BC CANCER

Provincial Health Services Authority

BC Cancer Clinical Care Pathways Methodology Report

Phase 2: Tumour Group Clinical Care Pathways

Version 1: 7 December 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 Tumour Group Clinical Care Pathways 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 on the second phase, Tumour Group Clinical Care Pathways development. The phase one methodology report can be found here.

Governance Structure and Leadership

Under the guidance of the Senior Executive Director, Clinical Programs & Policy and the Executive Director, Provincial Programs, the core project team included the Tumour Group Council Chair and Provincial Programs Director, manager, project coordinator and policy analyst. The clinical content development of Tumour Group Clinical Care Pathways were led by Tumour Group Committee Chairs or designates with support of approximately 10 Subject Matter Experts (SME) involved in cancer care delivery in BC.

Methodology: Tumour Group Clinical Care Pathways & Clinically Relevant Benchmarks (Phase 2)

Definition and Purpose

The BC Cancer Overarching Clinical Care Pathways developed in Phase 1 was leveraged as a guiding framework. Each tumour group clinical care pathway was designed to align with the categories reflected in the Overarching Pathway diagram:

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

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 target audience also includes primary care providers, emergency medicine providers, and anyone who may need to refer a person for cancer care or help guide them through cancer care. The disease specific clinical care pathways will reside on the BC Cancer website, where they will be accessed by the target audiences. They will be associated with reference hyperlinks and additional information.

Pathways will also influence the Cancer Management Manual, an important online clinical resource, as well as future work on patient resources. Each tumour group clinical care pathway will be associated with a patient focused companion guide which is being co-developed with patient partners.

Key Stakeholder Engagement

Tumour Group Clinical Care Pathways were developed through both depth and breadth of expertise which included the engagement of the full tumour group committee.

The development team for each disease site included the respective Tumour Group Chair or designate plus a working group of SMEs that represented all relevant clinical services (eg. Medical Oncology, Radiation Oncology, Surgical Oncology, Pathology, Radiologists and where relevant and appropriate, other clinicians such as Nuclear Medicine Physicians, Radiation Therapists, Nurses, Dieticians, and Speech Language Pathologists) from across all regions. The clinical care pathway developed by the SME working group was reviewed by the full tumour group committee and specialty services including Indigenous Cancer Care, Patient and Family Experience, Provincial Pharmacy, Nursing Community of Practice, PCPs and GPOs, and Supportive Care.

Tumour Group Clinical Care Pathway Development Process

Process Overview

Tumour groups were prioritized based on incidence rates, mortality rates and most importantly clinician resource availability. The TG Chair or designate selected the disease site/specific pathway to be addressed with the goal of addressing the most common or the most significant pathways.

Development of the Tumour Group Clinical Care Pathways used an approach similar to the BC Cancer Overarching Pathway including literature searches and environmental scans of globally existing clinical pathways. Clinical care pathways were created using terminology and flow direction based on documented evidence or expert consensus with the intention of addressing the full spectrum of the patient journey. These pathways were centered on currently approved treatments within BC and focused on capturing current, ideal

standard of care. Draft pathways were documented with Mural, an online collaboration tool to support SME engagement.

Approach to Evidence

An iterative, evidence-informed process was used in the development of the Tumour Group Clinical Care Pathways. Evidence from local, national and international sources were used to inform early drafts of the pathways with expert opinions driving further revisions of each draft.

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 criteria essentially matched that of the Overarching Clinical Care Pathway but included the tumour group and/or the disease site of interest. The search criteria and relevant references are listed in the Appendix. This process also included ongoing consultation with subject matter experts for their opinions, feedback, and consensus.

Pathway Development Process

The project team started with a global literature review and environmental scan. Leveraging the learnings and results from phase one of this project, the BC Cancer Overarching Clinical Care Pathway, the team then drafted clinical care pathways that were aligned with the categories identified in the BC Cancer Overarching Clinical Care Pathway.

Tumour Group Clinical Care Pathways were created through iterative consultation. The pathway scope and level of detail was determined and guided by Tumour Group (TG) Chair or designate. Draft clinical care pathways were reviewed by TG Chairs or designates. Once reviewed by the TG Chair/designate, they were further reviewed and revised by a working group of approximately 10 SMEs representing all relevant clinical services and across all regions, where possible. Where possible, SMEs met in groups to support discussion and consensus as the pathways were reviewed. Where it was not possible to meet SMEs in groups, personal sessions were offered. The TG Chair/lead was given the ultimate decision making power if individual sessions provided conflicting feedback. Pathways included hyperlinks to useful resources and evidence based details for additional supporting information. SMEs were compensated for their time through a Health System Redesign (HSR) grant. In some unique cases, pharmaceutical funding was used in place of HSR.

