

TIERS IN BRIEF  
TIERS IN FULL

# ADULT OUTPATIENT MEDICAL ONCOLOGY SERVICES

FEBRUARY 8, 2019



# Adult Outpatient Medical Oncology Services: Tiers to Support System and Operational Planning

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**HOW TO CITE THE ADULT OUTPATIENT MEDICAL ONCOLOGY SERVICES TIERS OF SERVICE MODULE:**

We encourage you to share this document with others and we welcome their use as a reference. When referencing this module, please cite as:

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# Adult Outpatient Medical Oncology Services: Tiers to Support System and Operational Planning

## 1.0 Purpose

Cancer is a complex, chronic condition affecting many British Columbians in their lifetime. The increased need for outpatient medical oncology services, combined with human resource and health care facility constraints requires an approach to organizing and delivering cancer care services in British Columbia (BC). Therefore, planning and coordinating outpatient medical oncology services is a major area of focus for BC Cancer, the Regional Health Authorities (Fraser Health, Interior Health Island Health, Northern Health and Vancouver Coastal Health), First Nations Health Authority and collaborators (Ministry of Health, non-profit organizations, etc.). The Tiers of Service framework provides a tool to define and plan such services.

This practical module guides the planning and standardized delivery of outpatient medical oncology services across British Columbia. The primary goal of the module is to provide safe, evidence-based outpatient medical oncology services, maximizing the efficient use of resources and employing the principle of patient-centred care with an emphasis on providing care as close to home as possible.

Utilizing a common language and methodology, the Tiers of Service module:

- Is informed by a review of frameworks / tools in other jurisdictions around the world.
- Facilitates system planning for clinical services, knowledge sharing and transfer / training and quality improvement / research. The responsibilities and requirements for each of these three areas are defined within the module.

The module has been developed to accommodate long-term needs and takes into account the projected need for outpatient medical oncology services in British Columbia over the next decade due to a rapidly growing and aging population. More importantly, these standards were developed with the expectation of increasing accessibility to safe, quality outpatient medical oncology services for adults diagnosed with cancer.

BC Cancer, the Regional Health Authorities and First Nations Health Authority are leading the use of the Tiers of Service approach to system planning for adult outpatient medical oncology services. This is being done through:

*Creation of the Tiers to Support System and Operational Planning:* Provides significant detail of key aspects of the module according to: (1) Clinical Services; (2) Knowledge Sharing and Transfer / Training; and (3) Quality Improvement / Research.

*Self-assessment based on the module:* Once a module is finalized and accepted by the key partners in the province, a self-assessment is completed. BC Cancer and the Regional Health Authorities work together as necessary to get this work completed. This self-assessment will determine their tier alignment and their ability to meet the responsibilities and requirements at that tier.

*System planning and service planning based on self-assessment results:* The self-assessment results identify strengths and opportunities for improvement. Using the self-assessment results, provincial, regional and local planning is undertaken through collaborations between BC Cancer and the Regional Health Authorities on an ongoing basis.

## 2.0 Provincial Network for Outpatient Medical Oncology Services

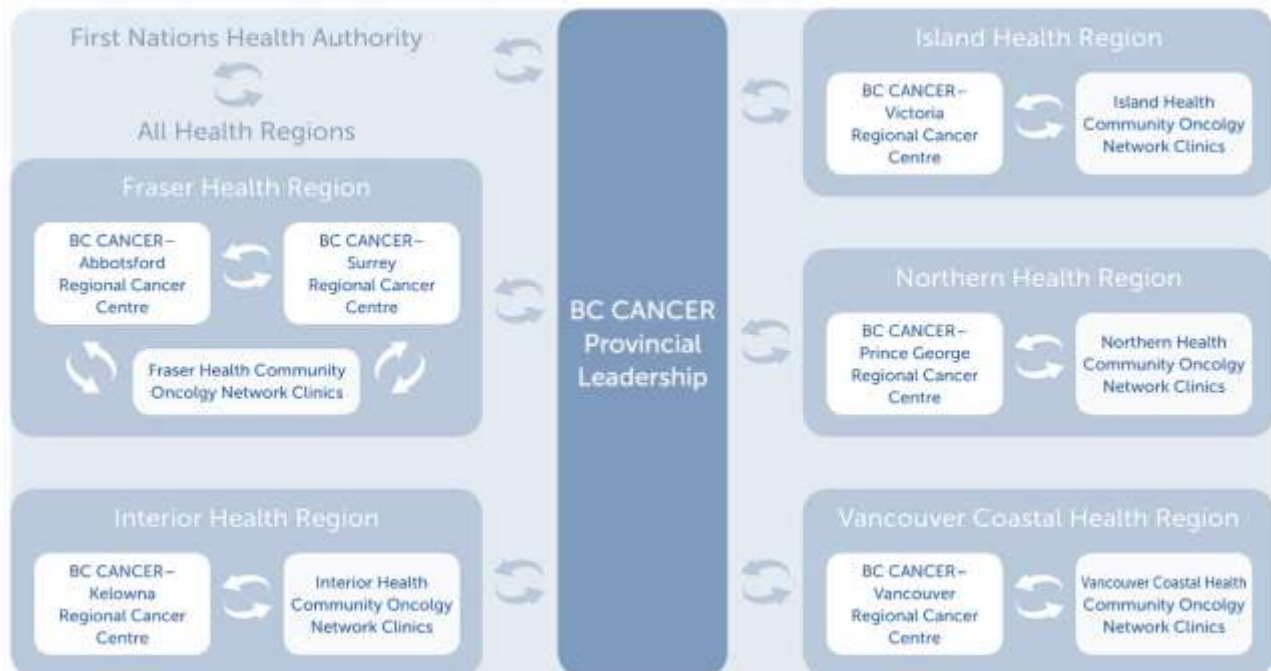
④ Meeting the full range of needs of patients and a community is beyond the capability of one team or organization. Depending on where services are offered, organizations partner with appropriate cancer agencies and organizations to ensure that patients are provided with the up-to-date care and have access to patient-centred resources and services in the community.

Therefore, the vision is for cancer care in BC to be delivered in a coordinated, efficient manner, governed through effective administrative and clinical partnerships between BC Cancer and the Regional Health Authorities.

Regionally, partnerships have been formalized between a BC Cancer - Regional Cancer Centre(s) and a Regional Health Authority to ensure and improve equitable access to appropriate evidence-based and coordinated cancer care services, across an identified region.

Provincially, BC Cancer’s main accountabilities are focused on system planning, setting evidence based standards and best practice, coordination of cancer care services, performance management and funding of some cancer care drugs and services (e.g. provision of systemic therapy) across BC.

The vision for the provincial network for outpatient medical oncology services is below:





## 3.0 Module Development and Scope

### 3.1 Module Development

The Adult Outpatient Medical Oncology Tiers of Service module was developed by collaborators from:

- An interdisciplinary Working Group from BC Cancer, Child Health BC and Fraser Health<sup>i</sup>
- A provincial Working Group from BC Cancer, Child Health BC, First Nations Health, Fraser Health, Interior Health, Island Health, Northern Health and Vancouver Coastal Health<sup>ii</sup>
- Senior Directors, Regional Clinical Operations and Regional Medical Directors from all BC Cancer Centres
- Provincial Cancer Advisory Committee (senior representatives from BC Cancer, First Nations Health Authority, Ministry of Health and all the Regional Health Authority)

The document was informed by existing standards and recommendations from other jurisdictions, mostly notably Child Health BC<sup>1</sup>, Cancer Care Ontario<sup>2</sup> and Queensland Government<sup>3</sup>. Data was used where it was available, as were relevant BC and Canadian standards and guidelines (e.g., Accreditation Canada, BC Cancer policies, Royal College of Physicians and Surgeons of Canada – Subspecialty Training Requirements in Medical Oncology<sup>4</sup>).

In addition to the aforementioned collaborators, representatives from BC Cancer, the Regional Health Authorities, First Nations Health Authority, other constituents and topic-specific groups were invited to provide feedback on the draft document. The final version was submitted to and accepted by the Provincial Cancer Advisory Committee.

### 3.2 Module Scope

The Adult Outpatient Medical Oncology Tiers of Service module applies to all adults **diagnosed** with cancer receiving outpatient medical oncology services in health care facilities operated by:

- Provincial Health Services Authority: BC Cancer
- Regional Health Authorities: Fraser Health, Interior Health, Island Health, Northern Health and Vancouver Coastal Health

Out of scope for the Outpatient Medical Oncology Services module (beyond the influence of the Tiers of Service):

- Pediatric cancer care services
- Systemic therapy administered for non-malignant conditions
- Cancer care supportive services provided by private and non-profit agencies
- Other oncology outpatient services (e.g. radiation therapy, hereditary cancer / genetic testing services, leukemia / bone marrow transplant services, etc.)
- Services provided in family physician / community specialist practices and infusion clinics
- Acute care services (e.g. surgical, emergency departments, inpatient, etc.)

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<sup>i</sup> Refer to *Appendix A: BC Cancer and Fraser Health Tiers of Service Working Group Membership*

<sup>ii</sup> Refer to *Appendix B: Tiers of Service Provincial Working Group Membership*

## 4.0 Tiers of Service: Outpatient Medical Oncology Services

### 4.1 Recognition of the Tiers

The *Tiers of Service Framework* recognizes each of the following tiers:

Tier	Tiers of Service
T1	Prevention and Primary Care Service
T2	Focused Outpatient Systemic Therapy Service
T3	General Outpatient Medical Oncology Service
T4	Comprehensive Outpatient Medical Oncology Service
T5	Regional Subspecialty Outpatient Medical Oncology Service
T6	Provincial Subspecialty Outpatient Medical Oncology Service

### 4.2 Overarching Policies and Procedures at each Tier

All tiers must provide outpatient medical oncology services in accordance with provincially legislated requirements, Accreditation Canada standards (*references to Accreditation Canada are noted throughout this module with the ® symbol*), BC Cancer Tumour Group Protocols, clinical trial requirements and all approved BC Cancer policies, particularly:

- III-10 Systemic Therapy Delivery Process
- III-20 Chemotherapy Extravasation
- III-45 Compassionate Access Program
- III-60 Drug Reaction Management
- III-110 Community Oncology Network Referral

The most up-to-date versions of these policies can be found electronically on <http://shop.healthcarebc.ca/phsa/BCCancer/Systemic%20Therapy/70005.pdf>

Additionally, all Pharmacies and Pharmacy staff must follow best practice standards set forth by:

- College of Pharmacists of BC<sup>5</sup>
- National Association of Pharmacy Regulatory Authorities (NAPRA)<sup>6</sup>
- United States Pharmacopeia (USP) Chapters 797 and 800<sup>7</sup>
- Canadian Society of Hospital Pharmacists (CSHP)<sup>8</sup>
- Canadian Association of Pharmacy in Oncology (CAPHO)<sup>9</sup>
- Institute for Safe Medication Practices (ISMP) Canada<sup>10</sup>
- National Institute of Occupational Safety and Health (NIOSH)<sup>11</sup>
- BC Cancer Safe Handling Standards Manual<sup>12</sup>
- BC Cancer Clinical Chemotherapy Assessment and Review Checklist<sup>13</sup>

### 4.3 Risk and Complexity

#### 4.3.1 Definitions

"Patient complexity" and "systemic therapy complexity" are the terms used to differentiate the tiers from each other in this module.

- Refer to **Table 1: Patient Complexity** and **Table 2: Systemic Therapy Complexity** for definitions.
- **Table 3: Patients Appropriate to Receive Services at Each Tier** summarizes the relationship between patient complexity, systemic therapy complexity, frequency and the relevant tier(s) of service. Examples of patients who would be expected to receive services at each tier are also included.

