



# Companion Guide to Tiers of Service

## PEDIATRIC CRITICAL CARE

**Note:** This guide complements and builds on the forthcoming provincial Tiers of Service framework. The provincial Tiers of Service framework is currently in development and will be launched by mid-2025. This guide is being made available ahead of the framework launch to support interim planning for health-care facilities. It will be updated as needed to reflect the provincial framework and changes in the health-care landscape.

September 2024

# Companion Guide to Tiers of Service: Pediatric Critical Care

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We encourage you to share this document with others and we welcome its use as a reference.

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The development of this companion guide was co-led by Child Health BC and Critical Care BC, in collaboration with BC Children’s Hospital and our network partners.

This document replaces the Child Health BC Tiers of Service Module: *Tiers in Brief and Tiers in Full Children and Critical Care Services*. Vancouver, BC: Child Health BC, Approved Jan 2019; Minor Update Nov 2020.

# 1.0 Acknowledgements

## Land Acknowledgement

As a provincial health improvement network, we operate on the unceded, traditional, and ancestral lands of First Nations across British Columbia (BC). Our main office is located on the traditional and ancestral lands of the Musqueam, Squamish, and Tsleil-Waututh Nations. We acknowledge the traditional and ancestral lands and territories of First Nations throughout BC in which the contributors to this resource work, live, and play. We also acknowledge the generations of First Nations, Métis, and Inuit from elsewhere in “Canada” who call these lands and waters home. We wish to honour the strength and beauty of the diverse Indigenous cultures, practices, beliefs, and values that have thrived on these lands for thousands of years.

## Commitment to Eradicating Indigenous Specific Racism

We are committed to eradicating Indigenous specific racism and advancing Indigenous cultural safety and humility. We acknowledge the harms resulting from ongoing colonization, systemic discrimination, and Indigenous-specific racism that continues to impact Indigenous health and wellness inequities. We understand that we have a responsibility to identify, interrupt, and redress the impacts of colonialism on Indigenous peoples health and wellness and are committed to: adopting and supporting culturally safe, humble, and trauma-informed practice and care that honour the inherent strength and resilience of Indigenous peoples and address Indigenous health and wellness inequities; embedding intentional and explicit consideration of Indigenous health and wellness through tools, resources, guidelines, processes, practices, and frameworks required for structural and systemic transformation; and continuing to educate our team through established programs and resources to build a more compassionate and informed workforce to create a meaningful, safe and healthy difference for Indigenous children, families and communities.

Some readers may not be familiar with the colonial context of Canada and its harmful legacies, nor of the ways in which Indigenous specific racism has been hardwired into the policies, processes, and practices of the health care system. If this history is unfamiliar, we strongly recommend that readers take the initiative to pursue additional learning to ensure we as a community identify and respond to Indigenous-specific racism, disrupt status quo ways of working that perpetuate systemic racism, and ultimately work towards creating a health care environment that is safe, equitable, and free of racism and discrimination for Indigenous children, youth, and families. This work is necessary to create an environment free of violence where First Nations, Inuit and Métis peoples are able to access and receive culturally safe, quality care.

## A commitment to gender-inclusive language

Throughout this document, the terms “children,” youth,” “families”, and “chosen supports” are utilized as broadly inclusive terms embracing Two-Spirit peoples, cisgender, transgender, gender non-binary, and gender non-conforming.

## 2.0 Tiers of Service

System planning for children's<sup>1</sup> health services is a major area of focus for Child Health BC and its provincial partners (health authorities, ministries, provincial organizations).

The [provincial Tiers of Service framework](#) establishes a unified understanding and a shared language for describing clinical services, based on collaboration among clinicians and health-care providers to define the requirements and interdependencies inherent in each clinical service.

*\*The provincial Tiers of Service framework is currently in development and will be launched by mid-2025. This guide is being made available ahead of the framework launch to support interim planning for health-care facilities. It will be updated as needed to reflect the provincial framework and changes in the health-care landscape.*

Tiers of Service is most effective as a tool to support hospital system and service planning when coupled with complementary methodologies. These include analyzing population growth projections, assessing clinical service utilization rates, studying referral patterns, addressing calls to action from foundational reports, and consulting with Indigenous peoples, patients, and communities.

*Additional information and frequently asked questions can be found on the [Tiers of Service webpage](#).*

## 3.0 Companion Guides

Companion guides have been developed for specific pediatric service areas. These companion guides complement and build on the provincial Tiers of Service framework, with supplementary information to support health service planning. These practical companion guides focus on operational and service planning considerations, such as responsibilities for pediatric care delivery, training, and quality improvement.

Collaborative working groups of multi-disciplinary clinicians, health professionals, patient and family representatives and health-system leaders from across B.C. have worked together to create these companion guides, using the best available data within B.C. and evidence from the literature. These guides are routinely reviewed and updated.

## 4.0 Cultural Safety and Anti-Indigenous Racism

In 2019, the Declaration on the Rights of Indigenous Peoples (DRIPA) established the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) as the province's framework for reconciliation, called for by the Truth and Reconciliation Commission's Calls to Action. To support its implementation, a provincial action plan was created to focus on upholding Indigenous rights and addressing the inequities experienced by Indigenous peoples by achieving the highest attainable standard for health and well-being.

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<sup>1</sup> Throughout this document "children" refers to children and youth unless otherwise stated.

The Pediatric Critical Care companion guide includes responsibilities which support achievement of the goals and outcomes described in the provincial action plan. References and footnotes have been included to draw attention to responses to specific recommendations.

Key reports utilized to inform this work include:

- [United Nations Declaration on the Rights of Indigenous Peoples \(UNDRIP\)](#)
- [BC Declaration on the Rights of Indigenous Peoples \(DRIPA\)](#)
- [DRIPA Action Plan](#)
- [Declaration of Commitment on Cultural Safety and Humility in Health Services](#)
- [British Columbia Cultural Safety and Humility Standard](#)
- [Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls](#)
- [In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care](#)

## 5.0 Companion Guide: Pediatric Critical Care

### 5.1 Scope

This companion guide for pediatric critical care is focused on critical care services provided to children up to 17 years old (16.9 years) who have highly acute and often highly complex illnesses, injuries, and complications. It complements and is designed to be utilized alongside the [provincial Tiers of Service framework](#), along with companion guides for pediatric emergency care, medicine, and surgery.

All facilities providing pediatric care should have capacity to provide resuscitation and initial stabilization of critically ill children while awaiting transport to a higher tier (in ED, on an inpatient unit and/or in critical care areas). This module focuses on critical care services which are provided beyond the resuscitation and initial stabilization period.

