in Cancer Plans

**EFFECTIVENESS PRIORITIES**

- Support the continued development of regional and national audits to drive performance improvements through safety netting practices and audit
- Implement decision support and risk assessment tools
- Improve accessibility to quality and safe cancer treatment services through target groups, telemedicine, and models of care
- Improve drug accessibility by working with patients, carers and other stakeholders
- Encourage engagement and involvement in clinical trials to facilitate the evaluation and introduction of new drugs
- Support regional and national multidisciplinary cancer conferences with the ongoing development of clinical management guidelines and protocols, including the most effective use of approved medicines
- Improve access to alternative medicine according to patient choice
- Develop improved mechanisms for the assessment and introduction of new techniques and technologies
- Assess the outcomes of eHealth and telehealth projects for improvements to service delivery and clinical outcomes for patients

4.3.1 Performance Management

The Healthcare Performance Management Institute suggests that performance management is an effective strategy as it ensures that evidence-based practices are implemented across the health system, involving monitoring system performance and developing indicators to measure outcomes at different levels. For example, New South Wales, Australia recommends reducing variations in cancer outcomes by providing timely feedback of quality information to drive systems improvement, and by providing information on performance of the cancer system to health providers and the community. Another example is from Scotland, where the government plans to support the continued development of regional and national audits to drive performance improvements. In addition, system and provider level reporting are important to performance management. Spinks et al. suggest that quality system-level public reporting requires independent oversight, public-private collaboration, and substantial funding to create robust and patient-centred quality measurement. According to the American National Strategy for Quality Improvement in Health Care, provider-level public reporting can include the input of both patients, and providers to foster a two way-delivery system to ensure better care, healthy people and communities, and affordable care. Reporting is important because it allows patients to review treatment outcomes, assess patient satisfaction, and hold providers accountable; it also provides resources and motivation for clinicians to improve performance.

4.3.2 Evidence-Based Care

One study suggests that a model of evidence-based practice includes conducting an evaluation of the impact on patient care and provider performance, and consideration of context or setting in which practice is implemented. Titler highlights the steps within the model: knowledge creation and distillation through the conduction of research with specific practice recommendations; diffusion and
dissemination through interaction with policy stakeholders; and end user adoption, where organizations, teams, and individuals implement and institutionalize the evidence. An example of an evidence-based practice is personalized medicine, an approach applicable to all patients with cancer. This approach spans the full care continuum from risk stratification to prevention, screening, therapy, and survivorship programs. Personalized cancer therapy involves looking at abnormalities, response to therapies, drug screens, cell-line models, and individualized drug treatments for each patient.

i. Screening and Early Diagnosis
Campbell suggests that evidence-based screening can be supported by wide-scale system performance assessment to evaluate effectiveness. For instance, creating system-level networks that engage all programs, policymakers, experts, and lay representatives involved in the implementation of the screening program has been shown to be effective. This network can use knowledge translation principles to increase screening participation and to guide the implementation strategies and quality determinants, and maximize participation. Specific strategies to increase screening participation include online tools and a public awareness program that encourages individuals to speak to their physicians about screening.

ii. Treatment
So et al. suggest that methods of improving the effectiveness of treatment include explicit practice guidelines, clinician involvement during development of intervention and outcomes, and explicit strategies for communication and implementation. Another study recommends that patients undergoing procedures that are technically difficult to perform and have been associated with higher mortality in lower-volume settings receive care at facilities with extensive experience. To accomplish this goal, a more dramatic, long-term shift may be achieved by increasing the capacity of and access to higher volume, higher performing cancer facilities and directing patients to high quality, lower volume providers.

iii. Palliative and End of Life Care
Evidence suggests that an effective cancer plan ensures quality of care at the end of life, in particular, the management of cancer-related pain and timely referral to palliative and hospice care. In Japan, palliative care recommendations include promoting specialized, multidisciplinary and comprehensive cancer research and disseminating, utilizing and further developing the results of research, enabling cancer patients to receive appropriate treatment according to their situation; establishing community palliative care networks; increasing palliative care training; and integrating palliative care for other illnesses with palliative care for cancer. Van Beek et al. found that palliative care policies that are stricter and incorporate rights, laws, and system-wide policies have been found to be more effective. For example, the Newfoundland cancer plan’s palliative care goals are to collaborate with professional schools to ensure palliative and end-of-life care is part of the curriculum and to ensure continuing education and standardized training in palliative and end of-life care for all health care providers, volunteer support care providers, patients, families, and the general public.
iv. Survivorship

From the perspective of effectiveness, research suggests that survivorship programs should include rigorous evaluation of implemented activities, increased translation of research to practice, and assessment of dissemination efforts. Programs can include a comprehensive database on cancer survivorship, education and training, public education, patient navigation, and clinical practice guidelines for each stage of cancer survivorship. As well, care plans can assist with coordinating survivorship needs such as cognitive and physical symptoms and social support. For example, in a study by Sprague et al., most patients reported that personalized care plans helped them to understand survivorship issues; however, plans could be more focused on descriptions of follow-up care coordination. Providers may need additional resources such as training and guidebooks to overcome barriers to implementing survivorship care plans as only some currently use them.

