



Provincial Health Services Authority

BC Cancer Clinical Care Pathways Methodology

Phase 1: Overarching Clinical Care Pathway

Version 1: 20 October 2023

Project Overview

Introduction

BC Cancer's mission is to reduce the burden of cancer in BC. BC Cancer works collaboratively with the BC Ministry of Health and its overall governing body, the Provincial Health Services Authority (PHSA), to deliver high quality integrated and standardized cancer care across the province.

Purpose

The purpose of this document is to outline the methodology used to develop the BC Cancer Overarching Clinical Care Pathway and associated clinically relevant benchmarks in order to ensure clarity, transparency, and reproducibility of future revisions and iterations of this work.

Background

Standardized cancer care pathways and clinically relevant benchmarks improve outcomes for patients with all types of cancer by ensuring that efficient navigation of multi-disciplinary teams is facilitated (Hoeve et al., 2020; Rotter et al., 2012; Vanhaecht et al., 2006). In 2017, international oncology organizations developed standards by which proposed oncology clinical care pathways should be developed (Zon et al., 2017). This provides structure and support for sound clinical pathway development.

In 2022/23, BC Cancer Tumour Group Council and Provincial Programs initiated the BC Cancer Tumour Groups Clinical Care Pathways Program. The goal was to develop standardized cancer care pathways and corresponding clinically relevant benchmarks that support the continuous provision of high quality care and improved patient outcomes. This work was intended to support all health care professionals in the delivery of cancer care across BC, from pre-diagnosis through to end-of-life care. This program was organized in two phases, the first to lay out a general, overarching framework representing the cancer trajectory and any associated overarching clinically relevant benchmarks. The second phase focused on the development of Tumour Group disease-specific clinical care pathways to support standardization of clinical care and the identification of corresponding clinically relevant benchmarks to improve patient outcomes. This report will focus only on phase one, the overarching clinical care pathway development and phase two will be addressed in a separate report.

Governance Structure and Leadership

Under the guidance of the Senior Executive Director, Clinical Programs & Policy and the Executive Director, Provincial Programs, the project team included the Tumour Group Council Chair and Provincial Programs Director, manager, project coordinator and policy analyst. BC Cancer Tumour Group Council membership and BC Cancer Senior Clinical Leadership Committee (SCLC) provided final sign-off.

Methodology: Overarching Clinical Care Pathway & Clinically Relevant Benchmarks (Phase 1)

Definition and Purpose

An overarching clinical care pathway was developed to provide a general framework for all tumour group clinical pathways. The goal of the overarching clinical care pathway was to reflect a high-level overview of the care path that a general person with cancer should receive.

The pathway is organized around six main components of any care pathway in oncology and corresponding clinically relevant benchmarks that may drive optimization of high quality patient care and outcomes.

These include:

- Pre-diagnosis
- Diagnosis
- Treatment
- Post-treatment care whether it may be recovery/surveillance/survivorship or
- Progressive disease
- Palliation/end of life care

These components were developed with review of the patient experience trajectory in states of chronic illness, first published by Edward Suchman in 1965, and subsequently reviewed and updated by Corbin and Strauss in the mid 1990s. This model of organizing and thinking of chronic illnesses also has roots in many medical school curricula.

Target Audiences and Vision

Health care providers, including those at BC Cancer Centres, Community Oncology Networks (CON) sites, Physicians, General Practitioners in Oncology (GPOs), Nurse Practitioners (NPs), Nursing and Allied Health staff, and other hospitals and provider organizations across the province are expected to benefit from an evidence based standard care pathway. The overarching pathway will reside on the BC Cancer website, in a location that is easy to reach so that it will be readily accessible by the target audience.

Key Stakeholder Engagement

The BC Cancer Overarching Clinical Care Pathway was developed through both a depth and breadth of expertise which included forty-six members including Executive Leadership, Provincial Medical Directors, Regional leadership (both clinical and operational), Tumour Group Council (including a representative from each Tumour Group) and specialty services including Indigenous Cancer Care, Patient and Family Experience, and Supportive Care. Representation of all tumour sites, clinical roles and support services was carefully sought. Individuals were invited to complete modified Delphi surveys to provide their consensus on the terminology and flow of a draft BC Cancer Overarching Clinical Care Pathway, and corresponding clinically relevant benchmarks. The project team also engaged patient partners to review the finalized overarching clinical care pathway diagram.