**Table 1: Patient Complexity**

Patient complexity refers to the **complexity of the patient** with consideration to the underlying medical co-morbidities, type and stage of cancer and psychosocial/spiritual support requirements.

	Patient Complexity		
	Low	Moderate	High
<b>Underlying Medical and / or Psychiatric Co-Morbidities</b>	No underlying medical including psychiatric co-morbidities present or, if present, co-morbidities are medically controlled and not expected to impact the complexity or risk of treatment.	One or more underlying medical including psychiatric co-morbidities present. Co-morbidity / co-morbidities may impact the complexity and /or risk of treatment and may require involvement of other specialists.	Multiple underlying medical including psychiatric co-morbidities and / or unclear diagnoses. Co-morbidities impact the complexity and / or risk of treatment and require involvement of multiple specialists.
<b>Symptom Burden and / or Performance Status</b>	<ul style="list-style-type: none"> <li>• Eastern Cooperative Oncology Group (ECOG)<sup>iii</sup>: Grade 0-1</li> <li>• Symptoms can be managed using standard care algorithms / protocols</li> </ul>	<ul style="list-style-type: none"> <li>• ECOG<sup>iii</sup>: Grade 1-2</li> <li>• Symptoms can be managed using standard care algorithms / protocols with some adaptations</li> </ul>	<ul style="list-style-type: none"> <li>• ECOG<sup>iii</sup>: Grade 3+</li> <li>• Symptoms requires development of customized symptom management plan and requires an extended range of therapies</li> </ul>
<b>Nutrition Needs</b>	Low risk of malnutrition.	Moderate risk of malnutrition.	Baseline malnourished or at high risk of malnutrition.
<b>Psychosocial / Spiritual Support</b>	Life circumstances are predominantly stable. Psychosocial / spiritual support is readily available.	Psychosocial / spiritual support is limited. May be significant difficulties in family or other important relationships.	Few or no psychosocial / spiritual supports available. Serious disruption of family/social milieu or life circumstance.
<b>Patient Engagement</b>	Potential to understand and accept oncological condition and its effects (with support and psychoeducation).	Some variability in understanding or accepting oncological condition, associated impact and / or co-morbidities.	No understanding or awareness of oncological condition, associated impact and / or co-morbidities. Poor ability to understand risks and how to appropriately address it.

<sup>iii</sup> Refer to *Appendix C: Eastern Cooperative Oncology Toxicity and Response Criteria*.



	Patient Complexity		
	Low	Moderate	High
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Otherwise healthy individual.</li> <li>• Solid family and/or social supports.</li> </ul>	<ul style="list-style-type: none"> <li>• Co-morbidities that are well controlled (e.g. diabetes, treated ischemic heart disease, stable mild renal impairment).</li> <li>• Elderly and lives alone .</li> </ul>	<ul style="list-style-type: none"> <li>• Frail elderly who lives alone with multiple co-morbidities that are not well-controlled (i.e. brittle diabetes, chronic renal failure, congestive heart failure, cognitively impaired and/or major psychiatric illness).</li> <li>• History of several hospital inpatient admissions in previous year.</li> </ul>

**Table 2: Systemic Therapy Complexity**

Systemic therapy complexity refers to the **complexity of the systemic therapy** with consideration to the type of systemic therapy, potential for adverse reactions, severity of the side effects and likelihood of complications.

	Systemic Therapy Complexity		
	Low	Moderate	High
<b>Use of Standard Protocols / Doses</b>	Standard protocols / doses utilized 100% of time.	Standard protocols / doses may require adaptation.	Standard protocols / doses often require adaptation. May involve clinical trials / research.
<b>Regime Complexity</b>	Usually involves single systemic therapy agents.	May involve multiple systemic therapy agents.	Often involves multiple systemic therapy agents.
<b>Therapy - Related Risk</b>	Severe adverse reactions rare. When occur, can be managed by general medical knowledge.	Severe adverse reactions not frequent. When occur, may require some specialized oncological knowledge or experience.	Severe adverse reactions relatively frequent. When occur, require specialized oncological knowledge or experience.
<b>Access to Concurrent Therapy (E.G. Radiation)</b>	None.	None.	May involve radiation or other therapies concurrently.
<b>Predictability of Outcomes</b>	Predictable.	Predictable most of the time.	Often unpredictable.
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Adjuvant colorectal cancer</li> <li>• Single agent, oral medication in palliative setting</li> </ul>	<ul style="list-style-type: none"> <li>• Single agent immunotherapy</li> <li>• Cyclophosphamide, Doxorubicin, Vincristine, Prednisone and Rituximab (CCHOP-R) (standard multi-agent chemotherapy regimen)</li> </ul>	<ul style="list-style-type: none"> <li>• Combination immunotherapy (e.g ipilimumab and nivolumab)</li> <li>• Novel agents with high risk of side effects or tumour lysis syndrome (e.g. first cycle Venetoclax).</li> </ul>

### 4.3.2 Relationships: Patient and Systemic Therapy Complexity and Tiers

The following table provides an overview of the relationship between patient complexity and systemic therapy complexity and the appropriate tier of service provision.

**Table 3: Patients Appropriate to Receive Services at Each Tier (based on Patient and Systemic Therapy Complexity)**

			Focused Outpatient Systemic Therapy Service			General Outpatient Medical Oncology Service			Comprehensive Outpatient Medical Oncology Service			Regional Subspecialty Outpatient Medical Oncology Service			Provincial Subspecialty Outpatient Medical Service		
			T2			T3			T4			T5			T6		
			Patient Complexity			Patient Complexity			Patient Complexity			Patient Complexity			Patient Complexity		
			Relative Frequency	Low	Mod	High	Low	Mod	High	Low	Mod	High	Low	Mod	High	Low	Mod
Systemic Therapy Complexity	Low		X				X			X			X			X	
	Mod					X			X			X				X	
	High	Common							X	X	X	X	X	X			X
		Uncommon										X	X				X
	Concurrent therapy required											X	X	X	X	X	X

**Special Note:**

<sup>Ⓐ</sup> Patient rights regarding service delivery include: the right to refuse service or refuse to have certain people involved in their service; participate in all aspects of their service and make personal choices; have a support person or advocate involved in their service; appeal a care plan decision or file a complaint; take part in or refuse to take part in research or clinical trials; receive safe, competent service; and raise concerns about the quality of service.

The tier identified for a given service represents the highest tier of that service which is available at that facility under **usual** circumstances (i.e. minimum expectations. Situations may occur, usually due to geography and transportation, in which care may be provided on a case-by-case basis. These exceptions are appropriate where the resources (trained staff and physicians, equipment, etc.) are available. These special situations are *not* the focus of this module.

#### **4.4 Responsibilities and Requirements at each Tier**

This next section describes the **responsibilities** and **requirements** at each tier to provide a **safe, sustainable** and **appropriate** level of service at each tier.

Sections are divided as follows:

- 4.4.1 Clinical Service
  - 4.4.1.1 Health care facility-based service
    - A. Overview
    - B. Responsibilities
    - C. Requirements
- 4.4.2 Knowledge Sharing and Transfer/Training
- 4.4.3 Quality Improvement and Research

## 4.4.1 Clinical Services

### 4.4.1.1 Health Care Facility - Based Service

#### A. Overview

Note: T1 is included in the table below to show the continuum of services between T1 and T6, as well as the relationship between Primary Care Homes and Specialized Care Programs. T1 is not included in subsequent tables within this module because T1 is considered to be a “supportive service” for patients with cancer but it is not a “cancer-specific” service.

	Prevention and Primary Care Service	Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
	T1	T2	T3	T4	T5	T6
<b>Service Reach</b>	Local Health Area <sup>14</sup> .	Local Health Areas <sup>14</sup> .	Multiple Health Service Delivery Areas <sup>14</sup> .	Regional Health Authority <sup>14</sup> .	Same as T4.	Province.
<b>Service Description</b>	Provides coordinated, comprehensive and quality cancer care services for adults with a cancer diagnosis to stay healthy, get better, live with cancer and cope with end of life. Includes providing first contact access for each new need and long-term comprehensive coordinated care for most health needs and when it must be sought elsewhere <sup>15</sup> .	Oversight / care is provided by T3-6.  Upon request from T3-6 Clinical Practitioner in Oncology <sup>iv</sup> / Medical Oncology Specialist, <b>provides systemic therapy to patients on a case-by-case basis</b> to facilitate care closer to home.  Oncology Clinic staffing includes an onsite <b>chemotherapy - certified Registered Nurse</b> when providing systemic therapy.	<b>Oversight provided by a Clinical Practitioner in Oncology</b> under the direction and support of T4-6 Medical Oncology Specialist.  Clinical Practitioner in Oncology writes orders, monitors and manages care as per the established treatment plan.  Capacity to administer <i>low to moderate</i> complexity systemic therapy for <i>low to moderate</i> medically complex patients.	<b>Specialized interdisciplinary team includes a Medical Oncology Specialist</b> and provides the full range of medical oncology services.  Medical Oncology Specialist develops the treatment plan and prescribes systemic therapy.  Capacity to administer <i>low to relatively common, high</i> complexity systemic therapy for <i>low to high</i> medically complex	Same as T4 Plus:  Specialized interdisciplinary team includes a Medical Oncology Specialist <b>assigned to specific tumour sites</b> and provides the full range of medical oncology services.  Provides <b>concurrent</b> outpatient medical oncology services <b>and</b> radiation oncology services Facilitates care closer to home by referring patients to T2-4.	Same as T5 Plus:  Provides outpatient medical oncology services for patients with <b>rare and highly specialized cancers</b> (e.g. gynaecologic malignancies, sarcomas).  Capacity to administer <b>new</b> and / or <b>uncommon, low to high</b> complexity systemic therapy for <i>low to high</i> medically complex patients.

<sup>iv</sup> Formerly known as General Practitioner in Oncology.

	Prevention and Primary Care Service	Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
	T1	T2	T3	T4	T5	T6
<b>Service Description</b> <i>Continued...</i>		Capacity to administer <b>low</b> complexity systemic therapy for <b>low</b> medically complex patients.	Where appropriate and closer to home, makes arrangements for patients to receive some / all of their systemic therapy at T2.	patients.  Facilitates care closer to home by referring patients to T2-3.		
<b>Service Setting</b>	Community settings (e.g. family physician offices, walk-in clinics, dental offices, pharmacies, etc.).	Oncology clinic located in / adjacent to a <b>community health centre</b> or <b>small community health care facility</b> <sup>16</sup> .	Oncology clinic located in / adjacent to a small community health care facility or <b>health care facility with limited specialty services</b> <sup>16</sup> .	Oncology clinic located in / adjacent to a <b>health care facility with limited specialty services</b> <sup>16</sup> .	Oncology clinic located in a <b>regional cancer centre</b> and adjacent to a <b>regional health care facility</b> <sup>16</sup> .	Oncology clinic located in a <b>recognized regional cancer centre for rare and / or highly specialized cancers</b> and adjacent to a regional health care facility <sup>16</sup> .

**B. Responsibilities**

Note: It is assumed patients receiving outpatient medical oncology services in T2-6 have had an initial screening, assessment and confirmation of diagnosis completed prior to being referred to T2-6. Some exceptions may apply.