4.4 SAFETY

Patient safety is defined by the IOM as “the prevention of harm to patients”, and by the Agency for Healthcare Research and Quality as “freedom from accidental or preventable injuries produced by medical care.” Emphasis is placed on the system of care delivery that prevents errors, learning from errors that occur, and is built on a culture of safety involving health care professionals, organizations, and patients. Vincent suggests that key priorities for patient safety in health systems are to improve reporting, to support research, and to improve leadership and decision support. System strategies for safety discussed in this section include monitoring and reporting systems, peer review and interdisciplinary teams, and preventing avoidable outcomes such as unplanned hospital visits. Monitoring and reporting standards from various health organizations are listed in Box 4.
Box 4: Monitoring and Reporting Standards from Health Organizations

<table>
<thead>
<tr>
<th>SAFETY PRIORITIES AND STANDARDS</th>
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<tbody>
<tr>
<td><strong>Australian Commission on Quality and Safety in Health Care:</strong></td>
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<tr>
<td>- Health professionals, clinical leaders, and governments take action for safety</td>
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<tr>
<td>- Ensure funding models are designed to support safety and quality</td>
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<tr>
<td>- Support, implement and evaluate e-health initiatives</td>
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<tr>
<td>- Design and operate facilities, equipment and work processes for safety</td>
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<tr>
<td>- Take action to prevent or minimize harm from healthcare errors</td>
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<tr>
<td>- Implement better technology and communication</td>
</tr>
<tr>
<td>- Transfer information between providers at referrals and at admission, and discharge from hospital medication safety</td>
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</table>

**References:** Australian Commission on Quality and Safety in Health Care. Australian safety and quality framework for health care. ; 2010.
Australian Commission on Quality and Safety in Health Care. Australian safety and quality framework for healthcare - putting the framework into action: Getting started. ; 2012.

**NHS National Patient Safety Agency, United Kingdom:**
- Give feedback to and engage frontline staff – what should be reported and why
- Focus on learning – root cause of incidents, not blame
- Make it easy to report safety issues through HIT systems and EMRs
- Make reporting matter by investing and bringing together multiple data sources


**World Health Organization – Reporting standards:**
- Non-punitive: Reporters are free from fear of retaliation against themselves or punishment of others as a result of reporting
- Confidential: The identities of the patient, reporter, and institution are never revealed
- Independent: The reporting system is independent of any authority with power to punish the reporter or the organization
- Expert analysis: Reports are evaluated by experts who understand the clinical circumstances and are trained to recognize underlying systems causes
- Timely: Reports are analyzed promptly and recommendations are rapidly disseminated to those who need to know, especially when serious hazards are identified
- Systems-oriented: Recommendations focus on changes in systems, processes, or products, rather than being targeted at individual performance
- Responsive: The agency that receives reports is capable of disseminating recommendations. Participating organizations commit to implementing recommendations whenever possible

**Reference:** World Health Organization. WHO draft guidelines for adverse event reporting and learning systems - from learning to action. ; 2005.
4.4.1 Patient-Led Monitoring and Reporting

Middleton et al. suggest that cancer patients who believe they experienced an adverse event during their diagnosis or care often do not report their concerns.216 One example of a patient safety reporting initiative is “Good Catch” awards at Johns Hopkins Hospital in Baltimore, United States, for individuals who notice and act on safety hazards.217 The initiative is comprised of a number of steps, from identifying the hazard to addressing it through education, which has led to improved knowledge of providers and a system of sustained quality improvement.217 Middleton et al. also found that systems, such as internet-based reporting mechanisms, are an effective method to encourage patients to report such events and to help physicians and health systems respond effectively to adverse events and errors.216 This approach can be facilitated by the development of active surveillance systems that regularly inquire about patients’ symptoms to measure patient-reported outcomes.216 Evidence suggests that testing these systems for effectiveness and vulnerabilities and engaging in a quality improvement process may improve patient safety outcomes.215, 216

4.4.2 Peer Review and Interdisciplinary Teams

Research suggests that patient safety is facilitated through peer review and a multidisciplinary team of health practitioners.216, 218 Peer review is a process by which physicians critically analyze the medical services performed by their colleagues for the purpose of reducing errors and increasing patient safety.218 It is important to identify underlying factors when assessing risk in order to improve patient safety.218 Integrated knowledge translation interventions may be one solution to improving the uptake of clinical guidelines including peer review.219 As well, the Knowledge to Action framework employed by the Canadian Institutes of Health Research is one tool that can be used to assess barriers to these interventions.219 The framework outlines a series of steps, from the generation of knowledge to its application, that improve the implementation of patient safety initiatives in the health care system.219

4.4.3 Reducing Adverse Effects

Adverse events are undesired harmful effects resulting from medical interventions that compromise patient safety.220 For example, unplanned hospital visits during cancer treatment pose a threat to patient safety; however, there are many interventions to prevent them.220 At the system level, McKenzie et al. suggest that the development of systems to support information sharing can help to improve care coordination and reduce these visits.220 As well, more comprehensive, coordinated and multi-disciplinary approaches to care for chemotherapy outpatients can directly link them with primary care providers in order to shift the focus to community care.220 These approaches can be facilitated by actively involving community nurses and general practitioners in community-based care and linking patients with specialist staff through improved communication channels and coordinated care.220 Finally, according to the literature, patients may benefit from detailed education from practitioners comprising identification and management of issues and how to deal with minor problems.220, 221

4.5 TRANSITIONS OF CARE

Transitions of care are grounded in improving patient care, focusing on transitions into and out of the cancer system and coordination of treatment. Transitions refer to changes in the level, location, or providers of care as patients move within the health care system.222 According to the literature,
transitions of care within a patient’s cancer treatment should be seamless, comprehensive and integrated across the care continuum, ensuring optimal care and coordination.\textsuperscript{2-89, 100, 101, 127-129} Models of care, risk stratification, and information management and health information technology are discussed in this section. Box 5 outlines common transitions of care priorities in cancer plans.