"Critical care services" refer to services which are above and beyond those usually available on a pediatric inpatient unit. Provision of these services requires specialized skills and enhanced staffing levels.

This Companion Guide does not include:

- Services provided in emergency departments.
- Services provided in neonatal intensive care units.

The tier identified for a given service represents the highest tier of that service which is available at that facility in typical day to day circumstances. Occasional exceptions may occur, usually due to geography and transportation, in which children may be managed and/or interventions performed on a case-by-case basis, by services that would not normally care for such children. These exceptions are appropriate where the resources (trained personnel, equipment, etc.) are available and deferring the treatment/procedure would be detrimental to a child's outcome. Another circumstance in which exceptions may occur is in unique, planned situations where children with chronic conditions are supported to remain living in their home community (e.g., children with chronic ventilators). These special situations are not the focus of this guide.

## 5.2 Format

The next section of this companion guide provides additional details to support clinical service and operational planning, such as responsibilities in care delivery, training, and quality improvement.

The table is divided into two sections:

- 5.3 Clinical Service
- 5.4 Education, Quality and Research

### 5.3 Clinical Service

The information in the tables below focuses on clinical responsibilities that promote and advance pediatric critical care and should be read in conjunction with the provincial Tiers of Service frameworks: Critical Care and Pediatric Critical Care (*in development*).

Critical care for pediatric patients begins at Tier 4. Tier 4 is divided into two distinct service settings:

- T4: Adult critical care service that admits pediatric patients.
- T4: Pediatric critical care service:
  - Sometimes referred to as high acuity, high dependency, or intermediate care units; describing the provision of care for pediatric patients requiring more complex intervention and close monitoring than available on a general hospital ward but not exceeding level of life support provided in an ICU.

T4 provides the first level of critical care for children and is typically available in more populated geographic areas in facilities which also have children's acute medical services.

T5 and T6 provide subspecialty critical care service for children within pediatric intensive care units. T5 provides a primarily regional service and T6 provides a provincial service which includes an extended range of monitoring and therapeutic interventions.

#### 5.3.1. Responsibilities

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
1.0	Service reach	Health service delivery area/health authority	Health service delivery area/health authority	Health authority	Province
2.0	Service description	<p>Critical care (CC) service primarily for adults.</p> <p>Infrequent care of critical care level 1 pediatric patients<sup>2</sup>.</p> <p>Adult CC service with acute pediatric medicine service support (no pediatric CC supports on-site).</p>	<p>Critical care service for children</p> <p>Routinely cares for critical care level 1 patients.<sup>2</sup></p> <p>Provides lowest level of critical care for pediatric patients with close monitoring and observation.</p> <p>Pediatric CC service with adult CC or NICU support.</p>	<p>Regional critical care service for children</p> <p>Routinely care for critical care levels 1-2 patients<sup>2</sup>.</p>	<p>Provincial critical care service for children which includes an extended range of monitoring and therapeutic interventions.</p> <p>Routinely care for all levels of critical care patients (levels 1- 3)<sup>2</sup>.</p>

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
3.0	Service focus/target population	<p>Provides resuscitation and initial stabilization of critically ill children.</p> <p>Short-term care for children with predictable trajectories (level 1 pediatric patients)<sup>2</sup>, showing continuous improvement and with expected resolution within 48 hours.</p> <p>Management of patients (levels 2-3 pediatric critical care patients)<sup>2</sup> requiring immediate transport with continuing consultation with T5/6.</p> <p>Established relationship and ongoing consultation with T5/T6 pediatric CC service regarding ongoing care and transfer.</p> <p>Documented process in place to escalate care and manage critically ill children while awaiting arrival of transport team. Process clearly outlines the role for the pediatric unit, ED, adult ICU and BCEHS.</p>	<p>Provides resuscitation and initial stabilization of critically ill children.</p> <p>Routinely cares for level 1 pediatric critical care patients.<sup>2</sup></p> <p>Children requiring more complex intervention and close monitoring than is available from acute medical services, but not exceeding level of life support provided in an ICU.</p> <p>Established relationship and ongoing consultation with T5/T6 pediatric CC service regarding ongoing care and transfer.</p> <p>Disease processes/injuries and/or management strategies may be unique to children.</p> <p>Documented process in place to escalate care and manage critically ill children while awaiting</p>	<p>Provides resuscitation and stabilization of critically ill children.</p> <p>Provides critical care services for children with a wide range of conditions and medical complexities.</p> <p>Routinely cares for levels 1-2 pediatric critical care patients.<sup>2</sup></p> <p>Disease processes/injuries and/or management strategies may be unique to children.</p> <p>Provides care in collaboration with subspecialty pediatric services (e.g., pediatric palliative care) to support children living with complex needs.</p>	<p>Provides resuscitation and stabilization of critically ill children.</p> <p>Children with a wide range of conditions and multiple medical complexities:</p> <ul style="list-style-type: none"> <li>• Provides an extended range of monitoring and therapeutic interventions.</li> </ul> <p>Routinely cares for levels 1-3 pediatric critical care patients.<sup>2</sup></p> <p>Disease processes/injuries and/or management strategies often require the services of multiple pediatric subspecialists.</p>

<sup>2</sup> Separate from the Tiers of Service is the child’s current “**Level of Care**”. This describes the child’s clinical status and intensity of care at the point in time at which it is measured. BC Children’s Hospital is leading the development of Pediatric Critical Care Levels of Care.



		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
			arrival of transport team. Process clearly outlines the role for the pediatric unit, ED, adult ICU and BCEHS.		
4.0	Trauma Informed and culturally safe care	Care provided is trauma informed with a focus on cultural safety and anti-Indigenous Racism. <sup>3</sup> Engages in a practice of Indigenous Cultural Safety and Humility as part of the service delivery approach. <sup>4</sup>			
5.0	Monitoring	Provides hemodynamic, respiratory, neurologic, and endocrine monitoring which may be more frequent than q1h for prolonged periods.			
6.0	Sepsis	Utilizes best and wise practices to screen and manage suspected and/or confirmed sepsis. <sup>5</sup>			
7.0	Pain and sedation management & anxiolysis.  Pain: acute, chronic, complex, & procedural.	Initial and on-going assessment and support for acute and chronic pain.  Regularly assesses and documents levels of pain and sedation using developmentally and culturally appropriate, validated assessment tools.  Identifies and regularly assesses desired levels of analgesia and sedation.  Provides age and developmentally appropriate, evidence-based psychological and physical pain-relieving interventions (non-pharmacological approaches). <sup>6,7</sup>	Same as T4 Adult/Pediatric plus:  Range of IV medications administered is consistent with HA/site approved pediatric critical care medication infusion profiles for a general pediatric unit.	Same as T4 plus:  Manages pain and symptoms that require an extended and innovative range of options. Often involves multiple types of analgesics and other medications which may be provided by multiple routes of administration to children of all ages. Utilizes regional anesthetic techniques as required (e.g., nerve blocks).  Range of IV medications administered is consistent with HA/site approved pediatric critical	Same as T5.