Overarching Clinical Care Pathway Development Process

Process Overview

The project team took a multi-faceted approach in creating the BC Cancer Overarching Clinical Care Pathway. The overarching pathway was developed by conducting environmental scans, scoping reviews and reviews of historical patient and clinician directed care pathways developed within BC Cancer over the past 10 years. Key stakeholders and Tumour Group Chairs from each disease site were engaged and a modified Delphi protocol was employed to forty-six members to ensure broad and equitable input across all groups. The final pathway was reviewed and approved at Tumour Group Council, the Senior Clinical Leadership Committee at BC Cancer and endorsed by BC Cancer Executive. In addition, it was approved by leaders in Indigenous Cancer Control, Supportive Care, Family Practice/Primary Care and Patient partners.

Approach to Evidence

An environmental scan and literature search were conducted on the various pathway terminology and clinically relevant benchmarks used within Canada and across the globe for overarching clinical cancer care

pathways. This search was performed to enhance and augment previous work completed by BC Cancer, including the BC Cancer Care Experience Pathway and the Journey Mapping in Cancer Care Report. Search methodology included a combination of grey literature and academic literature sources.

Canadian pathways were identified by searching each province or territory's primary cancer provider websites using search terms such as "Cancer Care Pathway" or "Cancer Continuum". International cancer care pathways were also searched using google, google scholar, databases such as PubMed, and the BC Cancer library services using search terms such as "Cancer Care Map", "Cancer Care Pathway", "Clinical Pathway", and "Journey Map". The search was performed from July 18-20, 2022, and search criteria and relevant references are listed in Appendix 1 and 3, respectively. This process also included ongoing consultation with subject matter experts for their opinions, feedback and identification of any other terminology that may have been missed.

Modified Delphi Process

The subject matter experts were invited to complete modified Delphi surveys to provide their consensus on the terminology and flow of the draft BC Cancer Overarching Clinical Care Pathway. Clinically relevant benchmarks identified through the literature search and environmental scan were categorized into sections that matched the draft Pathway diagram (eg. Diagnosis and Treatment) and participants were asked to rank each benchmark for importance.

The surveys were each distributed over a 6 week period with weekly reminders sent out to each member who had not yet submitted a response. A dichotomous scale was used to gather participant agreement on pathway phase terms by selecting "Yes" or "No". Consensus was defined as an agreement of $\geq 85\%$ and all feedback/comments of all pathway components were carefully analyzed to guide future recommendations. The Delphi 1 survey results including all comments and a revised pathway were presented at a Tumour Group Council meeting. Each component of the pathway was reviewed, including summarized feedback, and polls were used to further vote on pathway components that had not reached consensus through the first review process. A second Delphi survey was conducted to report back and confirm the approved overarching pathway diagram and clinically relevant benchmarks that reached $\geq 85\%$ consensus in Delphi 1. Delphi 2 was also used to further understand the value of the benchmarks that did not reach 85%. A sample of the Delphi surveys used can be found in Appendix 2. A final draft of the overarching clinical care pathway was reviewed by specialty programs such as Indigenous Cancer Control, Supportive Care and Pain & Symptom Management to ensure consensus of each specialty area.

Final Sign-Off

The finalized BC Cancer Overarching Clinical Care Pathway diagram was presented at Tumour Group Council and Senior Clinical Leadership Council (SCLC) for final sign-off.

Publication

Upon receiving approval from senior leadership, the overarching clinical care pathway was published on the BC Cancer website.

Assessment, Review & Updates

The Overarching Clinical Care Pathway is scheduled to be reviewed annually by the Tumour Group Council. New evidence and feedback will be monitored and incorporated as per direction of the Tumour Group Council Chair. It is expected that the Overarching Clinical Care Pathway will be edited every 3-5 years.