**Box 5: Transitions of Care Priorities in Cancer Plans**

<table>
<thead>
<tr>
<th>TRANSITIONS OF CARE PRIORITIES</th>
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<tbody>
<tr>
<td>• Ensure seamless patient transitions between points of care through the operation of existing structures in parallel\textsuperscript{2-89, 100, 101, 127-129}</td>
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<tr>
<td>• Establish care pathways for each stage of the cancer continuum\textsuperscript{9, 11}</td>
</tr>
<tr>
<td>• Ensure a timely cancer diagnostic process and diagnostic pathways through diagnostic assessment programs (DAPs)\textsuperscript{9-51, 65, 67-85, 101}</td>
</tr>
<tr>
<td>• Improve models of care for survivorship using survivorship care plans\textsuperscript{9, 11}</td>
</tr>
<tr>
<td>• Increase awareness of cancer symptoms for providers and the public to improve early detection\textsuperscript{9-12, 22, 65}</td>
</tr>
<tr>
<td>• Prevent unnecessary admission to the hospital\textsuperscript{2-67, 127-129}</td>
</tr>
<tr>
<td>• Use risk stratification to assess each patient’s health risk status to develop a personalized care plan.\textsuperscript{9, 11, 45-47, 129}</td>
</tr>
<tr>
<td>• Improve continuity of care at the local level through network organization and Health Information Technology\textsuperscript{9}</td>
</tr>
</tbody>
</table>

Evidence suggests that integrated care should be coordinated along the cancer continuum at the system level, between organizations, focusing on transitions, and patient care.\textsuperscript{223, 224} At the provider level, care should be delivered by interdisciplinary teams, where each member understands their role and the roles of the team members. For this to occur, existing structures can be integrated and can operate in parallel.\textsuperscript{223, 224} Increased integration enables an efficient transition of care for patients.\textsuperscript{225, 226} Large system transformations (LST) facilitate integration by reducing regionalization, and taking a whole system approach to improving patient care and population-level patient outcomes.\textsuperscript{227-229} LST emphasizes whole system engagement and thinking, while acting as one component in the development of key strategies, targets and actions, fostering and supporting interdisciplinary and inter-organizational connections along with a long-term vision. Engagement between patients, families, and providers is a cornerstone to integration.\textsuperscript{229-231}

Improvements to transitions of care can be applied in various healthcare settings. Some models of care focus on interventions, such as Diagnostic Assessment Programs, and survivorship programs that improve integration for patient care throughout the cancer journey. In addition, techniques such as risk stratification, as well as utilizing information management and health information technology are applications which assist health care providers in improving patient care and the transitions of care when undergoing cancer treatment.
4.5.1 Models of Care

i. Diagnostic Assessment Programs (DAPs)

The main strategy for integrated diagnosis is the implementation of diagnostic assessment programs (DAPs), which reduce wait times and increase inter-professional communication and collaborative care.\textsuperscript{232, 233} DAPs are organized, centralized systems with multidisciplinary teams and are considered to be the optimal organization for the delivery of diagnostic cancer assessment services.\textsuperscript{232} DAPs ideally include units for each disease site, in order to tailor services to the unique aspects of each disease. DAPs can also include special cancer assessment clinics to facilitate the diagnostic process.\textsuperscript{232} The cancer assessment clinic acts as a central access point offering coordinated and streamlined multidisciplinary care, where a patient with a suspicion of cancer enters the clinic which acts as the gateway and triage centre for access to coordinated cancer services.\textsuperscript{232} Under this system, important collaborative linkages, known as “communities of practice,” have been established across regions, and have led to improvements in patient and system outcomes.\textsuperscript{228, 232} Currently, Ontario has 30 DAPs that help patients through their diagnostic journeys for thoracic (lung), prostate and colorectal cancers, and more DAPs are being developed and implemented across the province.\textsuperscript{229}

ii. Survivorship Programs

Survivorship programs are specifically designed for patients who have completed their initial treatment for cancer.\textsuperscript{234, 235} Integration within survivorship programs provides patients with effective multidisciplinary care.\textsuperscript{7, 236, 237} When transitioning from treatment to a follow-up care plan, providers can educate survivors regarding their transitions and the available resources with the assistance of a Survivorship Care Plan (SCP).\textsuperscript{7, 234, 238} SCPs assist patients in transitioning from seeing the specialist on a regular basis, to their general practitioner, which reduces confusion.\textsuperscript{7, 234, 239} Since SCPs can be created through the use of EMRs, they can be shared among other providers and updated on a regular basis.\textsuperscript{7, 234, 239}

4.5.2 Risk Stratification

Risk stratification begins with a continuous and systematic assessment of each patient’s health risk status, using criteria from multiple sources to develop a personalized care plan.\textsuperscript{240, 241, 240, 242} It can also be used in predictive modelling, or identifying patients with complex needs and placing them in categories, in order to direct resources accordingly.\textsuperscript{243, 244} Moreover, risk stratification is used in disease management, where the model identifies patients with a long-term condition (or risk of a long-term condition, whose management may be sub-optimal against current clinical guidelines and protocols, thereby increasing sustainability, effectiveness, and improving the transitions of care of the patient across primary care and hospital settings).\textsuperscript{245, 246} This is often completed with risk profiling tools, which encompass needs-based budgeting, performance management and strategic planning.\textsuperscript{245, 246} For example, profiling tools for risk stratification are currently being used in the South Central region of England, where the processes have assisted in increased sustainability and integration across the region.\textsuperscript{247} Risk stratification processes in England have given local authorities the ability to focus on commissioning and ensuring the kind of care and support that is targeted to meet the specific needs of their local populations, as well as finding local solutions to improve services.\textsuperscript{247}
4.5.3 Information Management and Health Information Technology

Information systems are integral to maintaining and sustaining integrated health systems. The information technology systems enhance communication, patient pathways, and the integration of clinical and financial information. Health information technology (HIT) can be leveraged by providers to improve interdisciplinary care and communication through knowledge translation, or by empowering patients to be involved in their cancer care. For example, Adjuvant! (www.adjuvantonline.com), is a HIT tool used to help health professionals and patients with early stage cancer to discuss the risk and benefits of getting additional therapy after surgery, making estimates of the risk of negative outcome without adjuvant chemotherapy.