<sup>3</sup> In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care. Recommendation 20: That a refreshed approach to anti-racism, cultural humility and trauma-informed training for health workers be developed and implemented.

<sup>4</sup> British Columbia Cultural Safety and Humility Standard - HSO 75000:2022(E). Standard 7 Design and Deliver Culturally Safe Services. 7.2.3

<sup>5</sup> Pediatric Sepsis Toolkit.

<sup>6</sup> Pain Management Standard, BC Children's Hospital and BC Women's Hospital, [https://shop.healthcarebc.ca/phsa/BCWH\\_2/CW%20Campus%20Wide/C-0506-15-60941.pdf](https://shop.healthcarebc.ca/phsa/BCWH_2/CW%20Campus%20Wide/C-0506-15-60941.pdf)

<sup>7</sup> Education Resources and Practice Support Documents: Pediatric Pain and Comfort, Child Health BC, [https://www.childhealthbc.ca/foundations/resource\\_bundle/pediatric\\_pain\\_comfort](https://www.childhealthbc.ca/foundations/resource_bundle/pediatric_pain_comfort)

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
		<p>Administers and titrates weight-based doses of analgesics and sedative agents.</p> <p>Optimizes multi-modal analgesia (e.g., acetaminophen/ibuprofen in addition to other medications).</p> <p>Manages complications of analgesia and sedative agents.</p> <p>Prevents, assesses, and manages medication withdrawal.</p> <p>Range of IV medications administered is consistent with HA/site approved pediatric CC medication infusion profiles for an adult critical care unit.</p> <p>Consults/refers to Canuck Place, as required.</p>		care medication infusion profiles for a pediatric critical care unit.	
8.0	Procedural sedation	<p>Administers weight-based doses of analgesics/sedatives/ dissociative anesthetics as per health authority guidance, assuming availability of appropriate staffing, monitoring, and resuscitation equipment.<sup>8</sup></p> <p>Regularly assesses and documents level of sedation using an age and developmentally appropriate, validated sedation assessment tool(s).</p> <p>Processes in place to manage side effects of medications given and care for patient when the actual level of sedation is deeper than intended.</p> <p>Manages complications of sedative agents.</p>			
9.0	Psychosocial and spiritual support	Provides trauma-informed, time-limited 1:1 psychosocial/family <sup>9</sup> and	Same as T4 Adult/Pediatric.	Same as T4 plus:	Same as Tier 5.

<sup>8</sup> Please refer to your Health Authority specific guidelines and protocols for procedural sedation, including the compliment of healthcare providers necessary.

<sup>9</sup> "Family" is inclusive of family members, extended family members, and chosen supports such as community members, peer supports, trusted advocates, Elders, traditional healers, friends, romantic partners, and other caregivers.

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
		<p>spiritual care that supports with managing acute distress associated with critical illness.</p> <p>Accommodates requests for chosen supports (e.g., family members, extended family members, community members, peer supports, trusted advocates, Elders, traditional healers, friends, romantic partners, other caregivers) to remain with patient during their visit and/or be present at variable times to provide support and advocacy.<sup>10</sup></p> <p>Provide staff support for critical incident debriefing, psychological first aid to address emotional impact, compassion fatigue/grief or moral distress.</p>		<p>Provides specialized psychosocial/family support including structured therapeutic and diversional play, preparation and assistance during medical tests and procedures and support and short-term therapeutic counselling for families.</p>	
10.	Goals of care and advance care planning	<p>Identifies children that require advance care planning. Initiates shared decision-making discussions and documents advance care plans (ACPs), goals of care (GOC) and levels of interventions (LOI) when appropriate.</p> <p>Explores illness understanding and values/beliefs related to shared medical decision making, shares evolving prognostic understanding and makes recommendations for care informed by discussions with the family. Incorporates family and child-voice.</p> <p>Provides pediatric advance care planning and supportive communication for children living with a serious illness.<sup>11</sup> Consults with provincial pediatric palliative care program, Canuck Place.</p>			
11.	Imminent dying care	<p>After determining EOL is near and deciding, in consultation with T5/T6 and Canuck Place, most reasonable and appropriate location for death (whether or not a transfer is appropriate), provides</p>	<p>Same as T4 Adult/Pediatric.</p>	<p>Same as T4 plus:</p> <p>Provides specialized psychosocial/family support inclusive of family's personal, cultural, religious, or</p>	<p>Same as Tier 5.</p>

<sup>10</sup> BC Declaration on the Rights of Indigenous Peoples (DRIPA), [DRIPA Action Plan](#). Theme 3: Ending Indigenous-specific Racism and Discrimination.

<sup>11</sup> Serious Illness is defined as a condition that carries a high-risk of mortality in childhood that negatively impacts a child's daily function, quality of life, or excessively stresses their parents / caregivers.

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
		<p>imminently dying care. Consults with T5/T6 CC and other subspecialty services, including Canuck Place (if not already involved).</p> <p>Assesses and manages distressing symptoms utilizing a 3 P<sup>12</sup> approach to symptom care. Consults with T5/T6 peds CC service, and/or Canuck place for ongoing support and symptom management, including pain and agitation management.</p> <p>Provides caring spaces to foster meaningful family interaction (unimpeded access to the child, self-care facilities, bed space). Provides care to de-medicalize the care environment.</p> <p>Manages challenging ethical issues and moral distress in the best interest of the child (e.g., conflict with futile or potentially inappropriate interventions).</p> <p>Provides additional supports for staff to address moral distress and support increased patient and family care needs.</p> <p>Screens/assesses for spiritual distress/needs. Facilitates the expression of a family's cultural, religious, or spiritual beliefs as a child approaches</p>		<p>spiritual beliefs and needs relevant to the child's condition, context and when death is expected.</p> <p>Provides specialized psychosocial sibling support.</p> <p>Access to legacy interventions and designated staff (e.g., child life specialist) to foster individualized meaning making and family adaptation.</p> <p>Healthcare providers receive education related to emotional, cognitive, spiritual impacts of child death including grief, loss and bereavement needs, adaptive coping and impacts for family and siblings.</p>	

<sup>12</sup> 3P Approach: Pain management is provided with a combination of psychological, physical, and pharmacological strategies, or methods, to treat and manage pain.