		<b>Focused Outpatient Systemic Therapy Service</b>	<b>General Outpatient Medical Oncology Service</b>	<b>Comprehensive Outpatient Medical Oncology Service</b>	<b>Regional Subspecialty Outpatient Medical Oncology Service</b>	<b>Provincial Subspecialty Outpatient Medical Oncology Service</b>
		<b>T2</b>	<b>T3</b>	<b>T4</b>	<b>T5</b>	<b>T6</b>
<b>1a.</b>	<b>Initial Referral and Triage of Patients</b>	<p>Receives directives from T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist to provide systemic therapy for patients living in the Local Health Areas<sup>14</sup> who have been assigned to an established treatment plan.</p> <p>Liaises with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist if unable to provide systemic therapy within timeframe indicated on the established treatment plan.</p>	<p>Receives directives / referrals from T4-6 for patients living in multiple Health Service Delivery Areas<sup>14</sup> who have been assigned to an established treatment plan.</p> <p>Receives and processes directives / referrals for the Clinical Practitioner in Oncology within two working days. Liaises with the Clinical Practitioner in Oncology if unable to accommodate care within timeframe indicated on the established treatment plan.</p>	<p>Receives referrals from any referring medical professional for patients living in the Regional Health Authority<sup>14</sup>.</p> <p>Triages referrals for the onsite Medical Oncology Specialist within two working days. Liaises with the Medical Oncology Specialist if unable to accommodate care within timeframe indicated on the treatment plan.</p>	<p>Receives referrals from any referring medical professional for patients living in the Regional Health Authority<sup>14</sup>.</p> <p>Upon receipt of referral, onsite Medical Oncology Specialist and Radiation Oncology Specialist assesses and triages patients for medical oncology services, radiation oncology services or concurrent outpatient oncology services (i.e. medical oncology <b>and</b> radiation oncology services) within two working days. Liaises with onsite Medical Oncology Specialist if unable to accommodate care within timeframe indicated on the treatment plan.</p>	<p>Same as T5 Plus:</p> <p>Receives referrals from any referring medical professional for patients living in the province.</p>
<b>1b.</b>	<b>Subsequent Referral</b>	<p>Liaises with referring T3-6 Clinical Practitioner In Oncology / Medical Oncology Specialist for subsequent referrals.</p>	<p>Refers patients with suspected or confirmed cancer diagnoses (new cancer in a different body site or recurrent cancer) to</p>	<p>Refers patients with suspected or confirmed cancer diagnoses (new cancer in a different body site or recurrent cancer) to</p>	<p>Same as T4 Plus:</p> <p>Where appropriate and closer to home, refers patients to T2-4 to facilitate</p>	<p>Same as T5 Plus:</p> <p>Where appropriate and closer to home, refers patients to T2-5 to facilitate</p>



		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Subsequent Referral</b> <i>Continued...</i>		<p>the T4-6 Medical Oncology Specialist.</p> <p>Where appropriate and closer to home, makes arrangements for patients to receive some / all of their systemic therapy at T2. Continues to provide oversight in these situations.</p> <p>Coordinates care and referrals for other outpatient medical oncology services, clinical diagnostic services, clinical adjacencies and other health care team members.</p>	<p>the Medical Oncology Specialist.</p> <p>Where appropriate and closer to home, refers patients to T2-3 to facilitate care closer to home. Maintains responsibility for prescribing, monitoring and managing care in these situations.</p> <p>Coordinates care and referrals for other outpatient medical oncology services, clinical diagnostic services, clinical adjacencies and health care team members.</p>	<p>care closer to home.</p> <p>Coordinates care and referrals with the radiation oncology specialist if patient receiving concurrent outpatient oncology services.</p>	<p>care closer to home.</p>
2.	<b>Monitoring, Managing and Systemic Therapy Prescribing</b>	<p>Provides general medical care and monitoring.</p> <p>Prescribes non-systemic therapy related drugs.</p>	<p>Writes orders for <i>low to moderate</i> complexity systemic therapy on a pre-printed order based on the established treatment plan. Prescribes non-systemic therapy related drugs and supportive care medications required for specific systemic therapy protocols.</p> <p>Monitors disease and manages systemic therapy side effects, toxicities and complications.</p> <p>Completes a medication</p>	<p>Prescribes <i>low to relatively common, high complexity</i> systemic therapy. Prescribes non-systemic therapy related drugs and supportive care medications required for specific systemic therapy protocols.</p> <p>Monitors disease and manages systemic therapy side effects, toxicities and complications.</p> <p>Completes a medication history and reconciliation</p>	<p>Same as T4 Plus:</p> <p>Prescribes systemic therapy for patients requiring concurrent outpatient oncology services.</p> <p>Prescribes systemic therapy that can be administered via intrathecal<sup>21</sup>, ventricular and intraperitoneal routes.</p> <p>Upon request, provides consultations and advises T2-4 on the management of patients.</p>	<p>Same as T5.</p> <p>Prescribes <i>new and / or uncommon and / or high complexity</i> systemic therapy.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<p><b>Monitoring, Managing and Systemic Therapy Prescribing</b> <i>Continued...</i></p>		<p>history and reconciliation. Ensures all relevant clinical parameters have been reviewed.</p> <p>Facilitates discussions with patients on traditional medicines, traditional healing practices and Complementary and Alternative Medicine (CAM) therapies<sup>17</sup>.</p> <p>Ensures patients are provided written information and understands the diagnosis, treatment plan, risks, benefits and goals so that informed consent (verbal, written or implied) is given prior to treatment.</p> <p>Provides coordinated access to:</p> <ul style="list-style-type: none"> <li>• BC Cancer protocols<sup>18</sup></li> <li>• BC Cancer's Compassionate Access Program<sup>19</sup></li> <li>• Health Canada's Special Access Programme<sup>20</sup></li> <li>• Pharmaceutical Manufacture Patient Assistance Program<sup>19</sup></li> </ul>	<p>and ensures all relevant clinical parameters have been reviewed.</p> <p>Assesses family history for hereditary cancer family risk.</p> <p>Facilitates discussions with patients on traditional medicines, traditional healing practices and Complementary and Alternative Medicine (CAM) therapies<sup>17</sup>.</p> <p>Ensures patients are provided written information and understands the diagnosis, treatment plan, risks, benefits and goals so that informed consent (verbal, written or implied) is given prior to treatment.</p> <p>Establishes the treatment plan appropriate for the tier.</p> <p>Provides coordinated access to:</p> <ul style="list-style-type: none"> <li>• BC Cancer protocols<sup>18</sup></li> <li>• BC Cancer's Compassionate Access Program<sup>19</sup></li> <li>• Health Canada's Special</li> </ul>		

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Monitoring, Managing and Systemic Therapy Prescribing</b> <i>Continued...</i>			Access Programme <sup>20</sup> <ul style="list-style-type: none"> <li>Pharmaceutical Manufacture Patient Assistance Program<sup>19</sup></li> </ul>		
3.	<b>Clinical Trials</b>	Liaises with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist if patient requests information regarding clinical trials.	Liaises with T4-6 Medical Oncology Specialist for consideration of enrollment in clinical trials.	Consults with Principal Investigators (PIs) regarding patients participation in clinical trials <sup>v</sup> and enrolls patients as applicable.	Same as T4 Plus:  Participates in clinical trials <sup>v</sup> .  Coordinates with Clinical Trials to ensure Registered Nurses understand the protocol and are provided education regarding the clinical trial drug being administered.	Same as T5 Plus:  Leads clinical trials <sup>v</sup> .
4.	<b>Systemic Therapy Preparation and Dispensing</b>  <b>Systemic Therapy Preparation and Dispensing</b> <i>Continued...</i>	Liaises with T3-6 for preparation and dispensing of <i>low</i> complexity systemic therapy.	According to the pre-printed order, prepares and dispenses <i>low</i> to <i>moderate</i> complexity systemic therapy (includes completing a final product check).  Upon request, dispenses systemic therapy for T2.	Prepares and dispenses prescribed <i>low</i> to <i>relatively common high</i> complexity systemic therapy (includes completing a final product check).  Upon request, dispenses systemic therapy for T2-3.	Same as T4 Plus:  Prepares and dispenses prescribed drugs for clinical trials.  Upon request, dispenses systemic therapy for T2-4.  While clinical trial drugs are usually administered at T5-6, T5-6 may under certain circumstances, direct and support	Prepares and dispenses prescribed <i>new and / or uncommon and / or low to high complexity</i> systemic therapy (includes completing a final product check) and prescribed drugs for clinical trials.  Upon request, dispenses systemic therapy for T2-5.  While clinical trial drugs are usually administered

<sup>v</sup> Clinical trials to be conducted as per health care facility protocol and Good Clinical Practice.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
					administration at T2-T4.	at T5-6, T5-6 may under certain circumstances, direct and support administration at T2-T4.
5a.	<b>Prior to Systemic Therapy Administration</b>	<p>Reviews medication orders and independently verifies them according to the tumour group protocol, Compassionate Access Program<sup>19</sup> approved treatment regimen or the Cancer Drug Manual monograph<sup>22</sup>.</p> <p>Determines appropriateness based on patient specific information, including allergies, alerts and systemic therapy protocol required laboratory values and tests. Communicates dose modifications / discrepancies with the T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist.</p>	Same as T2.	Same as T3.	Same as T4.	Same as T5.
5b.	<b>During Systemic Therapy Administration</b>	<p>Completes independent double check at the point of care for all high alert medications.</p> <p>Administers <i>low</i> complexity systemic therapy. Administers select high</p>	<p>Same as T2 Plus:</p> <p>Administers <i>low to moderate</i> complexity systemic therapy.</p>	<p>Same as T3.</p> <p>Administers <i>low to relatively common, high</i> complexity systemic therapy.</p>	<p>Same as T4 Plus:</p> <p>Administers systemic therapy via the intrathecal<sup>21</sup>, ventricular and intraperitoneal routes.</p>	<p>Same as T5.</p> <p>Administers <i>new</i> and / or <i>uncommon</i> and / or <i>high complexity</i> systemic therapy</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
		<p>alert medications<sup>23</sup> only if the local Physician / Nurse Practitioner has accepted responsibility to oversee the delivery of select high alert medication<sup>23</sup>.</p> <p>Infuses systemic therapy within:</p> <ul style="list-style-type: none"> <li>• A closed system (or approved procedures to maintain a closed system)</li> <li>• An elastomeric device (e.g. INFUSOR®) as required.</li> <li>• An electronic ambulatory infusion device (e.g. CADD® pump) as required.</li> </ul> <p>Manages and administers systemic therapy via a Peripherally Inserted Central Catheter (PICC) or Central Venous Access Device (CVAD) as required (excludes insertion).</p>			Administers drugs as part of clinical trials.	

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
5b.	<p><b>During Systemic Therapy Administration</b> <i>Continued...</i></p>	<p>Recognizes, monitors and manages systemic therapy side effects and toxicity during systemic therapy administration:</p> <ul style="list-style-type: none"> <li>Remains with the patient during administration of a systemic therapy with a known hypersensitivity risk.</li> <li>Monitors and manages extravasation<sup>24</sup>.</li> </ul> <p>Follows guidelines for wearing Personal Protective equipment (PPE) and handling hazardous drugs and accidental exposures / spills<sup>19</sup>.</p>				
5c.	<p><b>Post Systemic Therapy Administration</b></p>	<p>Documents all systemic therapy administered on the appropriate medication record.</p> <p>Communicates with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist regarding systemic therapy side effects, toxicity, reactions and complications impacting the patient during administration and follows</p>	Same as T2.	Same as T3.	Same as T4.	Same as T5.