4.6 EQUITY

Equity is described by the World Health Organization as “the absence of avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically.” The provision of equitable care is a challenge due to the complexity and multidisciplinary nature of cancer and cancer treatment. Inequity in access to healthcare implies that there are individual differences in access to services, according to health needs, which are perceived as ethically problematic or of social concern. Health inequities can be caused by differences in income, race or ethnicity, sex, distance to closest cancer centre, or sexual orientation. Examples of approaches to reducing inequities include taking a whole government approach and introducing public policies to impact care, reducing barriers to access within underserved populations, and strengthening community partnerships at a local level. Priorities for equity in cancer plans are listed in Box 6.

Box 6: Equity Priorities in Cancer Plans

<table>
<thead>
<tr>
<th>EQUITY PRIORITIES</th>
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</thead>
<tbody>
<tr>
<td>- Ensure health education for all</td>
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<tr>
<td>- Improve health literacy for all</td>
</tr>
<tr>
<td>- Improve research, data, and public policy as they relate to equity</td>
</tr>
<tr>
<td>- Improve access to care for all along the entire continuum</td>
</tr>
<tr>
<td>- Locate cancer care services based on need</td>
</tr>
<tr>
<td>- Review existing social policies and initiatives to increase access to services along the care continuum</td>
</tr>
<tr>
<td>- Review the financial and treatment aspects of access to services</td>
</tr>
<tr>
<td>- Improve access and funding for drugs for all</td>
</tr>
<tr>
<td>- Explore research and advocacy capacity as they pertain to accessibility</td>
</tr>
<tr>
<td>- Improve accessibility to high quality, safe cancer treatment services for specific target groups through the use of telemedicine and models of care</td>
</tr>
<tr>
<td>- Reduce wait times for cancer surgery, radiation, and systemic treatment for the entire population</td>
</tr>
</tbody>
</table>
4.6.1 Whole Government Approach to Equity
Over the last few years, evidence has shown an increase in longevity and life expectancy in Canada and other economically developed nations.\textsuperscript{260} However, inequalities in health are still very prevalent in these developed nations.\textsuperscript{260} Therefore, system level strategies can be implemented to improve health care, to reduce barriers to health, and to improve health equity. The \textit{Health in All Policies} approach (HiAP) was first used in Europe in 2006, with the aim of collaborating across sectors, such as transportation, agriculture, and housing, achieving common health goals, and improving the social determinants of health.\textsuperscript{260, 261} Since 2011, the Welsh Government has been attempting to tackle health inequities while employing a HiAP approach and setting up cross-sectional and inter-level (national/local) collaboration.\textsuperscript{262} Lastly, the \textit{Action Plan} for health equity was developed to target the region of Vastra Gotaland in Sweden to create preconditions for health equity and to facilitate cooperation between stakeholders. The plan aims to offer the best opportunities for reducing health inequalities through three public health challenges: safe and satisfactory early life conditions, increased participation in working life, and aging with quality of life.\textsuperscript{263}

Within Canada, the Winnipeg Regional Health Authority introduced the \textit{Health for All} health equity action plan, which aims to close the health equity gap in Winnipeg. This collaborative approach has been implemented to move towards greater health equity in the areas of mortality and life expectancy; illness, injury and wellness; health risks and behaviours; early beginnings and education; and employment.\textsuperscript{264, 265} Ontario’s \textit{Excellent Care for All} strategy is one of the government’s steps to improve the quality of Ontario’s health care system for all patients. This strategy will ensure that patients are at the centre of the health care system, that patient care will be based on best evidence and standards, and that patients receive quality care.\textsuperscript{266}

4.6.2 Barriers to Access
Underserved populations can be defined as people without adequate access to health-care services, and who may have characteristics such as low socioeconomic status, limited literacy and/or English language proficiency, ethnic minority status, geographic isolation, and age vulnerability.\textsuperscript{267}

\textit{i. Ethnicity and Culture}
Ethnicity refers to the fact or state of belonging to a social group that has a common national tradition,\textsuperscript{268} while culture describes the ideas, language, customs, and social behaviour of a particular people or society.\textsuperscript{269} Targeted approaches to health equity have been used in an effort to eliminate health disparities among populations experiencing a disproportionate burden of disease, disability and death.\textsuperscript{247, 270, 271} One essential tool for facilitating equitable practices is cross-cultural skills.\textsuperscript{56, 265, 272, 273} Research highlights the importance for healthcare professionals to possess cross-cultural skills in order to deliver culturally competent, patient-centered, and individualized care that eliminates the burden of health disparities.\textsuperscript{274, 275} These skills can be developed through practitioner education and culturally competent organizations and environments.\textsuperscript{274, 275} Cancer and health care may be delivered alongside community cultural programs and culturally based education.\textsuperscript{274, 276} Kagawa-Singer et al. indicate that culturally sensitive communication and constant collaboration with patients, their families, and community representatives are the keys to reducing cancer care disparities on a daily basis.\textsuperscript{274} For example, to increase breast cancer screening rates in the African-American population in the United
States, initiatives were implemented to establish community coalitions and to provide advocacy training for community leaders to become cancer advocates. The advocates used client reminders (printed materials or telephone reminders), small media interventions, one-on-one education, and multi-component media-interventions, which increased screening awareness and participation.

**ii. Age**

Although the incidence of cancer increases with age, treatment inequalities exist with both older adults, and adolescents/young adults. The negative personal, societal, and socioeconomic impacts of potential years of life lost are substantial and can be lessened through various strategies. Evidence suggests that these strategies include awareness, education, specific design of care pathways, quality of life, developmental transition strategies, continuity of care, and survivorship programs. It is important for the special needs of these patient groups to be taken into account. To be successful, these approaches can use the principles of population-based cancer control, including comprehensive health management, integrated acute care, individualized care, and population health. For instance, one of the UK cancer plan’s equity goals is to develop a two year pilot programme to improve intervention rates for people over 70 who have a cancer diagnosis. The project aims to identify, test and evaluate a simpler way to comprehensively assess an older person for cancer treatment, to provide practical support and information to aid shared decision-making, and to train professionals involved in this pathway to promote age equality and address age discrimination. This approach has led to increased patient satisfaction through being engaged in the shared decision-making process.