Appendix 1: Search Criteria

Search Criteria for Pathways:

1. **CANCER:** “cancer care” OR “overarching cancer care” OR “general cancer care” OR “cancer” OR “oncology” **AND**
2. **PATHWAYS:** “clinical pathway” OR “pathway” OR “patient pathway” OR “journey map” OR “clinical care pathway” OR “care map” OR “care pathway” OR “care continuum” OR “care journey”

Search Criteria for Clinically Relevant Benchmarks:

1. **CANCER:** “cancer care” OR “overarching cancer care” OR “general cancer care” OR “Cancer”
AND/OR
2. **PATHWAYS:** “clinical pathway” OR “patient pathway” OR “pathway” OR “journey map” OR “clinical care pathway” OR “care map” OR “care pathway” OR “care continuum” OR “care journey”
AND/OR
3. **INDICATORS:** “quality indicators” OR “evaluation metrics” OR “evaluation indicators” OR “high quality care indicators” OR “high quality care metrics” OR “indicators”

Appendix 2: Sample Delphi Surveys

Delphi 1



Phase 1 Delphi 1
Survey Instrument PD

Delphi 2



Delphi 2 Survey
Instrument PDF.pdf

Appendix 3: ASCO Evaluating Oncology Clinical Pathways Checklist

[ASCO-Clinical-Pathways-Checklist.pdf](#)

ASCO Checklist Question	BC Cancer's Approach
Development	
<p>Is it expert driven? Did practicing oncology providers with relevant disease and/or specialty expertise play a central role in the pathway development?</p>	Practicing oncologists and other multidisciplinary providers with specialty expertise were key members of the stakeholder group involved in developing this pathway.
<p>Does it reflect stakeholder input? Was there a mechanism in place for patients, payers, and other stakeholders to provide input during the development process?</p>	Two Delphi surveys were conducted to receive feedback and revise the overarching pathway and corresponding benchmarks in addition to discussions at Tumour Group Council and ongoing requests for feedback from allied health and other stakeholders prior to final approvals.
<p>Is it transparent? Was there a clear, consistent process and methodology for pathway development that is transparent to all pathway users, stakeholders, and the general public? Is there a policy in place and adhered to that requires public disclosure of all potential conflicts of interest by oncology pathway panel members and any other individual or entities that contributed to the development of pathway content?</p>	A full methodology report (above) accompanying the overarching pathway is published on the website.
<p>Is it evidence-based? Is the clinical pathway based on the best available scientific evidence documented or disseminated in clinical practice guidelines, peer-reviewed journals, and/or other disseminated vehicles? Is a mechanism in place for considering high-quality evidence generated from validated real-world data?</p>	Environmental scans were conducted to inform the overarching pathway and revisions were informed by the stakeholder group which included subject matter experts from diverse areas and regions.
<p>Is it patient focused? Does the pathway include evidence-based options to account for differences in patient characteristics and/or preferences?</p>	The overarching pathway was reviewed by 5 patient partners and represents a high level generic patient journey.
<p>Is it clinically driven? Is there an established methodology for prioritizing efficacy, safety, and cost? How is cost factored into pathway recommendations of therapeutically similar or equivalent treatments?</p>	The overarching pathway is based on an environmental scan, previous historical work and clinician consensus. No specific therapies are identified in the overarching pathway.
<p>Is it timely? Is the pathway program updated as relevant new information becomes available? Is a full review of the pathway performed and documented at least annually, and does a mechanism exist for ongoing rapid evaluation?</p>	The overarching pathway will undergo annual reviews at Tumour Group Council.
<p>Is it comprehensive? Does the pathway address the full spectrum of cancer care from diagnostic evaluation through first course of therapy, supportive care, post-treatment surveillance, to end-of-life care? If not, are the phase and elements of care the pathway is intended to address clearly described?</p>	The full spectrum of care is addressed in the overarching pathway from pre-diagnosis to end of life.
<p>Does it promote participation in clinical trials? Are available clinical trials options incorporated into the pathway program?</p>	Consideration of clinical trials is prompted in all tumour group specific pathways, where applicable.

Appendix 4: References

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