		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Post Systemic Therapy Administration</b> <i>Continued...</i>	<p>appropriate documentation and follow up guidelines.</p> <p>Maintains exposure records when administrating hazardous drugs.</p>				
6.	<b>Urgent Clinical Situations During Systemic Therapy Administration</b>	<p>Initiates escalation processes as per health care facility protocol (e.g. Code Blue, Emergency Department and / or calling 911) and communicates with local Physician / Nurse Practitioner.</p> <p>Documents serious and unexpected adverse systemic therapy situations via the Patient Safety Learning System (PSLS).</p> <p>If inpatient care is required communicates with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist and facilitates admission to a health care facility with an acute care unit.</p>	Same as T2.	Same as T3.	<p>Initiates escalation processes as per health care facility protocol (e.g. Code Blue, Emergency Department and / or calling 911) and communicates with onsite Medical Oncology Specialist.</p> <p>Documents serious and unexpected adverse systemic therapy situations via the Patient Safety Learning System (PSLS). If the patient received clinical trials drugs, reports serious events as per clinical trials protocol.</p> <p>If inpatient care is required, onsite Medical Oncology Specialist facilitates admission to an onsite health care facility with an acute care unit.</p>	Same as T5.
7.	<b>Nutritional Care</b>	<p>Provides care for patients at <i>low</i> risk of malnutrition.</p> <p>Screens patients for</p>	Provides care for patients at <i>low to moderate</i> risk of malnutrition.	<p>Same as T3 Plus:</p> <p>Participates in care planning and provides care</p>	<p>Same as T4 Plus:</p> <p>Processes in place to consult with <b>Registered</b></p>	<p>Same as T5 Plus:</p> <p>Upon request, provides consultations and advises</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<p><b>Nutritional Care</b> <i>Continued...</i></p>	<p>nutritional needs / concerns during the first patient visit, critical points throughout the cancer journey and specific care transition points (e.g. recurrent disease and palliative / end of life care).</p> <p>Provides patients with information on nutritional resources such as:</p> <ul style="list-style-type: none"> <li>• Oncology Dietitian Services at HealthLink BC, 8-1-1.</li> <li>• Resources located on the BC Cancer and Canadian Cancer Society website.</li> </ul> <p>Liases with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist for referral to a Registered Dietitian.</p>	<p>Utilizes a screening tool to screen for nutritional needs / concerns during the first patient visit, critical points throughout the cancer journey and specific care transition points (e.g. recurrent disease and palliative / end of life care) and triages patients accordingly.</p> <p>Provides patients with information on nutritional resources such as:</p> <ul style="list-style-type: none"> <li>• Oncology Dietitian Services at HealthLink BC, 8-1-1.</li> <li>• Resources located on the BC Cancer and Canadian Cancer Society website.</li> </ul> <p>Processes in place to consult with and / or refer screened patients to a Registered Dietitian.</p> <p>For patients with enteral nutrition needs:</p> <ul style="list-style-type: none"> <li>• Process in place to consult with and / or refer patients to Registered Dietitians with Restricted Activity C: Administration of Enteral Nutrition</li> </ul>	<p>for patients who are at baseline malnourished and/ or at <i>low to high</i> risk of malnutrition.</p> <p>Upon request, provides consultations and advises T2-3 on the management of patients with nutritional needs.</p>	<p><b>Dietitians with expertise in specific tumour sites</b> (e.g. head and neck, esophageal, gastro-intestinal, lung, etc.)</p> <p>Upon request, provides consultations and advises T2-4 on the management of patients with nutritional needs.</p> <p>Works closely with HealthLink BC 8-1-1 Registered Dietitians for resource development and program planning.</p> <p>Provides <b>onsite</b> group and / or individualized nutrition teaching sessions.</p>	<p>T2-5 on the management of patients with nutritional needs.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	Nutritional Care <i>Continued...</i>		<p>competency</p> <ul style="list-style-type: none"> <li>Facilitates insertion, replacement and removal of tubes for enteral nutrition.</li> </ul>			
8.	Psychosocial Care	<p>Provides care for patients with <i>low</i> psychosocial / emotional needs / concerns.</p> <p>Screens patients for psychosocial / emotional needs during the first patient visit, critical points throughout the cancer journey and specific care transition points (e.g. recurrent disease and palliative / end of life care).</p> <p>Provides patients with information on psychosocial / emotional resources (e.g. yoga, meditation, etc.).</p> <p>Facilitates access to spiritual care and indigenous resources and services (e.g. indigenous patient liaisons / advocates).</p> <p>Liaises with referring T3-6 Clinical Practitioner in Oncology / Medical</p>	<p>Provides care for patients with <i>low to moderate</i> psychosocial / emotional needs / concerns.</p> <p>ⓐUtilizes a screening tool to screen for psychosocial / emotional distress at the time of diagnosis, critical points throughout the cancer journey and specific care transition points (e.g. recurrent disease and palliative / end of life care) and triages accordingly.</p> <p>Provides patients with information on psychosocial / emotional resources (e.g. yoga, meditation, peer support etc.).</p> <p>Facilitates access to spiritual care and indigenous resources and services (e.g. indigenous patient liaisons / advocates).</p>	<p>Same as T3 Plus:</p> <p>Participates in care planning and provides care for patients with <i>low to high</i> psychosocial / emotional needs / concerns.</p> <p>Upon request, provides consultations and advises T2-3 on the management of patients with psychosocial / emotional needs.</p>	<p>Same at T4 Plus:</p> <p>Processes in place to consult with and / or refer screened patients to a Social Worker / Counsellor with expertise in oncology knowledge, skills, and experience.</p> <p>Upon request, provides consultations and advises T2-4 on the management of patients with psychosocial / emotional needs.</p> <p>Provides <b>onsite</b> specialized support groups (e.g. prostate cancer support, relaxation, art therapy, etc.).</p>	<p>Same as T5 Plus:</p> <p>Upon request, provides consultations and advises T2-4 on the management of patients with psychosocial / emotional needs.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Psychosocial Care</b> <i>Continued...</i>	<p>Oncology Specialist for referral to a Social Worker / Counsellor.</p>	<p>Processes in place to consult with and / or refer screened patients to a Social Worker / Counsellor.</p> <p>For patients with psychosocial / emotional needs / concerns:</p> <ul style="list-style-type: none"> <li>Assesses, develops a plan and provides support in the following areas: practical and financial; emotional and mental health; social and spiritual</li> <li>Assists with treatment decision making, palliative and end of life care and concerns</li> </ul>			
9.	<b>Pain and Symptom Management / Palliative Care</b>	<p>Screens patients for pain and symptom care needs / concerns (e.g. dehydration, fatigue, concerns, etc.).</p> <p>Provides patients with information on pain and symptom management / palliative care.</p> <p>Liaises with referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist if patient has pain and symptom care needs / concerns.</p>	<p>Utilizes a screening tool to recognize and manage patients with pain and symptom and palliative care needs (e.g. ascites, dehydration, dyspnea, fatigue, hypercalcemia, concerns, etc.) and triages accordingly.</p> <p>Provides patients with information on pain and symptom management / palliative care.</p> <p>Provides the following care for patients with pain and</p>	Same as T3.	<p>Same as T4 Plus:</p> <p>Provides <b>onsite</b> specialized pain and symptom management and palliative care for patients.</p>	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Pain and Symptom Management / Palliative Care</b> <i>Continued...</i>		<p>symptom and palliative care needs:</p> <ul style="list-style-type: none"> <li>• Medications</li> <li>• Non - pharmacological options.</li> </ul> <p>Refers patients to resource(s) for pain and symptom management (e.g. acupuncturist, physiotherapist, registered, massage therapist, pharmacist).</p> <p>Refers patients with more complex pain and symptom and palliative needs to specialized Pain and Symptom Management and Palliative Care clinics. If inpatient care related to pain and symptom management / palliative care is required, facilitates:</p> <ul style="list-style-type: none"> <li>• Inpatient admissions.</li> <li>• Radiotherapy (e.g. management of bone pain or spinal cord compression).</li> <li>• Surgery (e.g. surgical underpinning for an impending fracture)</li> <li>• Interventional treatments (e.g. epidural or celiac block, cementoplasty).</li> </ul>			

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
10.	<b>Resources to Address Questions / Concerns from Patients and Providers</b>	<p>During and after Oncology Clinic hours, processes in place to address questions / concerns regarding the following:</p> <ul style="list-style-type: none"> <li>• Appointments</li> <li>• Systemic therapy treatment</li> <li>• Supportive care</li> </ul> <p>Ensures processes are clearly communicated and readily accessible to patients and providers involved in the patient's care (e.g. pharmacists, inpatient based physicians, etc.)<sup>26</sup>.</p>	<p>During Oncology Clinic hours and after Oncology Clinical hours, processes in place to address questions / concerns regarding the following:</p> <ul style="list-style-type: none"> <li>• Appointments</li> <li>• Systemic therapy treatment</li> <li>• Supportive care</li> </ul> <p>Ensures processes are clearly communicated and readily accessible to patients and providers involved in the patient's care (e.g. pharmacists, inpatient based physicians, etc.)<sup>26</sup>.</p>	Same as T3.	<p>Same as T4 Plus:</p> <p>During Oncology Clinic hours provides a dedicated nursing support telephone line for patients.</p> <p>Provides dedicated support for any health care professional (non-urgent matters) via telephone and email by an assigned Clinical Nurse Educator.</p>	Same as T5.
11.	<b>Patient Education</b>	<p>Provides individualized information to patients that meets diverse needs (e.g. different language options, understandable) on:</p> <ul style="list-style-type: none"> <li>• @Systemic therapy use.</li> <li>• @Preventing, recognizing and managing systemic therapy side effects.</li> <li>• @Caring for vascular access devices and infusion sites.</li> <li>• Handling cancer drugs and body fluids in the</li> </ul>	Same as T2.	Same as T3.	<p>Same as T4 Plus:</p> <p>Provides <b>onsite</b> group systemic therapy teaching sessions.</p> <p>Provides <b>onsite</b> specialized tumour group education sessions (e.g. breast, gynecological, colorectal, prostate, etc.).</p>	<p>Same as T5 Plus:</p> <p>Provides <b>onsite</b> specialized support programs (e.g. Patient and Family Counselling, Vocational Rehabilitation, Return to Work Educational Sessions, etc.).</p>



		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Patient Education</b> <i>Continued...</i>	<p>home; including written information on administration, storage and handling for those on oral systemic therapy.</p> <ul style="list-style-type: none"> <li>Contact information (e.g. for emergencies, who to call, phone numbers).</li> </ul>				
12.	<b>Virtual Care</b>	<p>Hosts Virtual Care services from T3-6 for clinical consultations / appointments.</p>	<p>Provides Virtual Care clinical consultations / appointments for T2-3 to support patients across the Regional Health Authority and in First Nations communities.</p> <p>Hosts Virtual Care services from T4-6 for clinical consultations / appointments.</p>	<p>Provides Virtual Care clinical consultations / appointments for T2-4 to support patients across the Regional Health Authority and in First Nations communities.</p> <p>Hosts Virtual Care services from T5-6 for clinical consultations / appointments.</p>	<p>Provides Virtual Care clinical consultations / appointments for T2-5 to support patients across the Regional Health Authority and in First Nations communities.</p> <p>Hosts Virtual Care services from T6 for clinical consultations / appointments.</p>	<p>Provides Virtual Care clinical consultations / appointments for T2-5 to support patients across the province.</p>
13.	<b>Emergency Management</b>	<p>Emergency management code responses and Emergency Operations Centre in place to coordinate and manage response requirements.</p> <p>Processes in place to access patient medical records and treatment plans in the event of an emergency.</p> <p>Processes in place to allocate new medical records should a disaster</p>	Same as T2.	Same as T3.	Same as T4.	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
		occur.				
14.	<b>Transfer of Care</b>	Directs patients back to referring T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist as per the established treatment plan.	Directs patients back to T4-6 Medical Oncology Specialist as per the established treatment plan.	<p>Following the completion of care and / or when transitioning to another tier or setting of care:</p> <ul style="list-style-type: none"> <li>• Discusses and assesses any side effects and / or late effects</li> <li>• Provides contact information on who to talk to about different concerns</li> <li>• Provides a comprehensive care summary and follow up plan.</li> <li>• Provides a schedule of tests and coordinates care and referrals for other outpatient medical oncology services, clinical diagnostic services, clinical adjacencies (e.g. removal of central lines) and health care team members as required.</li> <li>• Coordinates with T1 to prescribe / renew prescriptions for select cancer drugs (e.g. tamoxifen and aromatase inhibitors) as required.</li> </ul>	Same as T4.	Same as T5.