**iii. Geography**

Variations in access to health care and health outcomes are associated with geography. Geography may directly affect an individual’s health status and may play an important role in the nature of the healthcare delivered. Geographical distribution of healthcare facilities may affect utilization, through the unequal opportunity of access to services. For instance, Manitoba has several programs in place to address geographical barriers. Firstly, Community Cancer Programs in rural locations enable cancer treatment and services closer to home. As well, the Uniting Primary Care and Oncology Network facilitates communication and collaboration between primary care and specialist providers through access to EMRs. Finally, telecommunication programs are in place which link community sites and academic oncology centers and facilitate direction and care without travel.

### 4.6.3 First Nations, Inuit, and Métis (FNIM)

Many of Canada’s national health equity goals focus on First Nations, Inuit, and Métis (FNIM) peoples. Pathways to improve health equity for these populations include increasing community-based health human resources and capacity, as well as awareness around cancer control and chronic disease prevention. Current research is utilizing a collaborative perspective with aboriginal peoples in developing and implementing the use of culturally responsive cancer control resources and services, including leading models of cancer care in rural and remote locations. An example of an FNIM initiative is Cancer Care Ontario’s Aboriginal Cancer Strategy, which was created to address FNIM cancer control issues and needs in Ontario. The strategy outlines CCO’s commitment to improving the FNIM
patient journey, and the program is currently engaging and collaborating with core FNIM health tables. 266

4.6.4 Community Partnerships

Community partnerships foster community involvement, which can open new opportunities for individuals to be empowered, and utilize their own resources to attain a desired outcome. 282, 292, 293 For instance, a goal of Alberta’s cancer plan is to support, engage and integrate primary health care providers in the delivery of cancer services in the home or community and to underserved populations. 21 To facilitate this approach, primary health care providers partner with community organizations to streamline and standardize the referral process to improve access to specialized cancer services. 21

5.0 IMPLEMENTATION, MONITORING, AND ACCOUNTABILITY STRATEGIES

Implementation, monitoring and accountability are methods that jurisdictions use to implement plans, budget for strategic priorities and initiatives, monitor and report on progress, and determine accountability to ensure the organization is meeting the goals of the plan.

5.1 IMPLEMENTATION STRATEGIES

Some jurisdictions developed detailed action plans for implementing their cancer plans. These action plans include responsibility for delivering actions, steps that can be undertaken within existing resources, identifying areas where additional resources will be required, and processes that will manage, monitor and review implementation of recommendations. 9-11, 14, 16, 18, 20, 22, 23, 32, 43, 63, 64, 79, 80, 86, 90, 100, 294 Many jurisdictions create committees for each strategic objective within their cancer plan or health system strategy to have consensus on recommendations for action. 9-11, 18, 32, 90 The Northern Ireland cancer plan recommends that these committees can create annual work programmes with key advisory groups in order to ensure that actions are addressed, and that there is access to the latest advice and expertise. 10 In some cases, when recommendations in the cancer plan are out of scope for the jurisdiction implementing the plan, there is an opportunity to take a more integrated, multi-sectorial approach. 70 Another method for implementation in a number of cancer plans is to maintain a permanent council, managed by a neutral party, which reports directly to the jurisdiction to oversee implementation of the recommendations and works to improve cancer care. 32, 125, 295 In many cancer plans, committees and councils are also responsible for developing a detailed plan for budgeting and resource allocation, which is frequently reviewed. 1, 9, 112-119, 32, 125, 295, 296, 297 Research suggests that resource allocation depends on population distribution, the commonness of certain cancers, and the prioritization of strategic objectives. 1, 9, 112-119 In order to aid this process, the UK cancer plan suggests developing guidance documents for each strategic priority, including a summary of the strategic priority, basic costs for each initiative, and the importance of the priority in comparison to others. 9 At a local or regional level, similar committees or councils can be developed to address regional cancer plan initiatives. 32, 125, 295, 298 Finally, patient preferences, attitudes and experiences can help to inform cancer
Research suggests engaging in a public consultation process to ensure strategic priorities and initiatives are supported and that implementation occurs as planned. Examples of implementation guidelines from health organizations are described in Box 7.

Box 7: Examples of Implementation Guidelines

<table>
<thead>
<tr>
<th><strong>Canada Health Infoway</strong> Implementation steps:</th>
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<tbody>
<tr>
<td>1. Creating vision</td>
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<tr>
<td>2. Articulating why change needs to happen and when</td>
</tr>
<tr>
<td>3. Harnessing support</td>
</tr>
<tr>
<td>4. Engaging key decision makers, resource holders and those impacted by the change</td>
</tr>
<tr>
<td>5. Articulating goals</td>
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<tr>
<td>6. Nominating roles</td>
</tr>
<tr>
<td>7. Assigning responsibility to specific stakeholders for the various tasks and outcomes</td>
</tr>
<tr>
<td>8. Entrenching changes</td>
</tr>
<tr>
<td>9. Institutionalizing the changes</td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th><strong>Centres for Disease Control ‘Guidance for Comprehensive Cancer Control Planning’</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select a priority through a data-driven and stakeholder driven prioritization process for the goals and initiatives for a set timeframe</td>
</tr>
<tr>
<td>2. Assemble a team with a leader and assess the skills of the organization to determine whether additional expertise is required for the cancer plan</td>
</tr>
<tr>
<td>3. Organize a plan of action for each priority</td>
</tr>
<tr>
<td>4. Obtain implementation resources</td>
</tr>
<tr>
<td>5. Attain widespread support from internal and external stakeholders and partners</td>
</tr>
<tr>
<td>6. Track implementation progress and make adjustments if and when necessary</td>
</tr>
<tr>
<td>7. Address problems as they arise and revise the plan of action if necessary</td>
</tr>
</tbody>
</table>


5.2 MONITORING AND REPORTING STRATEGIES

Monitoring and reporting on the progress of a cancer plan is important to determine whether goals are being accomplished and to ensure accountability to the public. Three examples of monitoring and reporting strategies include the development of: quality frameworks, outcome indicator frameworks, and evaluation committees.