			Pediatric Limited Critical Care Service		T5	T6
			T4			
			Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
			<p>their end of life. Accesses/refers to spiritual care clinicians as needed.</p> <p>Shares and explores options for legacy<sup>13</sup> making with families.</p>			
12.	Post Death Care	<p>Support for organ donation</p> <hr/> <p>Care of the child's body</p>	<p>As directed by BC Transplant, arranges tests to determine suitability for organ donation.</p> <p>Maintains child until arrangements for transport are made.</p> <p>Assesses and supports ceremonies, traditions, and spiritual needs related to post death.</p> <p>Available caring spaces to foster meaningful family interaction (unimpeded access to the child, self-care facilitates, bed space).</p>	Same as T4 Adult/Pediatrics	<p>Same as T4 plus:</p> <p>As directed by BC Transplant, receives children from lower-tiered sites and manages according to the provincial pediatric protocol.</p>	Same as T5.
13.	Grief and bereavement support		<p>Provides initial grief and bereavement support. Assesses need and refers families requiring ongoing support to local bereavement and/or counseling resources. Consults/refers to Canuck Place, if not already involved.</p> <p>Provides guidance to family about what to expect in the hours after the death (including how the body will be cared for and what will happen after body leaves unit).</p>	Same as T4 Adult/Pediatric.	<p>Same as T4 plus:</p> <p>Provides relevant, current supportive information to families (e.g., list of funeral homes, local grief resources, grief literacy about death of a child and sibling, information on what to expect next).</p> <p>Creates opportunities for grieving families to connect with other</p>	Same as T5 plus:

<sup>13</sup> Legacy interventions focus on the creation of lasting memories (e.g., hand and foot molds, memory books, recordings etc.)

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
				<p>grieving families (e.g., annual memorial service).</p> <p>Provides opportunities for families to reconnect with the CC team to support requests for revisiting events and management of EOL.</p>	
14.	Deteriorating/emergency situations outside the critical care unit.	Mechanism is in place for resuscitation of a hospitalized child outside the critical care unit. Stabilizes children while arranging and awaiting transfer. Determines most appropriate location within facility to maintain critically ill child while awaiting transfer.	Same as T4 Adult/Pediatric.	<p>Same as T4 plus:</p> <p>Provides immediate pediatric critical care expertise in response to the clinical deterioration of a child outside the critical care unit. Assists staff to assess and stabilize the child and determine whether transfer to CC unit is required or care can be provided safely on the pediatric unit +/- support from CC staff. Educates and supports staff as they care for the child.</p>	Same as Tier 5.
15.	Critical care transfer and transport.	<p>Makes requests for transfer to T5/T6 via BC Patient Transfer Network (PTN). Prepares patient/family for arrival of transport team.</p> <p>Critical Care Transport includes a family member or caregiver.<sup>14</sup></p>	Same as T4 Adult/Pediatric.	<p>Makes requests for transfer to T6 via BC PTN. Prepares patient/family for arrival of transport team.</p> <p>Receives calls from BC PTN for transfer of children to T5 CC unit. Makes arrangements within unit/hospital for transfers. Most requests are for children living <i>within the HA</i> but, if bed availability is limited at T6 and the appropriate care can be provided at T5,</p>	<p>Referral centre for complex patients from lower-tiered services within the provincial critical care network.</p> <p>Receives calls from BC PTN for transfer of children to T6 CC unit. Makes arrangements within unit/hospital for transfers. Requests for transfers may be for children living <i>throughout the province</i>.</p>

<sup>14</sup> [Decolonizing Health Care: Confronting Medical Colonialism against Indigenous Children](#)

		Pediatric Limited Critical Care Service		T5	T6
		T4			
		Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	Regional Pediatric Subspecialty Critical Care Service	Provincial Pediatric Subspecialty Critical Care Service
				requests may be for children living outside the HA.	Specialty trained transport advisor receives and prioritizes requests from PTN about the transport of critically ill children <i>within BC</i> . Coordinates and provides medical supervision/ consultation to specially trained air transport teams during transport. Provides coordination and consultation and, in some cases, medical supervision to other medical escort teams during transport.
16.	Children with home tracheostomies and/or ventilators	Provides care to children with stable airways and home ventilator settings who require an inpatient stay (e.g., child with cellulitis requiring IV antibiotics).	Same as T4 Adult/Pediatric.	Same as T4 plus:  Oversees care for out-of-hospital care for children living within the HA requiring long-term airway and/or ventilation support. Builds capacity in local communities to care for these children.	Same as Tier 5 plus:  Oversees out-of-hospital care for children living <i>throughout the province</i> requiring long-term airway and/or ventilation support. Builds capacity in local communities to care for these children (Home Tracheostomy and Ventilation Program).
17.	Serves as resource for providers	Collaborates with the on-site pediatric medicine and neonatal intensive care services as required.	Same as T4 Adult/Pediatric plus: Collaborates with the on-site adult critical care service as required.	Pediatric-focused critical care physician, nurse(s) and respiratory therapist(s) available as resources to health professionals within the HA by telephone and/or virtual 24/7.	Available as a consultative resource for healthcare providers provincially. Pediatric-focused critical care physician, nurse(s) and respiratory therapist(s) available as resources to health professionals throughout BC by telephone and/or virtual 24/7.  Provides specialized extracorporeal life support (ECLS) care and consultations (may be virtual).

### 5.3.2 Requirements

		Pediatric Limited Critical Care Service				Pediatric Regional Subspecialty Critical Care Service	Pediatric Provincial Subspecialty Critical Care Service
		T4					T5
		Adult Critical Care Service that Admits Pediatric Patients		Pediatric Critical Care Service			
<b>1.0</b>	<b>Providers<sup>15</sup></b>						
Providers	1.1	MDs	Pediatricians	Pediatrician on-call 24/7 and available on-site as needed. Maintains current PALS/APLS or equivalent certification.	Same as T4 Adult/Pediatric.	Pediatrician (or designate) on-site 24/7. Maintains current PALS certification or equivalent.	Same as Tier 5.
			Critical Care Medicine (CCM) MDs	Adult critical care, internal medicine, or anesthesia physician on-call 24/7 and available on-site as needed.  Pediatric CCM MD available for consultation (virtual).	Pediatric CCM MD available for consultation 24/7 (may be virtual).  Adult CCM MD available for consultation (virtual).	Pediatric CCM MD on-call 24/7 and available on-site as needed.	Pediatric CCM MD or designate (i.e., CCM fellow) available on-site 24/7.
		Most Responsible Physician (MRP)	MRP is established for each patient according to HA processes/local standards.	Same as T4 Adult/Pediatric.	Pediatric CCM MD is MRP.	Same as T5.	
		Other MDs	See Table 2 for specialist/subspecialist physician interdependencies.				
	1.2	Registered Nurses (RNs)	RNs have completed critical care training in keeping with the requirements of adult ICU (external or in-house) or have equivalent knowledge, skills, and experience.  A team-based model of care can be utilized, in which RNs with pediatric expertise work with RNs with adult critical care expertise.	RNs have completed a structured pediatric critical care course or have equivalent knowledge, skills, and experience.  Practice is exclusively or predominantly with children.  A team-based model of care can be utilized, in	Pediatric critical care RNs. Practice is exclusively with children.  RNs have completed a structured pediatric critical care course or have equivalent knowledge, skills, and experience. Formalized orientation and ongoing education focusing on pediatric critical care is available.  RNs maintain current PALS certification.	Same as T5 plus:  Canadian Nurses Association (CNA) Pediatric Critical Care Certification recommended.  Pediatric critical care educator(s)/resource nurse(s) is dedicated to PICU.	