### C. Requirements

Notes: The team is established based on defined criteria such as accepted standards of practice, legal requirements, knowledge, experience and other qualifications; volume or complexity of caseload, changes in workload and patient safety and needs. Additionally, depending on the needs and desires of the patient, the team may consist of specialized roles (e.g. care providers) and support roles (e.g. care planners, translators or representatives from community organizations). Students, volunteers and patient representatives / advisors may also be included as part of the team. The health care facility is responsible for vacation, relief and recruitment planning particularly for T2-3 where access to health care teams with oncology knowledge, skills and experience may be limited.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
<b>1.0</b>	<b>Minimum Systemic Therapy (Parenteral) Administration Treatment Visit Volumes Per Year<sup>vi</sup></b>					
<b>1.1</b>	<b>Volumes</b>	100+	400+	2000+	2500+	10,000+
<b>2.0</b>	<b>Providers</b>					
<b>2.1</b>	<b>Team Overview</b>	<p><b>Chemotherapy-certified Registered Nurse(s)</b> provide systemic therapy.</p> <p>Practice of the Registered Nurse(s) <b>predominantly</b> involves providing services other than systemic therapy delivery.</p> <p>Access to Allied Health professionals to provide care for patients with cancer.</p>	<p><b>Clinical Practitioner(s) in Oncology and Registered Nurses regularly</b> provide care for patients with cancer.</p> <p>Practice of the team <b>mostly</b> involves providing medical oncology services.</p> <p>Access to Allied Health professionals to provide care for patients with cancer.</p>	<p><b>Medical Oncology Specialists, Registered Nurses and Allied Health professionals continuously</b> provide care for patients with cancer.</p> <p>Practice of the <b>specialized interdisciplinary team primarily</b> involves providing outpatient oncology services.</p>	<p><b>Medical Oncology Specialists assigned to specific tumour sites, Registered Nurses and Allied Health professionals continuously</b> provide care for patients with cancer.</p> <p>Practice of the specialized interdisciplinary team <b>exclusively</b> involves providing outpatient oncology services.</p>	<p>Medical Oncology Specialists with <b>expertise in rare and / or highly specialized cancers</b>, Registered Nurses and Allied Health professionals continuously provide care for patients with cancer.</p> <p>Practice of the specialized interdisciplinary team <b>exclusively</b> involves providing medical oncology services.</p>

<sup>vi</sup> Refer to Appendix D: Systemic Therapy Administration Treatment Visit Volumes (Actuals) for the Regional Health Authorities and BC Cancer.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
2.2	Physician	<p>T3-6 Clinical Practitioner in Oncology / Medical Oncology Specialist directs oncological care.</p> <p>During Oncology Clinic hours:</p> <ul style="list-style-type: none"> <li>• <b>Designated</b> local physician provides general medical care.</li> <li>• <b>Designated onsite</b> local physician <b>readily available in person</b> during select high alert medication<sup>23</sup> delivery and for urgent clinical situations</li> </ul> <p>After Oncology Clinic hours, available as per documented health care facility protocol.</p>	<p>Oversight provided by a Clinical Practitioner in Oncology.</p> <p>During Oncology Clinic hours:</p> <ul style="list-style-type: none"> <li>• Clinical Practitioner in Oncology <b>available within 30 minutes for non-urgent clinical situations</b> (e.g. dosage adjustments).</li> <li>• Designated onsite local physician readily available in person during select high alert medication<sup>23</sup> delivery and for urgent clinical situations.</li> </ul> <p>After Oncology Clinic hours, establishes a schedule of on-call coverage or makes other arrangements to ensure that medical advice is available to patients and providers as necessary<sup>26</sup>.</p> <p>Clinical Practitioner in Oncology is part of the Family Practice Oncology Network and engages in activities with this network.</p>	<p>Care provided by a <b>Medical Oncology Specialist</b>.</p> <p>During Oncology Clinic hours:</p> <ul style="list-style-type: none"> <li>• Medical Oncology Specialist available within 30 minutes for non-urgent clinical situations (e.g. dosage adjustments).</li> <li>• Designated onsite local physician readily available in person during select high alert medication<sup>23</sup> delivery and for urgent clinical situations.</li> </ul> <p>After Oncology Clinic hours, establishes a schedule of on-call coverage or makes other arrangements to ensure that medical advice is available to patients and providers as necessary<sup>26</sup>.</p>	<p>Care provided by an <b>onsite Medical Oncology Specialist assigned to a specific tumour site</b>.</p> <p>During Oncology Clinic hours onsite Medical Oncology Specialist:</p> <ul style="list-style-type: none"> <li>• Readily available <b>in person</b> within 30 minutes for non-urgent clinical situations (e.g. dosage adjustments).</li> <li>• Readily available in person during select high alert medication<sup>23</sup> delivery and for urgent clinical situations.</li> </ul> <p>After Oncology Clinic hours, establishes <b>24/7 on-call coverage, (including on-call coverage for patients participating in clinical drug therapy trials)</b> to ensure that urgent medical advice is available to patients and providers as necessary<sup>26</sup>.</p>	<p>Same as T5 Plus:</p> <p>Many onsite Medical Oncology Specialists have <b>expertise in rare and highly specialized tumours</b>.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
2.3	Nurse Practitioner	<p><b>In lieu of a local physician;</b> during Oncology Clinic hours:</p> <ul style="list-style-type: none"> <li>• <b>Designated local Nurse Practitioner</b> provides general medical care.</li> <li>• <b>Designated onsite local Nurse Practitioner readily available in person</b> during select high alert medication<sup>23</sup> delivery and for urgent clinical situations.</li> </ul>	<p><b>In lieu of a local physician;</b> during Oncology Clinic hours:</p> <ul style="list-style-type: none"> <li>• <b>Designated onsite local Nurse Practitioner readily available in person</b> during select high alert medication<sup>23</sup> delivery<sup>vii</sup> and for urgent clinical situations.</li> </ul>	Same as T3.	<i>Non-Applicable: Nurse Practitioners are not a requirement for T5.</i>	<i>Non-Applicable: Nurse Practitioners are not a requirement for T6.</i>
2.4	Registered Nurse	<p>When providing systemic therapy, there are <b>onsite</b> chemotherapy certified Registered Nurse(s)<sup>iii</sup>.</p> <p><b>Access to a general clinical resource nurse</b> (e.g. Clinical Nurse Educator) for orientation and to address ongoing education / learning needs.</p> <p><b>Access to an experienced preceptor</b> to support Registered Nurses during clinical practicums for chemotherapy certification.</p>	<p>When providing systemic therapy, there are <b>onsite</b> chemotherapy certified Registered Nurse(s)<sup>iii</sup>.</p> <p>Access to a general clinical resource nurse (e.g. Clinical Nurse Educator) for orientation and to address ongoing education / learning needs.</p> <p>Access to an experienced preceptor to support Registered Nurses during clinical practicums for chemotherapy certification.</p>	<p>When providing systemic therapy, there are <b>onsite</b> chemotherapy certified Registered Nurses<sup>iii</sup>.</p> <p>Access to a designated clinical resource nurse (e.g. Clinical Nurse Educator) <b>with oncology expertise / experience</b> for orientation and to address ongoing education / learning needs.</p> <p><b>Onsite</b> experienced preceptor to support Registered Nurses during clinical practicums for chemotherapy certification.</p>	<p>When providing systemic therapy, there are <b>onsite</b> chemotherapy certified Registered Nurses<sup>iii</sup>.</p> <ul style="list-style-type: none"> <li>• Many have experience in participating in clinical trials.</li> </ul> <p><b>Onsite clinical resource nurse</b> (e.g. Clinical Nurse Educator) with oncology expertise / experience assigned to the Oncology Clinic to:</p> <ul style="list-style-type: none"> <li>• Provide orientation</li> <li>• Address ongoing education / learning needs.</li> <li>• Provide support for any</li> </ul>	<p>Same as T5 Plus:</p> <p>When providing systemic therapy, there are <b>onsite chemotherapy certified</b> Registered Nurses<sup>iii</sup>:</p> <ul style="list-style-type: none"> <li>• Have experience in providing care for patients with <b>rare and / or highly specialized cancers.</b></li> </ul>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	Registered Nurse <i>Continued...</i>				health care professional via telephone and email.  Onsite experienced preceptor to support Registered Nurses during clinical practicums for chemotherapy certification.	
2.5	Registered Dietitian	Access to a general Registered Dietitian.	Same as T2 Plus:  <b>Access to</b> a Registered Dietitian with oncology knowledge, experience and skills.	<b>Onsite designated</b> Registered Dietitian(s) with <b>oncology knowledge, skills and experience.</b>	Onsite designated Registered Dietitian(s) with <b>expert</b> oncology knowledge, skills and experience: <ul style="list-style-type: none"> <li>• <b>Have Restricted Activity C: Administration of Enteral Nutrition competency</b></li> <li>• Have experience managing patients receiving concurrent therapies</li> <li>• Most have expertise in specific tumour groups.</li> </ul>	Same as T5.
2.6	Social Worker / Counsellor	Access to a general Social Worker / Counsellor.	Same as T2 Plus:  <b>Access to</b> a Social Worker / Counsellor with oncology knowledge, experience and skills.	<b>Onsite designated</b> Social Worker(s) / Counsellor(s) with <b>oncology knowledge, skills and experience</b>	Onsite designated Social Worker(s) / Counsellor(s) with <b>expert</b> oncology knowledge, skills and experience <ul style="list-style-type: none"> <li>• Have completed a Master's program in order to provide counselling.</li> </ul>	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	Social Worker / Counsellor <i>Continued...</i>				<ul style="list-style-type: none"> <li>Leads onsite specialized support groups.</li> </ul>	
2.7	Pharmacist	<p>Access to a Pharmacist(s) with certification from the BC Cancer Pharmacy Oncology Certification Program.</p>	<p>Onsite Pharmacist(s) with</p> <ul style="list-style-type: none"> <li>Certification from the BC Cancer Pharmacy Oncology Certification Program</li> </ul> <p>Access to a Pharmacist with oncology knowledge, experience and skills.</p>	<p>Onsite designated Pharmacist(s) with:</p> <ul style="list-style-type: none"> <li>Certification from the BC Cancer Pharmacy Oncology Certification Program.</li> <li><b>Oncology knowledge, skills and experience.</b></li> </ul>	<p>Onsite designated Pharmacist(s) with:</p> <ul style="list-style-type: none"> <li>Certification from the BC Cancer Pharmacy Oncology Certification Program.</li> <li><b>Expert</b> oncology knowledge, experience and skills:</li> </ul> <p>Onsite pharmacist <b>with clinical trials training</b> to facilitate, oversee and manage drugs related to clinical trials.</p>	<p>Onsite designated Pharmacist(s) with:</p> <ul style="list-style-type: none"> <li>Certification from the BC Cancer Pharmacy Oncology Certification Program.</li> <li><b>Expert</b> oncology knowledge, experience and skills.</li> <li><b>Experience in providing care for patients requiring new and / or uncommon, high complexity systemic therapy.</b></li> <li><b>Experience in providing care for patients with rare and / or highly specialized cancers.</b></li> <li>Participates in scheduled rounds.</li> </ul> <p>Onsite pharmacist <b>with clinical trials training</b> to facilitate, oversee and manage drugs related to clinical trials.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
2.8	Pharmacy Technician	<b>Access to a Pharmacy Technician(s)</b> with: <ul style="list-style-type: none"> <li>• Certification from the BC Cancer Pharmacy Oncology Certification Program</li> </ul>	<b>Onsite Pharmacy Technician</b> with : <ul style="list-style-type: none"> <li>• Certification from the BC Cancer Pharmacy Oncology Certification Program</li> </ul>	Same as T3.	Same as T4.	Same as T5.
2.9	Indigenous Patient Liaison / Advocate	Access to an Indigenous Patient Liaison / Advocate.	Same as T2.	Same as T3.	Access to a <b>designated</b> Indigenous Patient Liaison / Advocate.	Same as T5.
2.10	Clerical Staff	<b>Designated</b> clerical staff to assist with registration, scheduling patient appointments and managing documentation.	Designated clerical staff <b>assigned to the Oncology Clinic</b> to assist with registration, scheduling patient appointments and managing documents.	Designated <b>consistent</b> clerical staff assigned to the Oncology Clinic to assist with registration, scheduling patient appointments and managing documentation.	Same as T4 Plus:  Clerical staff have experience in processing documentation for patients participating in clinical trials.	Same as T5.
3.0	<b>Facilities</b>	<p>Ⓐ Patient dignity; respect, privacy and confidentiality; accessibility; infection prevention and control; and other needs specific to the patients and community served must be considered in Oncology Clinic space use and design.</p> <p>Ⓐ The Oncology Clinic is kept clean and clutter-free to support physical accessibility for those who use mobility aids. The environment is also accessible for those with language, communication or other requirements, such as those who have auditory, visual, cognitive or other impairments..</p> <p>Varying factors such as leveraging on the health care facility support space, services, functions etc. (e.g. hospital registration, meal services, cytotoxic/bio-waste soiled room, co-sharing with adjacent outpatient clinics, etc.), will impact the facilities planning for services. An appropriate functional programming is required as part of the facility planning, ensuring the space and functional areas can support patients' care and operations, based on the varying care models, demands/projections, equipment needs, etc.</p>				
3.1	<b>Space</b>	Onsite Oncology Clinic space <b>may be shared</b> with other clinical services (e.g. other outpatient clinics).	Same as T2 Plus:  <b>Onsite pharmacy</b> with: <ul style="list-style-type: none"> <li>• Biological Safety Cabinet</li> </ul>	Same as T3 Plus:  Onsite Oncology Clinic space <b>is dedicated</b> to	Same as T4 Plus:  <b>Onsite</b> access to: <ul style="list-style-type: none"> <li>• Space for systemic</li> </ul>	Same as T5 Plus:  <b>Onsite access</b> to space for formal student learners.