The first example of a monitoring and reporting strategy is a quality framework. These can be comprised of quality in cancer control groups, which can develop quality guidelines for site-specific cancers; a statutory system of licensing and accreditation; an information model and infrastructure to address the needs of patients, providers, and policymakers; and a health technology assessment panel, which develops a model of assessment for the introduction of proven technologies. \(^{90, 299-304}\) Another strategy is to develop an outcome indicator framework based on the strategic objectives and initiatives.
for the plan, as is described in the Welsh cancer plan. In this strategy, each stakeholder creates a quality delivery plan in order to monitor progress. The goals are to adopt appropriate quality indicators along the cancer continuum, incorporating the collection of data to facilitate the monitoring of waiting times from suspected diagnosis to treatment, in order to benchmark service compliance with standards and achievement of quality. As well, the strategy includes a process whereby quality measures are made known to people with cancer, primary health care providers, and other members of the care team. Finally, the literature suggests forming an evaluation committee, with the responsibility of approving appropriate methods of gathering data around the actions and targets and monitoring progress against the targets.

Evaluating the cancer plan is an ongoing process, including both process and outcome evaluation approaches. Potential process questions can focus on evaluating partnership satisfaction and involvement, analyzing areas for improvement, determining priority implementation areas, and identifying the need for new partnerships.

5.2.1 Measuring Patient Experience

There are a number of different ways of measuring patient experience and uses for the data. Some strategies of applying patient experience measures include using provider-level data for quality improvement, using patient demographics to better target care for different populations, identifying system issues in quality, establishing financial incentives for patient experience and incorporating patient experience into certification requirements. At the operational level, patient feedback has been effective in highlighting issues that require immediate action. For example, the Midwest Hospital in Oklahoma City, United States uses feedback from patients to prioritize problems requiring attention. Complaints are a form of qualitative information provided by patients and health care consumers. To effectively use complaints, qualitative data, patient experience data and rapid feedback there is a requirement for standardized collection, continual and consistent analysis and timely feedback to front-line staff and management to ensure any problems or concerns are addressed and to improve the practice and processes in an ongoing effort.

The collection of patient experience data can be challenging especially when it relates to the duration of time it takes from the health care received and when the patient will receive a questionnaire on their care experience or is approached for follow-up. As a result of this, there has been a movement to real-time measurement, through methods such as social media and online communities. The real time gathering of patient opinions on their health care through the internet has been proposed as a viable collection method which could have benefits in terms of early warning on care that was not acceptable and change the relationship between patients and providers. For example, the Mayo Clinic is the first healthcare organization with a Centre of Social Media dedicated solely to the dissemination and gathering of data from social media sites. Online communities are also an important part of health care organization services due to the increase in chronic conditions requiring long-term management and the need for patients to have personalized information on their health and condition.
5.3 ACCOUNTABILITY FOR CANCER PLANS
The government or organization that develops the cancer plan is often responsible for overseeing system-level implementation by assigning accountability to stakeholders and monitoring overall performance.\textsuperscript{63} When assigning accountability to stakeholders, evidence suggests that a contractual model can be used that specifies objectives, deliverables, and timing.\textsuperscript{87, 315} As well, Hager et al. highlight that regional health authorities can be accountable for meeting support and facilitation, data collection, and a variety of other collaborative efforts to enhance infrastructure in the planning and implementation process.\textsuperscript{307} Some regional health authorities serve as the fiscal agent accountable for the tasks in the cancer plan and clear, detailed plans for each stakeholder from the outset are important.\textsuperscript{307} Moreover, the New South Wales, Australia cancer plan states that clinical leadership should advise on key clinical issues and ensure that work in such areas is coordinated appropriately at a system level.\textsuperscript{63} The plan also suggests that health professional organizations can play a role in implementing the cancer plan through workforce training, professional development, and standards of care.\textsuperscript{63} Finally, the cancer plan from New South Wales highlights the jurisdiction’s intentions to partner with non-governmental organizations, which have the ability to support areas such as health promotion, palliative care, advocacy, and research.\textsuperscript{63}

6.0 FOCUS OF THE OCP IV REVIEW
The focus of the discussion at the event will be the themes discussed in the section titled “4.0 Priorities and Initiatives in Cancer Plans” of this scan. Each topic will be introduced by an individual with content expertise as well as a patient or caregiver, providing examples of successful initiatives, lessons learned, experiences, and specific considerations for the strategic objectives. Attendees at the event will discuss recommendations for the strategic objectives and initiatives to meet the goals, as well as considerations for implementation, including barriers and enablers.
7.0 APPENDIX