<sup>15</sup> The workforce requirements outlined in the Tiers of Service provide the minimum workforce complement within each tier. Regional health authorities may identify substitute providers with the appropriate education, skills, and clinical competencies. Staffing ratios, skill mixes, and clerical and administrative needs are not specified and should be determined locally. Parallel initiatives such as 'Models of Care,' 'Nurse-Patient Ratios,' and 'Team-based Care' are underway to support effective care delivery. Modules will be updated to reflect any significant province-wide changes.



			Pediatric Limited Critical Care Service		Pediatric Regional Subspecialty Critical Care Service	Pediatric Provincial Subspecialty Critical Care Service
			T4			
			Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	T5	T6
			<p>Access to RNs and educator(s) with pediatric expertise (e.g., pediatric unit RNs, pediatric educator, ED educator). 24/7 real-time access to virtual pediatric critical care RN support from T5/T6.</p> <p>RN orientation and ongoing education includes a pediatric-specific component. RN practice may be predominantly with critically ill adults but includes some children.</p> <p>RNs maintain current Pediatric Advanced Life Support (PALS) certification.</p>	<p>which RNs with pediatric expertise work with RNs with adult critical care expertise.</p> <p>RNs maintain current PALS certification.</p> <p>Access to educator(s) with pediatric expertise. 24/7 real-time access to virtual pediatric critical care RN support from T5/T6.</p>	<p>Pediatric critical care educator/ resource nurse is assigned to PICU.</p>	
1.3	Psychosocial professionals	<p>Social worker(s) available days. Practice may include both adults and children.</p> <p>Spiritual care practitioner on-call and available on-site as needed.</p> <p>Access to child life specialist (may be virtual).</p>	Same as T4 Adult/Pediatric	<p>Same as T4 Adult/Pediatric plus:</p> <p>Social worker is assigned to cover PICU. Social worker available after hours (may be on-site or on-call).</p> <p>Child life specialist available on-site.</p>	<p>Same as T5 plus:</p> <p>Social worker(s) available 24/7.</p> <p>Child life specialist(s) assigned and dedicated to PICU.</p> <p>Psychologist(s) available on request for specific patients.</p>	

			Pediatric Limited Critical Care Service		Pediatric Regional Subspecialty Critical Care Service	Pediatric Provincial Subspecialty Critical Care Service
			T4			
			Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	T5	T6
	1.4	Indigenous patient liaison <sup>16, 17</sup>	Access to Indigenous patient liaison/navigator, preferable on-site (may be virtual).			
	1.5	Allied health	<p>Practice may include both adults and children.</p> <p>Respiratory therapist on-site 24/7. Maintains current PALS certification.</p> <ul style="list-style-type: none"> <li>24/7 real-time access to virtual support from T6.</li> </ul> <p>Physiotherapist, occupational therapist, and dietitian available on-site commensurate with case mix and clinical load.</p> <p>Pharmacist with pediatric expertise available (may be virtual). Outside of available hours, general pharmacist is available for consultation (may be virtual).</p>	Same as T4 Adult/Pediatric.	<p>Respiratory therapist available to PICU 24/7. Maintains current PALS certification.</p> <p>Physiotherapist, occupational therapist, and dietitian are assigned to PICU.</p> <p>Speech language pathologist is available on request.</p> <p>Clinical pharmacy specialist(s) (PhD) in pediatrics available to PICU.</p>	<p>Same as T5 plus: Pediatric specialists assigned and dedicated to PICU.</p> <p>Respiratory therapist(s) assigned to PICU 24/7. Maintains current PALS certification.</p> <p>Pharmacist with pediatric expertise available 24/7 (on-site or on-call).</p>
	1.6	Pediatric resuscitation team	All resuscitation team members responding to pediatric patients maintain current PALS certification or equivalent.			
	1.7	Other <ul style="list-style-type: none"> <li>Wound/ostomy.</li> <li>Pain management.</li> <li>Feeding and swallowing team.</li> <li>Complex feeding and nutrition service.</li> </ul>	<p>Wound/ostomy RN on-site (for adults and children).</p> <p>Pain management team on-site (for adults and children).</p>	Same as T4 Adult/Pediatric.	Same as T4 Adult/Pediatric plus: <p>Pediatric feeding and swallowing team with video fluoroscopy capabilities available on-site to provide oral motor and dietary assessment/consultation.</p>	Same as T5 plus: <p>Pediatric wound/ostomy RN on-site.</p> <p>Pediatric pain mgt team available 24/7 (on-site or</p>

<sup>16</sup> Similar positions may include Indigenous client liaison, wellness coach, Elder in residence, or cultural navigator.

<sup>17</sup> [British Columbia Cultural Safety and Humility Standard](#) - HSO 75000:2022 (E) Standard 4.1.1.1.

			Pediatric Limited Critical Care Service		Pediatric Regional Subspecialty Critical Care Service	Pediatric Provincial Subspecialty Critical Care Service
			T4			
			Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	T5	T6
		<ul style="list-style-type: none"> <li>Perfusionist</li> <li>Specialized extracorporeal life support (ECLS) leads.</li> </ul>				<p>on-call and available to come to the site).</p> <p>Pediatric complex feeding and nutrition service available on-site.</p> <p>Perfusionist on-call 24/7 and available on-site as required.</p> <p>Access to ECLS clinical resource/leader.</p>
<b>2.0</b>	<b>Facilities</b>					
	2.1	Setting	<p>Adult critical care setting.</p> <p>Care is provided in culturally safe spaces.<sup>18,19</sup></p>	<p>Pediatric critical care setting.</p> <p>Located at a site that also has a T4-6 pediatric medical service and a general adult critical care unit.</p> <p>Care is provided in culturally safe spaces.<sup>9,10</sup></p>	<p>Standalone pediatric critical care unit.</p> <p>Ability to provide isolation.</p> <p>Care is provided in culturally safe spaces.<sup>9,10</sup></p> <p>Physical space within the unit is consistent with the principles of a "healing environment." Examples include:<sup>15,16</sup></p> <ul style="list-style-type: none"> <li>Appropriate lighting, acoustics, air quality and temperature.</li> <li>Facilities for parents (e.g., kitchen, quiet room, bathroom), including overnight stays.</li> </ul>	Same as T5.