The first formal review process for the Tumour Group Clinical Care Pathways started after the SME working groups achieved consensus. The pathway was then presented at Tumour Group Committee meetings and distributed to the full tumour group through email for review. Subsequent engagement strategies included the review of special interest groups, as outlined in the Key Stakeholder Engagement section, such as Indigenous Cancer Care and supportive care as final approvals. Following this, a three month consultation period will allow for the pathways to be published on the BC Cancer website while users begin to interact with them and provide any further feedback for refinements. This period will solicit feedback from the wider health care community including the health authorities.

Each pathway is to be published in conjunction with a patient companion guide to be developed by the Patient and Family Experience team.

Modified Delphi Process

A detailed literature search was completed to identify clinically relevant benchmarks for each tumour group's disease site. Benchmarks were categorized into sections that matched the Overarching Clinical Care Pathway

(eg. Diagnosis and Treatment) and participants were asked to rank each for importance. All TG committee members and the SME working group were invited to complete a modified Delphi survey. The survey was open for a minimum of two weeks and weekly reminders were send out to the participants that had not responded to the survey. Consensus was defined as an agreement of >85%. Benchmark rankings and all feedback and comments were compiled and carefully reviewed. Clinically relevant benchmarks reaching 85% or greater were accepted. These will be shared with BC Cancer Data Analytics for feasibility assessment and implementation. A sample of the Delphi survey used for the Oropharyngeal Clinical Care Pathway can be found in Appendix 3.

Final Sign-Off

The BC Cancer Tumour Group Clinical Care Pathways are considered approved after receiving Tumour Group Committee and specialty services approval. The three month consultation period also provides the broader health care community a period to provide any final refinements.

Publication

Tumour Group Clinical Care Pathways, upon completion and final approval by the respective tumour group committee and senior leadership, will be published on the BC Cancer website.

Assessment, Review & Updates

Each Tumour Group Clinical Care Pathway is scheduled to be reviewed annually by its respective Tumour Group Committee. New evidence and feedback will be monitored and incorporate as per direction of the Tumour Group Committee Chair.

Appendix 1: Search Criteria (e.g. Breast Pathway)

Search Criteria for Pathways:

1. **CANCER**: “breast cancer” OR “breast cancer care” OR “breast carcinoma” OR “breast neoplasm” OR “breast 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**: “breast cancer” OR “breast cancer care” OR “breast carcinoma” OR “breast neoplasm” OR “breast oncology” or “breast tumour”

   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” OR “patient safety indicator” OR “clinical indicator” OR “benchmarks”

Appendix 2: Sample Delphi Survey

Oropharyngeal

OropharyngealPathway_Indicator Delphi.pc

Appendix 3: ASCO Evaluating Oncology Clinical Pathways Checklist

ASCO-Clinical-Pathways-Checklist.pdf

ASCO Checklist Question	BC Cancer's Approach
Development	
Is it expert driven? Did practicing oncology providers with relevant disease and/or specialty expertise play a central role in the pathway development?	Practicing oncologists and other multidisciplinary providers with specialty expertise were key members of the stakeholder group involved in developing the pathways.
Does it reflect stakeholder input? Was there a mechanism in place for patients, payers, and other stakeholders to provide input during the development process?	SME working group meetings were held to develop and revise the pathways in addition to requests for feedback from allied health and other stakeholders prior to final approvals.
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?	A full methodology report (above) accompanying the pathways will be published on the website.
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?	Environmental scans were conducted to inform initial drafts of each pathway, revisions were informed by the SME panel.
Is it patient focused? Does the pathway include evidence-based options to account for differences in patient characteristics and/or preferences?	The pathways include patient preferences and other consideration prompts to encourage providers to have ongoing discussions and include the patient in the decision making.
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?	No treatments that are not currently funded or approved are suggested in the pathways. Specificity of drug names are not included.
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?	Pathways will undergo annual reviews at respective tumour group meetings for revisions. Urgent revisions can be sent to the Tumour Group Coordinator for implementation if endorsement from the tumour group is received.
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?	The full spectrum of care is addressed in the pathways from pre-diagnosis to end of life.
Does it promote participation in clinical trials? Are available clinical trials options incorporated into the pathway program?	Consideration of clinical trials is prompted in all pathways, where applicable.

Appendix 4: References

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