List of Jurisdictional Cancer and Non-Communicable Disease Plans

<table>
<thead>
<tr>
<th>Plan Title</th>
<th>Author</th>
<th>Target Audience</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Path to Cancer Control in Alabama</td>
<td>Comprehensive Cancer Control Coalition Alabama</td>
<td>Made reference to public</td>
<td>2011-2015</td>
</tr>
<tr>
<td>Alaska Comprehensive Cancer Control Plan</td>
<td>Department of Health and Social Services Division of Public Health</td>
<td>Made reference to public</td>
<td>2005-2010</td>
</tr>
<tr>
<td>The National Cancer Control Program 2011-2020 (Albania)</td>
<td>National Committee for Cancer Control in Albania</td>
<td>Made reference to public</td>
<td>2011-2020</td>
</tr>
<tr>
<td>Changing our Future – Alberta’s Cancer Plan to 2030</td>
<td>Government of Alberta</td>
<td>Made reference to public</td>
<td>2013-2030</td>
</tr>
<tr>
<td>Arkansas Cancer Plan – A Framework for Action</td>
<td>The Arkansas Cancer Coalition</td>
<td>Made reference to public</td>
<td>2005-2010</td>
</tr>
<tr>
<td>Australia Northern Territory Cancer Plan</td>
<td>Northern Territory Government</td>
<td>Made reference to public</td>
<td>2013-2016</td>
</tr>
<tr>
<td>Belgium National Cancer Plan</td>
<td>Ministry of Health</td>
<td>Internal for government/ healthcare system</td>
<td>2008-2010</td>
</tr>
<tr>
<td>Sustaining Action Toward a Shared Vision - 2012-2017 Strategic Plan (Canada)</td>
<td>Canadian Partnership Against Cancer</td>
<td>Made reference to public</td>
<td>2012-2017</td>
</tr>
<tr>
<td>Colorado Cancer Plan</td>
<td>Colorado Cancer Coalition</td>
<td>Made reference to public</td>
<td>2010-2015</td>
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<tr>
<td>National Cancer Control Strategy Cyprus</td>
<td>Ministry of Health</td>
<td>Made reference to public</td>
<td>2010-2015</td>
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<tr>
<td>National Cancer Control Program of the Czech Republic</td>
<td>Czech Oncological Society Committee</td>
<td>Internal for government/ healthcare system</td>
<td>2005-2010</td>
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<tr>
<td>Plan Title</td>
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<td>Target Audience</td>
<td>Timeframe</td>
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<tr>
<td>Turning Action into Results – The Next Four-Year Plan (Delaware)</td>
<td>Delaware Cancer Consortium</td>
<td>Made reference to public</td>
<td>2007–2011</td>
</tr>
<tr>
<td>National Cancer Plan II – Denmark National Board of Health Recommendations for Improving Cancer Healthcare Services</td>
<td>Denmark National Board of Health</td>
<td>Internal for government/healthcare system</td>
<td>2005</td>
</tr>
<tr>
<td>Short summary of Cancer plan III, Denmark</td>
<td>Denmark National Board of Health</td>
<td>Internal for government/healthcare system</td>
<td>2010</td>
</tr>
<tr>
<td>District of Columbia Cancer Control Plan (Executive Summary)</td>
<td>DC Cancer Consortium</td>
<td>Made reference to public</td>
<td>2013-2018</td>
</tr>
<tr>
<td>Fiji Non-Communicable Diseases Prevention and Control Strategic Plan 2010-2014</td>
<td>Ministry of Health</td>
<td>Made reference to public</td>
<td>2010-2014</td>
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<tr>
<td>Florida Cancer Control Plan</td>
<td>Florida Department of Health</td>
<td>Made reference to public</td>
<td>2010</td>
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<tr>
<td>Summary of Finnish National Cancer Plan</td>
<td>Cancer Society of Finland</td>
<td>Internal for government/healthcare system</td>
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<tr>
<td>France Cancer Plan 2009-2013</td>
<td>French Ministry of Health and Sport</td>
<td>Internal for government/healthcare system</td>
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<td>Hungarian National Cancer Control Programme</td>
<td>Hungarian National Cancer Control Programme</td>
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<tr>
<td>India National Cancer Control Programme</td>
<td>National Cancer Control Programme</td>
<td>Internal for government/healthcare system</td>
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<td>Indiana Cancer Control Plan 2010-2014</td>
<td>Indiana Cancer Consortium</td>
<td>Made reference to public</td>
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<tr>
<td>2012-2017 Iowa Cancer Plan</td>
<td>Iowa Cancer Consortium</td>
<td>Made reference to public</td>
<td>2012-2017</td>
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<tr>
<td>A Strategy for Cancer Control in Ireland</td>
<td>National Cancer Forum</td>
<td>Made reference to public</td>
<td>2006</td>
</tr>
<tr>
<td>Technical Policy Documentation on the Reduction of Cancer Disease Burden - for the years 2010-2013 (Italy)</td>
<td>General Directorate for Prevention</td>
<td>Internal for government/healthcare system</td>
<td>2010-2013</td>
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<tr>
<td>Kentucky Cancer Action Plan – A Blueprint for Cancer Prevention and Control in our State</td>
<td>Kentucky Cancer Consortium</td>
<td>Made reference to public</td>
<td>2012</td>
</tr>
<tr>
<td>Malaysia National Strategic Plan for Non-Communicable Disease</td>
<td>Ministry of Health Malaysia</td>
<td>Made reference to public</td>
<td>2010-2014</td>
</tr>
<tr>
<td>A Strategy for the Prevention and Control of Non-communicable Disease in Malta</td>
<td>Ministry for Health, the Elderly and Community Care</td>
<td>Made reference to public</td>
<td>2010-2020</td>
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<tr>
<td>Maryland Comprehensive Cancer Control Plan</td>
<td>Department of Health and Mental Hygiene</td>
<td>Made reference to public</td>
<td>-2015</td>
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<td>Massachusetts’ Comprehensive Cancer Prevention and Control Plan 2012-2016</td>
<td>Massachusetts Department of Public Health</td>
<td>Made reference to public</td>
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<tr>
<td>Cancer Plan Minnesota 2011-2016</td>
<td>Minnesota Cancer Alliance</td>
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<td>National Program against oncological diseases in the Republic of Moldova for the years 2008-2012</td>
<td>National Program against Cancer</td>
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<td>Nebraska Comprehensive Cancer Control – State Plan 2011-2016</td>
<td>Department of Health and Human Services Nebraska, Nebraska Comprehensive Cancer Control Program, Nebraska Cancer Coalition</td>
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<td>New Jersey Comprehensive Cancer Control Plan</td>
<td>Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey</td>
<td>Internal for government/healthcare system</td>
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<td>New Mexico Cancer Plan 2012-2017 - A document to guide collaborative cancer control efforts throughout the state</td>
<td>New Mexico Cancer Council</td>
<td>Made reference to public</td>
<td>2012-2017</td>
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<td>Cut out Cancer in Oklahoma – Oklahoma Cancer State Plan 2006-2010</td>
<td>Oklahoma State Department of Health</td>
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<td>The Pennsylvania Comprehensive Cancer Control Plan</td>
<td>Pennsylvania Cancer Control Consortium</td>
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<td>National Cancer Control Programme (Poland)</td>
<td>Council on Cancer Control</td>
<td>Internal for government/ healthcare system</td>
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<td>Portuguese National Cancer Strategy – Summary</td>
<td>Government of Portugal</td>
<td>Internal for government/ healthcare system</td>
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<td>National Cancer Strategy - The Path to Excellence (Qatar)</td>
<td>State of Qatar Supreme Council of Health</td>
<td>Made reference to public</td>
<td>2011-2016</td>
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<td>Strategic Directions for Cancer Prevention and Control (Queensland)</td>
<td>Division of the Chief Health Officer</td>
<td>Made reference to public</td>
<td>2009-2012</td>
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<td>Rhode Island Comprehensive Cancer Control Plan 2007</td>
<td>Partnership to Reduce Cancer in Rhode Island</td>
<td>Made reference to public</td>
<td>2007</td>
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<td>Beyond the Horizon in Health Care – Strategic Plan 2011-2014 (Saskatchewan)</td>
<td>Saskatchewan Cancer Agency</td>
<td>Made reference to public</td>
<td>2011-2014</td>
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<td>National Program Serbia Against Cancer</td>
<td>Ministry of Health</td>
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<td>South Carolina Comprehensive Cancer Control Plan</td>
<td>South Carolina Cancer Alliance</td>
<td>Made reference to public</td>
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<td>Cancer Framework and Strategic Cancer Plan 2010-2013 (Tasmania)</td>
<td>Department of Health and Human Services</td>
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<td>Texas Cancer Plan 2012</td>
<td>Cancer Prevention and Research Institute of Texas</td>
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<td>National Cancer Control Program 2011-2015</td>
<td>Republic of Turkey Ministry of Health Department of Cancer Control</td>
<td>Made reference to public</td>
<td>2011-2015</td>
</tr>
<tr>
<td>Improving Outcomes: A Strategy for Cancer (UK)</td>
<td>Department of Health</td>
<td>Internal for government/healthcare system</td>
<td>2011-2015</td>
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<td>Western Australia Cancer Plan 2012–2017</td>
<td>Department of Health, State of Western Australia</td>
<td>Made reference to public</td>
<td>2012-2017</td>
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<td>The West Virginia Cancer Plan</td>
<td>Mountains of Hope West Virginia Cancer Coalition</td>
<td>Made reference to public</td>
<td>2007</td>
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<tr>
<td>Wisconsin Comprehensive Cancer Control Plan 2010-2015</td>
<td>University of Wisconsin Carbone Cancer Center and Wisconsin Department of Health Services</td>
<td>Made reference to public</td>
<td>2010-2015</td>
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</table>
REFERENCES