<sup>18</sup> [British Columbia Cultural Safety and Humility Standard](#) - HSO 75000:2022(E). Standard 4.

<sup>19</sup> [In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care](#) Recommendation 10: Design of hospital facilities in B.C. include partnership with local Indigenous peoples and the Nations on whose territories these facilities are located.

			Pediatric Limited Critical Care Service		Pediatric Regional Subspecialty Critical Care Service	Pediatric Provincial Subspecialty Critical Care Service
			T4			
			Adult Critical Care Service that Admits Pediatric Patients	Pediatric Critical Care Service	T5	T6
					<ul style="list-style-type: none"> <li>Single patient rooms (ideally with windows) are recommended.</li> </ul>	
	2.2	Welcoming spaces	Provide welcoming spaces for elders or cultural/spiritual advisors who may bring traditional medicines such as plants used for smudging or spiritual cleansing. If space is not available, explore alternatives with patients for ceremonies and cultural practices. <sup>20</sup>			
	2.3	Virtual support	<p>Access to equipment and infrastructure to participate in virtual health consultations.</p> <p>Virtual support for procedures/emergency interventions from pediatric specialists working within a provincial real-time service.</p>	Same as T4 Adult/Pediatric.	<p>Access to equipment and infrastructure in the unit to (1) provide pediatric-focused critical care virtual consultations to providers within the HA and (2) receive pediatric-focused critical care consultation from T6.</p>	<p>Access to equipment and infrastructure in the unit to provide pediatric-focused critical care virtual consultations.</p>

### 5.3.3 Education, Quality and Research

The Education, Quality and Research criteria outlines the structures and activities that enhance patient safety and quality of care provided to children, youth, and families throughout British Columbia. Quality is defined by the seven dimensions of quality articulated within the [BC Health Quality Matrix](#): Respect, Safety, Accessibility, Appropriateness, Effectiveness, Equity, and Efficiency.

To contribute to and promote patient safety and quality throughout the health system, there are unique cross-cutting quality structures and activities at both the health authority (HA) and provincial health system levels. The specifics are identified under the “Regional HA and Provincial Responsibilities” columns. Education, Quality and Research sections have been combined to reflect that education interventions should be closely aligned to support Quality Improvement activities. Refer to the Child Health BC (CHBC) website for more information about patient safety and quality systems which exist in BC.

<sup>20</sup> [In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care](#). Recommendation 10 and [United Nations Declaration on the Rights of Indigenous Peoples](#). Article 24 : Indigenous peoples have the right to their traditional medicines and to maintain their health practices.

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners		
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN	
<b>1.0</b>	<b>Education, Quality and Research</b>										
1.1	Pediatric competencies	Systems <sup>21</sup> exist for health care providers to develop, maintain, and track pediatric competencies appropriate to tier level (i.e., pediatric orientation, ongoing learning pathways).  Participates in education that builds knowledge, understanding and takes action to address Indigenous-specific racism in the health care system.						Provides pediatric expertise to facilitate pediatric education that develops and maintains pediatric competencies.  Provides educational opportunities to ensure teams are well-informed to take action and address Indigenous-specific racism in the health care system.	Co-lead the development and maintenance of the Resources for Interdisciplinary Pediatric Practice and Learning (RIPPL) platform for health care providers to access pediatric education resources to develop and maintain pediatric foundational competencies.  Take action to ensure that the resources for Interdisciplinary Pediatric Practice and Learning (RIPPL) platform includes resources to develop education and facilitate knowledge translation to address Indigenous-specific racism in the health care system.	Collaborate with CHBC, post-secondary institutions and provincial partners to provide resources, education, and training to provide the development and ongoing maintenance of pediatric specialty/subspecialty trained providers.	Collaborate with BCCH and provincial partners in the development, and delivery of resources and training to provide pediatric specialty/subspecialty education.
1.2	Application of pediatric clinical knowledge and skills	Education and training opportunities exist to apply pediatric clinical knowledge and skills that is informed by current evidence and best and wise practices (i.e., simulation activities, ongoing training opportunities).						Provides pediatric expertise to facilitate pediatric education and training opportunities.	Provides pediatric clinical expertise when requested in the development and delivery of pediatric education and training opportunities.	Responds to health authority requests to facilitate collaboration and communication with provincial partners in the development of new resources and sharing of existing resources for pediatric education and training opportunities.	

<sup>21</sup> “Systems” refers to both structures and processes throughout this document.

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
1.3	Guidelines, standards, protocols, and procedures	<p>Participates in the development of local and HA guidelines, standards, protocols, and procedures.</p> <p>Participates in working groups to develop/implement provincial guidelines standards, protocols, and procedures as requested.</p> <p>Systems<sup>21</sup> exist for local dissemination implementation and use of guidelines standards, protocols, and procedures.</p>						<p>Systems<sup>21</sup> are in place for the dissemination, implementation and use of HA and provincial guidelines, standards, protocols, and procedures.</p> <p>Participates in working groups and provides pediatric expertise in the development/ implementation of local, HA and provincial guidelines, standards, protocols, and procedures as requested.</p>	<p>Provides pediatric clinical expertise (specialty/subspecialty) in the development of provincial guidelines, standards, protocols, and procedures.</p> <p>Co-sponsorship in the development of provincial clinical guideline guidelines, standards, protocols, and procedures.</p> <p>Participation of BCCH Professional Practice in provincial guideline, standards, protocols, and procedures development.</p>	<p>Co-sponsors, and leads the development and maintenance of provincial guidelines, standards, protocols, and procedures informed by current best and wise practices.</p> <p>Systems<sup>21</sup> are in place to the engage provincial partners in the development and maintenance of provincial guidelines, standards, protocols, and procedures.</p> <p>Works with provincial partners to disseminate and implement provincial guidelines, standards, protocols, and procedures.</p> <p>Participation of CHBC in provincial and C&amp;W committees to contribute to the development of guidelines, standards, protocols, and procedures.</p>
1.4	Child and youth- specific indicators and measures <sup>22</sup> to inform system planning,	<p>Participates in HA, provincial and national systems (as applicable) to develop, monitor and report on HA-specific child and youth health indicators and measures (e.g., health and well-being, PEWS quality audits, surgical site infection rates,</p>						<p>Systems<sup>21</sup> are in place to develop, monitor and report on <u>HA</u>-specific child and youth health indicators and measures. Incorporates the indicators and measures identified as part of the</p>	<p>Provides child and youth specialty/subspecialty expertise in the development of <u>provincial</u> child and youth indicators and measures.</p>	<p>In collaboration with provincial partners, Identifies provincial child and youth health and indicators<sup>2</sup>.</p>

<sup>22</sup> ‘Indicators and Measures’ – refers to health and well-being indicators (example *Is Good Good Enough Report?*) and quality measures (outcome, process and structural measures that can be used to measure and track clinical system and care performance and outcomes ([https://qualityindicators.ahrq.gov/measures/qi\\_resources](https://qualityindicators.ahrq.gov/measures/qi_resources))).