		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
		<p><b>Onsite Oncology Clinic space</b> for:</p> <ul style="list-style-type: none"> <li>• Systemic therapy treatment chair and stretcher space</li> <li>• Patient education material</li> <li>• Clean supplies room</li> <li>• Soiled utility room</li> <li>• Staff workspace and workstations.</li> </ul> <p><b>Onsite access to:</b></p> <ul style="list-style-type: none"> <li>• Patient reception / waiting area in close proximity to the Oncology Clinic</li> <li>• Patient registration</li> <li>• Space for consultations (e.g. for nutritional, psychosocial care) in close proximity to the Oncology Clinic.</li> <li>• Isolated space for patients requiring Infection Control precautions.</li> <li>• Patient friendly Virtual Care (two way videoconferencing) enabled space, equipment, hardware and software access.</li> </ul>	<p>or Negative Pressure Isolator for parenteral systemic therapy preparation.</p> <ul style="list-style-type: none"> <li>• A dispensary for oral systemic therapy</li> </ul>	<p>outpatient oncology services and <b>is not shared</b> with other clinical services (e.g. other outpatient clinics)</p> <p>Onsite Oncology Clinic Space:</p> <ul style="list-style-type: none"> <li>• Patient reception / waiting area</li> </ul> <p>Onsite access to:</p> <ul style="list-style-type: none"> <li>• Space for team-based care</li> </ul>	<p>therapy group teaching sessions.</p> <ul style="list-style-type: none"> <li>• Space for specialized support groups</li> <li>• Expanded patient library and education / training space for patient education activities</li> </ul>	

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
		<p>Access to a <b>designated pharmacy</b> with:</p> <ul style="list-style-type: none"> <li>• Biological Safety Cabinet or Negative Pressure Isolator for parenteral systemic therapy preparation.</li> <li>• Dispensary for oral systemic therapy.</li> </ul>				
<b>4.0</b>	<b>Clinical Diagnostic and Support Services</b>					
<b>4.1</b>	<b>Radiation Oncology Clinic</b>	Access to an outpatient Radiation Oncology clinic.	Same as T2.	Same as T3.	<b>Onsite outpatient</b> Radiation Oncology clinic.	Same as T5.
<b>4.2</b>	<b>Medical Imaging</b>	<b>Access</b> to imaging services (i.e. Computed Tomography (CT), Magnetic Resonance Imaging (MRI), x-ray, ultrasound, nuclear medicine, interventional radiology and Positron Emission Tomography (PET)).	Same as T2.	Same as T3.	Same as T4.	Same as T5 Plus:  <b>Onsite</b> PET imaging services.
<b>4.3</b>	<b>Pathology and Laboratory</b>	<b>Access</b> to oncology related pathology and laboratory services (e.g. genetic testing, tumour markers).	Same as T2.	Same at T3.	Same as T4.	Same as T5.
<b>4.4</b>	<b>Medical Day Care / Ambulatory Care</b>	<b>Access</b> to Medical Day Care / Ambulatory Care services for the	Same as T2.	Same as T3.	Same as T4.	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Medical Day Care / Ambulatory Care</b> <i>Continued...</i>	management (includes insertion) for patients requiring central venous catheters / port-a-caths / Peripherally Inserted Central Catheters (PICC), intravenous hydration, blood product transfusions, wound care, supportive therapy and intravesicular administration.				
4.5	<b>Pain and Symptom Management and Palliative Care Clinic</b>	Access to Pain and Symptom Management and Palliative Care clinics.	Same as T2.	Same as T3.	<b>Onsite</b> Pain and Symptom Management and Palliative Care clinic.	Same as T5.
4.6	<b>Clinical Trials</b>	Access to a Clinical Trials Unit.	Same as T2.	Same as T3.	<b>Onsite</b> Clinical Trials Unit.	Same as T5.
<b>5.0</b>	<b>Other Requirements</b>					
5.1	<b>Emergency Equipment Supplies</b>	Resuscitation equipment, supplies and drugs (e.g. oxygen, suction, ambu bag, standard crash cart) (including an infusion reactive emergency reaction kit).	Same as T2.	Same as T3.	Same as T4.	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
5.2	<b>Systemic Therapy Delivery Equipment and Supplies</b>	<p>Equipment to administer systemic therapy via intravenous, subcutaneous and intramuscular routes.</p> <p>Maintains a closed system (or approved procedures to maintain a closed system), elastomeric device (e.g. INFUSOR® and electronic ambulatory infusion device (e.g. CADD® pump).</p> <p>Infusion device with a functioning alarm with dose error reduction functionality.</p>	Same as T2.	Same as T3.	<p>Same as T4 Plus:</p> <p>Equipment to administer systemic therapy via intrathecal<sup>21</sup>, ventricular and intraperitoneal routes.</p>	Same as T5.
5.3	<b>Systemic Therapy Safe Handling Equipment and Supplies</b>	<p>Personal Protective Equipment (PPE), Hazardous Drug Spill Kit and biohazardous waste disposal equipment in place.</p> <p>Cytotoxic precautions in place as per health care facility protocol.</p>	Same as T2.	Same as T3.	Same as T4.	Same as T5.
5.4	<b>Technology and Information Systems</b>	ⒶElectronic medical / health records (EMR / EHR), decision support	Same as T2.	Same as T3.	Same as T4.	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
Technology and Information Systems <i>Continued...</i>	tools, clinical tracking systems, waitlist management systems, patient self-assessment tools or access to service – specific registries and / or databases in place.					

### 4.4.2 Knowledge Sharing and Transfer / Training

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
<b>1.0</b>	<b>Formal Student Learning</b>					
<b>1.1</b>	<b>Medical Students, Residents and Fellows</b>	<b>Provides access</b> to formal cancer care learning experiences.	If designated by the University of British Columbia (UBC) as a training site, provides cancer care learning experiences for: <ul style="list-style-type: none"> <li>• Undergraduate medical students</li> <li>• Family medicine residents.</li> </ul>	Same as T3.	Same as T4 Plus:  Participates in the Royal College of Physicians and Surgeons of Canada accredited subspecialty Medical Oncology Program.  Provides clinical and post-graduate fellowships in specific tumour groups.  Range of cancer care experiences is broader than T4.	Same as T5 Plus:  Designated by UBC as a training site and together with T5 provides a two year Royal College of Physicians and Surgeons of Canada accredited subspecialty Medical Oncology Program.  Participates in other accredited residency programs (e.g. hematology)  Range of potential cancer care experiences is broader than T5.
<b>1.2</b>	<b>Registered Nursing Students, Registered Dietitian Students and Psychosocial Students</b>	<b>Provides access</b> to formal cancer care learning experiences.	If designated by an educational institution, provides cancer care learning experiences for students.	Same as T3.	Same as T4.	Same as T5.

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
1.2	Pharmacy Students	Provides access to formal cancer care learning experiences.	If designated by an educational institution, provides cancer care learning experiences for: <ul style="list-style-type: none"> <li>• Undergraduates</li> <li>• Residents</li> </ul>	Same as T3.	Same as T4.	Designated by UBC to provide the Pharmacy Practice Residency Program.
<b>2.0 Continuing Professional Education</b>						
2.1	Clinical Practitioner in Oncology, Nurse Practitioner and Medical Oncology Specialist	Provides access to continuing professional education.  Process in place to facilitate completion of cultural safety training.	Processes in place to support maintenance of Continuing Medical Education (CME).  Process in place to provide access to learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups, rounds) and clinical practice (e.g. clinical experience with T4-6).  Process in place to facilitate completion of cultural safety training.	Processes in place to support maintenance of Continuing Medical Education (CME).  Provides cancer care clinical experiences and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups, rounds) for T2-4 physicians / Nurse Practitioners.  Process in place to facilitate completion of cultural safety training.	Processes in place to support maintenance of Continuing Medical Education (CME).  Provides a clinical rotation as part of the General Practitioner in Oncology Education Program.  Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T2-5 physicians.  Organizes regional tumour group learning activities with T3-5 that supports the maintenance of physician competencies in tumour care.	Processes in place to support maintenance of Continuing Medical Education (CME).  In conjunction with UBC, delivers an Introductory Module for the General Practitioner in Oncology Education Program  Provides a clinical rotation as part of the General Practitioner in Oncology Education Program.  Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T3-

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Clinical Practitioner in Oncology, Nurse Practitioner and Medical Oncology Specialist</b> <i>Continued...</i>				Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-5 physicians.  Process in place to facilitate completion of cultural safety training.  Advocates for new treatment methods and protocols.	6 physicians / Nurse Practitioners.  Organizes regional tumour group learning activities with T3-6 that supports the maintenance of physician competencies in tumour care.  Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-6 physicians.  Process in place to facilitate completion of cultural safety training.  Advocates for new treatment methods and protocols.
2.2	<b>Registered Nurse</b>	Processes in place to: <ul style="list-style-type: none"> <li>Facilitate completion of chemotherapy certification</li> <li>Facilitate completion of cultural safety training</li> <li>Regularly review education needs for maintenance of cancer</li> </ul>	Same as T2 Plus:  Provides cancer care clinical experiences for T2 Registered Nurses.	Same as T3 Plus:  Provides cancer care clinical experiences and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning	Same as T4 Plus:  Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning	Same as T5 Plus:  Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation



		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
Registered Nurse <i>Continued...</i>	<p>care and continuing chemotherapy competencies</p> <ul style="list-style-type: none"> <li>Facilitate access to learning activities based on identified practice gaps, plus practice of critical clinical skills where limited opportunity exists in practice.</li> <li>Facilitate access to learning activities such as (e.g. online access to the INDEX of Nursing Practice / Education Resources, guidelines / reference materials / continuing education courses and participation in learning activities such as provincial and / or regional tumour groups).</li> </ul> <p>Facilitates access to cancer care clinical experiences at T3-6.</p>			activities relevant to cancer care such as provincial and / or regional tumour groups, rounds) for T2-4 Registered Nurses.	activities relevant to cancer) for T2-5 Registered Nurses.  Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-5 Registered Nurses.	in learning activities relevant to cancer) for T3-6 Registered Nurses.  Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-6 Registered Nurses.