72. South Carolina Comprehensive Cancer Control Plan [Internet]; c2011 [cited 2014 02/05].


82. District of Columbia Cancer Control Plan (Executive Summary) [Internet]; c2013 [cited 2014 02/05]. Available from: http://www.iccp-portal.org/cancer-plans.


126. Boosting Innovation and Cooperation in European Cancer Control: Key findings from the European Partnership for Action Against Cancer [Internet]; c2013 [cited 2014 02/05]. Available from: http://www.epaac.eu/.


150. Quality of life and patient-reported outcomes in cancer: a guide for advocates [Internet]; c2014 [cited 2014 05/21]. Available from:


153. Hibbard JH GJ. What the evidence shows about patient activation: Better health outcomes and care experiences; fewer data on costs. Health Affairs 2013;32(2).

154. Lloyd C KR. Consumer and carer participation in mental health services. Australasian Psychiatry 2013;11(2).


189. Canada Health Infoway. eHealth strategic plan. ; 2011.


197. Institute of Medicine [Internet]: Institute of Medicine; c2014 [cited 2014 05/02]. Available from: http://iom.edu/.


229. Diagnostic Assessment Programs [Internet]: Cancer Care Ontario; c2014 [cited 2013 05/30]. Available from: https://www.cancercare.on.ca/pcs/diagnosis/diagprograms/.


246. Shortell, S., Addicott, R., Walsh, N., & Ham, C. Accountable care organisations in the united states and england. 2014.


262. Fletcher A. Working towards “health in all policies” at a national level. BMJ 2013.


300. Transforming the Delivery of Health and Social Care: The case for fundamental change [Internet]; c2012 [cited 2014 02/05]. Available from: http://www.kingsfund.org.uk/.

301. Co-ordinated Care for People with Complex Chronic Conditions [Internet]; c2013 [cited 2014 02/05]. Available from: http://www.kingsfund.org.uk/.

302. Delivering better services for people with long-term conditions - Building the house of care [Internet]; c2013 [cited 2014 02/05]. Available from: http://www.kingsfund.org.uk/.


311. Bjertnaes OA. The association between survey timing and patient-reported experiences with hospitals: Results of a national postal survey. BMC Medical Research Methodology 2012;12(13).