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
	evaluation, and quality improvement	<p>admission rates). Takes <u>local</u> action to address issues.</p> <p>Collaborates with First Nations, Métis, and Inuit peoples, communities, and the workforce to design culturally safe processes to report on the quality and safety of the organization’s services.</p>						<p>core set of provincial child and youth health indicators. Takes actions to address issues.</p> <p>Participates in the development, monitoring and reporting on core sets of provincial child and youth health indicators and measures. Takes actions to address issues.</p> <p>Systems<sup>21</sup> are in place to authorize and release HA data (where appropriate) that contributes to provincial quality improvement and research.</p> <p>Collaborates with First Nations, Métis, and Inuit peoples, communities, and the workforce to design culturally safe processes to report on the quality and safety of the organization’s services.</p>	<p>Systems<sup>21</sup> are in place to authorize and release HA data (where appropriate) that contributes to provincial quality improvement and research.</p> <p>Collaborates with First Nations, Métis, and Inuit peoples, communities, and the workforce to design culturally safe processes to report on the quality and safety of the organization’s services</p>	<p>Develops a provincial system for monitoring and reporting on a core set of provincial child and youth health quality indicators and measures. Takes actions to address issues.</p> <p>Collaborates with First Nations, Métis, and Inuit peoples, communities, and the workforce to design culturally safe processes to report on the quality and safety of the system of care for children and youth services</p>
		Uses a distinctions-based approach to collect data related to First Nations, Métis, and Inuit peoples and communities. Develops an understanding and adheres to the OCAP® principles. <sup>23</sup>								
1.5	Adverse events, good catches (near misses) hazards, and learning from excellence	Reviews <u>local</u> data on adverse events, near misses and hazards (e.g., reports generated from the BC Patient Safety Learning System, patient safety huddles, event reviews) and areas of high-quality practice and positive outcomes to identify						Systems <sup>21</sup> are in place to review adverse events, near misses and hazards (e.g., reports generated from the BC Patient Safety Learning System) and areas of high-quality practice and positive	Participates in the Child Health Provincial Quality Committee (a multi-agency committee protected as per Section 51 of the BC Evidence Act <sup>25</sup> ).	Leads the Child Health Provincial Quality Committee. Responsibilities include: <ul style="list-style-type: none"> <li>Reviews provincial quality/patient safety/risk events and trends (e.g., reports generated from</li> </ul>

<sup>23</sup> The First Nations Principles of OCAP® - The First Nations Information Governance Centre (fnigc.ca)

<sup>25</sup> Community Care is not covered under S51 of the Evidence Act.

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
		areas of improvement and spread positive practice.						<p>outcomes. Determines root causes and trends.</p> <p>Develops, implements, evaluates, and shares actions within the HA to reduce future occurrences and spread high-quality practice. Involves providers, children, youth and families and HA partners, as applicable.</p> <p>Facilitates the inclusion of child and youth health expertise in case reviews, if requested.</p> <p>Systems are protected by Section 51 of the BC Evidence Act<sup>24</sup>. Physicians and staff with child and youth health expertise and others (e.g., young people and families) participate in case reviews, as appropriate.</p> <p>Participates in the Child Health Provincial Quality Committee (a multi-agency committee protected as per Section 51 of the BC Evidence Act.</p> <p>Brings forward events with provincial applicability to provincial quality committee for review and shared learning.</p>	Physicians and staff with child and youth specialty/subspecialty expertise and others (e.g., young people and families) participate in case reviews of other HAs, if requested.	<p>the BC Patient Safety Learning System). Determines root causes.</p> <ul style="list-style-type: none"> <li>Facilitates multi-incident, multi-HA provincial case reviews as appropriate. Involves providers, children, youth and families and HA partners, as applicable.</li> <li>Develops, implements, and evaluates actions to reduce future patient safety/risk events. Involves providers, children, youth and families and HA partners, as applicable.</li> </ul> <p>Facilitates the sharing of recommendations and best practices from case reviews which may have applicability for provincial learning.</p> <p>Facilitates collaboration with Health Authority quality committees and health authority-based quality and risk teams as appropriate.</p>

<sup>24</sup> BC Evidence Act- Section 51 – legislation which supports quality reviews of medical/hospital practice within a hospital setting and during transportation to/from the hospital.



		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
1.6	Involvement in quality improvement (QI) initiatives and Research	<p>Participates in local QI and research initiatives.</p> <ul style="list-style-type: none"> <li>Systems<sup>21</sup> are in place to identify and lead <u>local</u> QI initiatives.</li> </ul> <p>Participates in HA and provincial QI initiatives providing expertise on local context as requested.</p> <p>Participates in HA and provincial research initiatives providing expertise on local context as requested.</p>						<p>Identify and lead HA specific QI and research initiatives.</p> <ul style="list-style-type: none"> <li>Systems<sup>21</sup> are in place to identify and lead <u>HA-specific</u> QI initiatives.</li> <li>Systems<sup>21</sup> are in place to identify and lead HA-specific research initiatives.</li> </ul> <p>Provides child and youth health expertise, as requested, to local, HA and provincial (sub-specialty) QI initiatives.</p> <p>Provides child and youth health expertise, as requested, to local, HA and provincial (subspecialty) research initiatives.</p> <p>In collaboration with CHBC, works with BC Children’s Hospital Research Institute (BCCHRI) and other entities to disseminate QI/research findings (knowledge translation) and integrate into practice throughout the HA.</p>	<p>Systems<sup>21</sup> are in place to identify and lead specialty/subspecialty provincial and national QI initiatives.</p> <p>Systems<sup>21</sup> are in place to identify and lead specialty/subspecialty provincial and national research initiatives.</p> <p>Provides child and youth health expertise to provincial (specialty/subspecialty) QI initiatives.</p> <p>Provides child and youth health expertise in provincial (specialty/subspecialty) research initiatives.</p> <p>Established research program in relevant specialty/sub-specialty area, with appropriate staffing, resourcing, space, etc.</p> <p>Collaborates with CHBC and other entities to disseminate QI/research findings (knowledge translation) and integrate into practice throughout the province.</p> <p>Participates in provincial and national research networks in relevant specialty/subspecialty area.</p>	<p>Systems<sup>21</sup> are in place to identify and lead provincial QI initiatives.</p> <p>Systems<sup>21</sup> are in place to identify and co-lead provincial research initiatives.</p> <p>Facilitates partnerships with BCCHRI and other research and QI entities.</p> <p>Works with HAs, BCCH, BCCHRI or other entities to disseminate and integrate QI/research findings into practice throughout the province (knowledge translation).</p>