		<b>Focused Outpatient Systemic Therapy Service</b>	<b>General Outpatient Medical Oncology Service</b>	<b>Comprehensive Outpatient Medical Oncology Service</b>	<b>Regional Subspecialty Outpatient Medical Oncology Service</b>	<b>Provincial Subspecialty Outpatient Medical Oncology Service</b>
		<b>T2</b>	<b>T3</b>	<b>T4</b>	<b>T5</b>	<b>T6</b>
<b>2.3</b>	<b>Registered Dietitian and Social Worker/ Counsellor</b>	<p>Processes in place to:</p> <ul style="list-style-type: none"> <li>Facilitate completion of cultural safety training</li> <li>Facilitate access to learning activities based on identified practice gaps, plus practice of critical clinical skills where limited opportunity exists in practice.</li> <li>Facilitate access to learning activities (e.g. guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups.).</li> </ul>	<p>Processes in place to:</p> <ul style="list-style-type: none"> <li>Facilitate completion of cultural safety training</li> <li>Regularly review education needs related to maintenance of cancer care competencies.</li> <li>Facilitate access to learning activities based on identified practice gaps, plus practice of critical clinical skills where limited opportunity exists in practice.</li> <li>Facilitate access to learning activities (e.g. guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups.)</li> </ul> <p>Provides cancer care clinical experiences for T2-3 Registered Dietitians and Social Workers / Counsellors.</p>	<p>Same as T3 Plus:</p> <p>Provides cancer care clinical experiences and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups, rounds) for T2-4 Registered Dietitians and Social Workers / Counsellors.</p>	<p>Same as T4 Plus:</p> <p>Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T2-5 Registered Dietitians and Social Workers / Counsellors.</p> <p>Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-5.</p>	<p>Same as T5 Plus:</p> <p>Provides cancer care clinical experience and learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T3-6 Registered Dietitians and Social Workers / Counsellors.</p> <p>Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-6.</p>

		Focused Outpatient Systemic Therapy Service	General Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
2.4	<b>Pharmacists and Pharmacy Technicians</b>	<p>Processes in place to:</p> <ul style="list-style-type: none"> <li>• Facilitate completion of the BC Cancer Pharmacy Oncology Certification Program.</li> <li>• Facilitate completion of cultural safety training</li> <li>• Regularly review education needs for maintenance of BC Cancer Oncology Certification</li> <li>• Facilitate access to learning activities based on identified practice gaps, plus practice of critical clinical skills where limited opportunity exists in practice.</li> <li>• Facilitate access to learning activities such as (e.g. online access to education resources, guidelines / reference materials / continuing education courses and participation in learning activities such as provincial and / or regional tumour groups).</li> </ul>	Same as T2.	<p>Same as T3 Plus:</p> <p>Provides cancer care learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer care such as provincial and / or regional tumour groups, rounds) for T2-4 Pharmacists and Pharmacy Technicians.</p>	<p>Same as T4 Plus:</p> <p>Provides cancer care learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T2-5 Pharmacists and Pharmacy Technicians.</p> <p>Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-5 Pharmacists and Pharmacy Technicians.</p>	<p>Same as T5 Plus:</p> <p>Provides cancer care learning activities (e.g. online access to guidelines / reference materials / continuing education courses and participation in learning activities relevant to cancer) for T3-6 Pharmacists and Pharmacy Technicians.</p> <p>Organizes learning activities to promote improvements in providing culturally safe cancer care for T2-6 Pharmacists and Pharmacy Technicians.</p>

4.4.3 Quality Improvement / Research

		General Outpatient Medical Oncology Service	Focused Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
1.0	Quality Improvement	<p><sup>Ⓐ</sup>Organizational mechanisms in place to obtain patient feedback on cancer care services, resources, space and staffing and implement recommendations.</p> <p>Mechanisms in place to report and address culturally unsafe care.</p>	<p>Same as T2 Plus:</p> <p>Quality Improvement structures and processes in place, including case reviews.</p> <p>Implements recommendations, evaluates outcomes and participates in regional and provincial cancer care quality improvement initiatives.</p>	<p>Same as T3 Plus:</p> <p>Quality Improvement structures and processes in place to specifically review and improve the quality and safety of patients with cancer, including case reviews for T2-4 as required.</p>	<p>Same as T4 Plus:</p> <p>Provides subspecialty cancer care expertise for T2-5 case reviews as required.</p> <p>Consults with cancer care experts within or outside BC for case reviews, as appropriate.</p>	<p>Same as T5.</p> <p>Provides subspecialty cancer care expertise for T2-6 case reviews as required.</p>
		<p><sup>Ⓓ</sup>Processes in place to regularly collect indicator data and track progress (e.g. wait time data, treatment-related toxicity outcomes; client reported outcomes and feedback about the quality of services at a local level).</p> <p>Uses the data and feedback to identify opportunities for quality improvement initiatives and sets priorities with input from patients.</p>	<p>Same as T2.</p>	<p>Same as T3 Plus:</p> <p>Processes in place to regularly collect and analyze indicator data and track progress, including wait time data, treatment-related toxicity outcomes, client reported outcomes and feedback about the quality of services at a regional level.</p>	<p>Same as T4.</p>	<p>Same as T5.</p>

		General Outpatient Medical Oncology Service	Focused Outpatient Medical Oncology Service	Comprehensive Outpatient Medical Oncology Service	Regional Subspecialty Outpatient Medical Oncology Service	Provincial Subspecialty Outpatient Medical Oncology Service
		T2	T3	T4	T5	T6
	<b>Quality Improvement</b> <i>Continued...</i>	Participates in the reviewing of trends at a local level for hazards, adverse events and near misses as per reports generated from PSLs.  Participates in the analysis of patient safety incidents to prevent recurrences and make improvements with input from patients.	Same as T2.	Same as T3.	Same as T4.  In collaboration with BC Cancer and the Regional Health Authorities, participates in reviewing PSLs trends at a regional level.  Takes regional action to reduce future occurrences.	Same as T5.
		System supports in place to enable health care providers to provide care that is consistent with BC Cancer policies, guidelines and protocols.	Same as T2.	Same as T3.	Same as T4.	Same as T5.
<b>2.0</b>	<b>Research</b>	Participates in cancer care related research.	Same as T2.	Same as T3.	Same as T4.	Leads, participates and supports others to conducting cancer care related research.

## 5.0 Definitions

**Access / Accessible:** Ability to utilize a service (either located onsite or offsite) or skills of a suitably qualified person (who may be either onsite or offsite) without difficulty or delay via various communication mediums, including but not limited to face-to-face or Virtual Care.

**Available:** Ability to obtain advice and on-site presence of a suitably qualified person within specified hours. Person may be onsite or may be on-call and available onsite as needed.

**Biological Safety Cabinet:** A ventilated cabinet or enclosure that uses directional airflow and High Efficiency Particulate Air (HEPA) filters to provide personnel, environmental and varying degrees of product protection.

**Clinical Practitioner in Oncology** (Formerly known as General Practitioner in Oncology): Medical staff who provide an expanded scope of oncology based services as part of an Oncology team. They provide medical care to patients with cancer in consultation with oncology specialists. This includes but is not limited to: diagnostic procedures, implementation, management and monitoring of treatment plans and pain and symptom management.

**Clinical Trials Unit:** Responsible for designing, conducting, analyzing, executing, coordinating and reporting of clinical trials.

**Closed System:** A closed system is defined as one that does not exchange unfiltered air or contaminants with the adjacent environment. There are situations where a completely closed system cannot be achieved even with the use of a Closed System Drug Transfer Device (CSDTD) (e.g. subcutaneous or intramuscular injections). Use of a CSDTD does not replace safe handling guidelines or use of personnel protective equipment when administering chemotherapeutic drugs. Where CSDTDs are not yet available, attempts should be made to minimize opening the system by:

- Closing the vent on all tubing prior to initiating chemotherapy
- Clamping and changing the secondary medication line with each new chemotherapy drug (NOT unspiking the bag)

**Complexity:** Outlined in *Section 4.3 Risk and Complexity*.

**Compassionate Access Program:** Provides access to evidence-based treatments that are restricted in funding on the Benefit List or indicated in exceptional clinical circumstances. Details on BC Cancer's Compassionate Access Program can be accessed at <http://www.bccancer.bc.ca/health-professionals/clinical-resources/systemic-therapy#:~:text=The%20BC%20Cancer%20Compassionate%20Access,of%20their%20requests%2C%20and%20receive>

**Designated:** Pre-determined / pre-identified service or person.

**Health Canada's Special Access Programme:** Provides access to non-marketed drugs for practitioners treating patients with serious or life-threatening conditions when conventional therapies have failed, are unsuitable, or unavailable. It authorizes a manufacturer to sell a drug that

cannot otherwise be sold or distributed in Canada. Drugs considered for release include pharmaceutical, biologic, and radio-pharmaceutical products not approved for sale in Canada. Details on the Health Canada's Special Access Programme can be accessed at <http://www.bccancer.bc.ca/health-professionals/clinical-resources/pharmacy/drug-funding>

Ⓐ **Indicator:** A single, standardized measure, expressed in quantitative terms, that captures a key dimension of individual or population health, or health service performance. An indicator may measure available resources, an aspect of a process, or a health or service outcome. Indicators need to have a definition, inclusion and exclusion criteria, and a time period. Indicators are typically expressed as a proportion, which has a numerator and denominator (e.g., percentage of injuries from falls, compliance with standard procedures, team satisfaction). Counts, which do not have a denominator, may also be used (e.g., number of complaints, number of clients harmed as a result of a preventable error, number of policies revised). Tracking indicator data over time identifies successful practices or areas requiring improvement; indicator data is used to inform the development of quality improvement activities. Types of indicators include structure measures, process measures, outcome measures, and balancing measures.

**Medical Oncology Specialist:** Oncologist, Internist (with specialty training in Medical Oncology) or Hematologist.

**Oncology Clinic:** Systemic therapy treatment and assessment areas located within a health care facility.

**Onsite:** Physicians, staff, services and / or resources physically located within or adjacent to a health care facility.

**Operational Planning:** Planning for the creation of efficient and well-organized cancer care. Involves defining the needs of the population which will be accessing the service and utilizing the Tiers of Service framework to develop a service which aligns with those needs.

Ⓐ **Patient:** The recipient of care. Depending on the context, patient may also include the patient's family and / or support network when desired by the patient.

**Pharmaceutical Manufacture Patient Assistance Program:** Some pharmaceutical manufacturers have patient assistance programs that provide financial assistance to patients for their active cancer treatment drugs, and supportive care drugs that may not be covered by BC Cancer. They also offer home injection programs for some hormonal drugs. Details on the Pharmaceutical Manufacture Patient Assistance Program can be accessed at <http://www.bccancer.bc.ca/health-professionals/clinical-resources/pharmacy/drug-funding>

Ⓐ **Policy:** A document outlining an organization's plan or course of action. Refer to BC Cancer's Systemic Therapy Policies. They can be accessed at <http://www.bccancer.bc.ca/health-professionals/clinical-resources/systemic-therapy>

Ⓐ **Population:** Also known as community. A specific group of people, often living in a defined geographical area who may share common characteristics such as culture, values, and norms. A population may have some awareness of their identity as a group, and share common needs and a commitment to meeting them.

Ⓐ **Procedure:** A written series of steps for completing a task, often connected to a policy.

Ⓐ **Process:** A series of steps for completing a task, which are not necessarily documented.

Ⓐ **Protocols:** May also be referred to as treatment guidelines. Protocols vary by patient and cancer type. Protocols are used to guide the type(s) of treatments patients receive and may include systemic therapy regimens prescribed to patients, when and how imaging is completed, treatment delivery and the frequency of treatment. Refer to BC Cancer's Protocols. They can be accessed at <http://www.bccancer.bc.ca/health-professionals/clinical-resources/chemotherapy-protocols>

**Provincial:** Province-wide service accessible to patients and/or health care providers throughout the province.

**Risk:** Outlined in *Section 4.3 Risk and Complexity*.

Ⓐ **Scope of Practice:** The procedures, actions, and processes that are permitted for a specific health care provider. In some professions and regions, scope of practice is defined by laws and/or regulations. In these cases, licensing bodies use the scope of practice to determine the education, experience, and competencies that are required for health care providers to receive a license to practice.

**Select High Alert Medications:** IV infusions with a high risk of an acute serious infusion related reaction. Refer to BC Cancer Policy III-60 "Drug Reaction Management" for a listing of all IV infusions requiring a Physician or Nurse Practitioner to remain on site. This can be accessed at <http://shop.healthcarebc.ca/phsa/BCCancer/Systemic%20Therapy/70256.pdf>

**Specialist:** A specialty-trained medical doctor who has completed additional education and training in a specific area. Depending on the subspecialty, certification from the Royal College of Physicians and Surgeons of Canada (RCPSC) may be required.

**System Planning:** Strategic planning for the creation of an efficient and well-organized health system. Involves defining the needs of a population and utilizing the Tiers framework to develop services which align with those needs.

Ⓐ **Systemic Therapy:** Includes hormonal, biological, chemotherapeutic or cytotoxic agents.

Ⓐ **Team:** The group of the care professionals who work together to meet the complex and varied needs of patients, families and the community. Teams are collaborative, with different types of health care professionals working together in service provision. The specific composition of a team depends on the type of service provided.



Ⓐ **Transfer of Care:** When patients experience a change in team membership or location. This includes admissions, handovers, transfers and discharges.

Ⓐ **Transition:** A set of actions designed to ensure the safe and effective coordination and continuity of care as patients experience a change in health status, care needs, health-care providers or location (within, between, or across settings).

**Virtual Care:** Use of telecommunications and information technology to provide access to health assessment, diagnosis, intervention, consultation, supervision and information sharing across distance. Virtual Care may include, but is not limited to telephones, live interactive video links and remote patient monitoring devices.

**Visits:** Appointments scheduled in health care facility booking systems.

**Working Days:** Commonly defined as 0800-1700 Monday to Friday or as determined by the health care facility.

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## Appendix A: BC Cancer and Fraser Health Tiers of Service Working Group Membership

Organization	Name	Role
BC Cancer	<b>Dr. Gary Pansegrau (Co-Chair)</b>	<b>Regional Medical Director, Surrey</b>
	Dr. Helen Anderson	Provincial Lead, Systemic Therapy Program
	Joy Bunsko	Clinical Nurse Coordinator, Surrey
	Tammy Currie	Senior Director, Abbotsford
	Lexie Flatt	Consultant
	Dr. Shallen Letwin	Vice President, Regional Operations
	Astra Pereira	Coordinator, Regional Operations
	Cherie Taylor	Senior Director, Surrey
	Dr. Muhammad Zulfiqar	Regional Medical Director, Abbotsford
Child Health BC	Janet Williams	Consultant
Fraser Health	<b>Marie Hawkins (Co-Chair)</b>	<b>Executive Director, Primary Health Care, Stroke and Oncology and Medicine Clinical Network</b>
	Lynda Brown	Manager, Ridge Meadows Hospital
	Nankolia Gahadza	Coordinator, Oncology
	Theresa Guscott	Manager, Burnaby Hospital
	Dr. Wendy Lam	Medical Oncologist, Burnaby Hospital
	Dr. Ursula Lee	Department Head, Medical Oncology
	Dr. Caroline Mariano	Medical Oncologist, Royal Columbian Hospital
	Bruce Millin	Interim Executive Director, Lower Mainland Pharmacy Services
	Dr. Mike Noble	Medical Oncologist, Royal Columbian Hospital
	Dr. David Telio	Medical Oncologist, Burnaby Hospital
	Kay Unrau	Patient Care Coordinator, Burnaby Hospital
	Dr. Simon Yu	Medical Oncologist, Burnaby Hospital
Patient Voices Network	Pat Petrala	Patient Advisor

## Appendix B: Tiers of Service Provincial Working Group Membership

Organization	Name	Role
BC Cancer	<b>Dr. Shallen Letwin (Chair)</b>	<b>Vice President, Regional Operations</b>
	Dr. Helen Anderson	Provincial Lead, Systemic Therapy
	Tammy Currie	Senior Director, Regional Clinical Operations, BC Cancer - Abbotsford
	Heather Findlay	Senior Director, Regional Clinical Operations, BC Cancer - Vancouver
	Dr. Ed Hardy*	Medical Oncologist, Vernon Jubilee Hospital
	Dr. Steve Kulla*	General Practitioner in Oncology, Nanaimo Regional General Hospital
	Dr. Gary Pansegrau	Associate Medical Director, BC Cancer - Vancouver
	Dr. Caroline Lohrisch	Regional Department Head, Medical Oncology
	Astra Pereira	Coordinator, Regional Operations
Child Health BC	Dr. Maureen O'Donnell	Executive Director
	Joanne Shum	Consultant
	Janet Williams	Consultant
First Nations	Kevin Linn	Senior Health Policy Analyst
	Dr. Becky Palmer	Chief Nursing Officer
Fraser Health	Craig Goulet	Executive Director, Primary Care, Chronic Disease Management and Virtual Health
	Dr. Caroline Mariano	Medical Oncologist, Royal Columbian Hospital
	Justin Lochang	Director, Clinical Operations
	Kay Unrau	Patient Care Coordinator, Burnaby Hospital
Interior Health	Diana Ferguson	Patient Care Coordinator, Kootenay Boundary Regional Hospital
	Dr. Phillip Malpass	Internist, Kootenay Lake Hospital
	Yvonne Taylor	Health Service Administrator, North Okanagan Community Programs
Island Health	Dr. Donna Buna	Pharmacy Manager, Geographies 1 and 2
	Janet James	Manager, Ambulatory Care, Nanaimo Regional General Hospital
	Katie McTaggart	Manager, Cowichan District Hospital

<b>Northern Health</b>	Dr. Dana Cole	Regional Director, Pharmacy Services
	Dr. Jaco Fourie	Medical Lead, Cancer Care, Northern Health; Medical Director, Northwest Health Service Delivery Area
	Dr. Jessica Place	Lead, Cancer Care, Northern Health; Regional Director, Chronic Diseases
<b>Patient Advisor</b>	Cheryl Carter	Patient Advisor
<b>Vancouver Coastal</b>	Karen Baille	Patient Care Coordinator, Lions Gate Hospital
	Dr. Puneet Bains	Medical Oncologist, Lions Gate Hospital
	Shannon Chutskoff	Director, Lions Gate Hospital Emergency, Critical Care, Medicine, Neurology, Rehab and Sea-to-Sky
	Amy Randell	Interim Manager Acute Services, Squamish, Whistler, Pemberton

## Appendix C: Eastern Cooperative Oncology Group Performance Status<sup>27</sup>

Grade	Eastern Cooperative Oncology Group Performance Status
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all self-care but unable to carry out any work activities; up and about more than 50% of waking hours
3	Capable of only limited self-care; confined to bed or chair more than 50% of waking hours
4	Completely disabled; cannot carry on any self-care; totally confined to bed or chair
5	Dead



## Appendix D: Systemic Therapy (Parenteral) Administration Treatment Visit Volumes (Actuals) at the Regional Health Authorities and BC Cancer

<b>Systemic Therapy (Parenteral) Administration Treatment Visit Volumes (Actuals) at the Regional Health Authorities</b>					
<b>Regional Health Authority</b>	<b>Name of Hospital</b>	<b>Location of Hospital</b>	<b>FY2015/16</b>	<b>FY2016/17</b>	<b>FY2017/18</b>
<b>Fraser Health</b>	Burnaby Hospital	Burnaby	5025	4835	5088
	Ridge Meadows Hospital	Maple Ridge	658	649	737
	Royal Columbian Hospital	New Westminster	4039	5229	4761
<b>Interior Health</b>	100 Mile District General Hospital	100 Mile House	500	383	412
	Boundary District Hospital	Grand Forks	Not Available	329	283
	Cariboo Memorial Hospital	Williams Lake	750	538	293
	East Kootenay Regional Hospital	Cranbrook	1719	1968	1675
	Kootenay Boundary Regional Hospital	Trail	1322	1382	1621
	Kootenay Lake Hospital	Nelson	833	951	935
	Penticton Regional Hospital	Penticton	2487	2660	2925
	Royal Inland Hospital	Kamloops	3565	4094	4388
	Shuswap Lake General Hospital	Salmon Arm	827	1271	1342
	Vernon Jubilee Hospital	Vernon	3000	3134	3300
<b>Island Health</b>	Campbell River and District Regional Hospital	Campbell River	1207	1186	1327
	Cowichan District Hospital	Duncan	1748	1426	1781
	Nanaimo Regional General Hospital	Nanaimo	3965	4246	4871
	St. Joseph's General Hospital	Comox	2350	2282	2478
<b>Northern Health</b>	Bulkley Valley District Hospital	Smithers	523	511	559
	Dawson Creek and District Hospital	Dawson Creek	312	145	526
	Fort St. John General Hospital	Fort St. John	478	715	690
	Gerald Rumsey (G.R.) Baker Memorial Hospital	Quesnel	489	483	617
	Kitimat General Hospital	Kitimat	38	46	22

<b>Systemic Therapy (Parenteral) Administration Treatment Visit Volumes (Actuals) at the Regional Health Authorities</b>					
<b>Regional Health Authority</b>	<b>Name of Hospital</b>	<b>Location of Hospital</b>	<b>FY2015/16</b>	<b>FY2016/17</b>	<b>FY2017/18</b>
<b>Northern Health</b> <i>Continued</i>	Mills Memorial Hospital	Terrace	616	729	683
	Prince Rupert Regional Hospital	Prince Rupert	306	395	301
	Queen Charlotte / Haida Gwaii General Hospital	Queen Charlotte	147	65	130
	St. John Hospital	Vanderhoof	259	324	433
<b>Vancouver Coastal Health</b>	Lions Gate Hospital	North Vancouver	5870	5587	5591
	Powell River General Hospital	Powell River	650	786	789
	Richmond Hospital	Richmond	3350	3617	3405
	Sechelt Hospital	Sechelt	796	988	1226

<b>Systemic Therapy (Parenteral) Administration Treatment Visit Volumes (Actuals) at BC Cancer</b>			
<b>Regional Cancer Centre Name</b>	<b>FY2015/16</b>	<b>FY2016/17</b>	<b>FY2017/18</b>
Abbotsford	8800	9416	9742
Prince George	2737	2525	2626
Surrey	11143	11607	12231
Kelowna	5775	5983	6227
Vancouver	17715	17910	19058
Victoria	9367	9595	9890