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners		
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN	
1.7	Child/youth/family partnership	Engages diverse groups of children/youth/families, including from rural, remote, and Indigenous communities <sup>26</sup> to obtain feedback on services provided; and incorporates questions specific to cultural safety and anti-Indigenous racism.									
		Incorporates feedback (as appropriate), into program planning and QI/research.			Incorporates feedback (as appropriate), into regional program planning and QI/research.			Incorporates feedback (as appropriate), into provincial program planning and QI/research.			
1.8	Provincial and national networks				Participates in provincial and national networks focused on child and youth health/pediatric care.  Participates in provincial and national benchmarking programs.			Participates in provincial and national networks relevant to specialty/subspecialty area.  Participates in provincial and national networks focused on child and youth health/pediatric care.  Participates in provincial and national benchmarking programs.		Participates in provincial and national networks focused on child and youth health/pediatric care.  Facilitates HA participation in provincial and national benchmarking programs.	

<sup>26</sup> <https://www.bcpcm.ca/>

**Table 2: Specialist/Subspecialist Physician Interdependencies**

✓24/7 = available for on-site consultation as needed.

✓ M-F = available for on-site consultation days M-F (T5: minimum of 46 weeks/year).

Service	Availability			
	T4		T5	T6
	T4 Adult Service	T4 Pediatric Service		
Pediatric critical care medicine	Virtual support from T5 or T6 PICU	Virtual support from T5 or T6 PICU	✓24/7	✓24/7
Adult critical care medicine	✓24/7	✓24/7		
Pediatrician	✓24/7	✓24/7	✓ <u>on-site</u> 24/7	✓ <u>on-site</u> 24/7
Anesthesiologist that provides care to children and adults	✓24/7	✓24/7		
Pediatric anesthesiologist			✓24/7	✓24/7 (Including subspecialty cardiac)
General surgeon that provides care to children and adults	✓24/7	✓24/7	✓24/7	
Pediatric general surgery			✓24/7	✓24/7
Pediatric palliative care	✓24/7 virtual	✓24/7 virtual	✓24/7 virtual	✓24/7
Pediatric biochemical/metabolic diseases				✓24/7
Pediatric bone marrow transplant				✓ M-F days
Pediatric cardiology			✓M-F days. Strive for 24/7 coverage and available on-site as needed	✓24/7
Pediatric cardiovascular surgery				✓24/7
Pediatric dermatology				✓ M-F days
Developmental pediatrics/child development and rehab				✓ M-F days
Ear, nose and throat surgeon that provides care to children and adults	✓24/7	✓24/7	✓24/7	

Service	Availability			
	T4		T5	T6
	T4 Adult Service	T4 Pediatric Service		
Pediatric ear, nose and throat surgery				✓24/7
Emergency medicine	✓24/7	✓24/7	✓24/7	✓24/7
Pediatric endocrinology				✓24/7
Pediatric gastroenterology				✓24/7
Pediatric hematology/oncology				✓24/7
Pediatric immunology				✓24/7
Infectious diseases physician that provides care to children and adults	✓virtual consultation available within HA 24/7	✓virtual consultation available within HA 24/7	✓24/7	
Pediatric infectious diseases				✓24/7
Medical genetics				✓ M-F days
Neonatology			T5 NICU	T6 NICU
Pediatric nephrology				✓24/7
Pediatric neurology			✓M-F days	✓24/7
Neurosurgeon that provides care to children and adults			✓24/7	
Pediatric neurosurgery				✓24/7
Pediatric ophthalmology				✓24/7
Orthopedic surgeon that provides care to children and adults	✓24/7	✓24/7	✓24/7	
Pediatric orthopedic surgeon				✓24/7 (incl spinal)
Plastic surgeon that provides care to children and adults			✓24/7	
Pediatric plastic surgery				✓24/7
General psychiatrist	✓24/7	✓24/7	✓24/7	

Service	Availability			
	T4		T5	T6
	T4 Adult Service	T4 Pediatric Service		
Child and youth psychiatrist			✓ M-F days	✓24/7
Radiologist that provides care to children and adults	✓Diagnostics: 24/7 ✓Interventional radiology	✓Diagnostics: 24/7 ✓Interventional radiology	✓Diagnostics 24/7 ✓Interventional radiology	
Pediatric radiologist + pediatric interventional radiologist				✓Diagnostics 24/7 ✓Interventional radiology
Pediatric respiratory medicine				✓24/7
Pediatric rheumatology				✓24/7
Urologist that provides care to children and adults			✓24/7	
Pediatric urology				✓24/7
Pediatric child protection medical specialist (e.g., Pediatrician with enhanced training/experience)	✓24/7 (may be virtual) <sup>27</sup>	✓24/7 (may be virtual) <sup>3</sup>	✓24/7 (may be virtual) <sup>3</sup>	✓24/7 (may be virtual) <sup>3</sup>

<sup>27</sup> Note 1: Alternatively, may have a clearly describable referral process to a nearby child protection medical specialist at T4, T5, or T6 site (within 1 hour driving distance)

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## 7.0 Appendix 1: Change Log

Document	Date	Description of Change
Child Health BC. Children and Critical Care Services. Vancouver, BC: Child Health BC		
Initial approval (CHBC Steering Committee +/- relevant Provincial Steering Committees).	Jan 2019	Initial CHBC Tiers of Service Module
Minor revisions	July 2019 and Nov 2020	Revisions to update content based on feedback received and current best and wise practices.
Retired	May 2024	Module content used to inform the creation of the provincial Tiers of Service module and to create this companion guide.
Companion Guide to Tiers of Service: Pediatric Critical Care Service		
Initial approval by the CHBC and CCBC Committees.	Sept 2024	Updated content with small working group and circulated for wider feedback. Repositioned and aligned with the Provincial Tiers of Service framework.