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Companion Guide to Tiers of Service

PEDIATRIC EMERGENCY

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.

DECEMBER 2024

Companion Guide to Tiers of Service: Pediatric Emergency

Contents

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 Emergency Care BC, in collaboration with our network partners and their participation on the provincial working groups.

This document replaces the Child Health BC Tiers of Service Modules: *Tiers in Brief and Tiers in Full Children's Emergency Department Services*. Vancouver, BC: Child Health BC, Approved: July 2018.

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[1] 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.

[1] Throughout this document "children" refers to children and youth unless otherwise stated.

The Pediatric Emergency 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)[1]
- BC Declaration on the Rights of Indigenous Peoples (DRIPA)[2]
- DRIPA Action Plan[3]
- Declaration of Commitment on Cultural Safety and Humility in Health Services[4]
- British Columbia Cultural Safety and Humility Standard[5]
- Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls[6]
- In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care[7]

5.0 Companion Guide: Pediatric Emergency

5.1 Scope

In development is a provincial Tiers of Service framework for Emergency Service that includes all six tiers of service for all ages, starting at Tier 1. Due to the nature of emergency care, being unplanned and unscheduled, every hospital, health centre and nursing station may receive high and low-complexity patients with all types of emergencies. All children should receive high-quality care no matter what site they initially visit, recognizing that they may need to be transferred elsewhere for more specialized, definitive, or higher-level care. The six tiers delineate the complexity of on-site services, with the higher-tiered pediatric emergency service providing definitive treatment for children with higher complexity, multiple-system injuries.

Specifically, the Companion Guide for Pediatric Emergency Service focuses on describing services for children up to their 17th birthday (16 years + 364 days) in:

- Provincial and federally funded health centres, including outpost stations, diagnostic and treatment centres, and hospital emergency departments that provide urgent/emergent services.
- While urgent/emergent services are provided to children in other settings (e.g., private physician offices, schools) and by other care providers (e.g., primary care physicians, Critical Care Transport and Infant Transfer Teams, ground, and air ambulance attendants and first responders), these circumstances/settings are outside the scope of this document.

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). 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 emergency care and should be read in conjunction with the provincial Tiers of Service framework: Emergency (*in development*).

The responsibility for triage and initial stabilization of ill and injured children is the same across all settings. However, the tiers differ in their capacity to manage varying levels of acuity and medical complexity beyond the initial stabilization period.

5.3.1. Service Responsibilities

SERVICE RESPONSIBILITIES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit[2]	Pediatric Emergency	Provincial Pediatric Emergency
1.0	Service description	Acute health setting that provides emergency service to all ages with no on-site pediatric unit. May have capacity for short-term stays for children with low acuity/complexity presentations (in the ED or a general inpatient bed). Access to pediatric specialty and subspecialty services (may be via telephone, virtual care and/or hospital outreach), with the ability to transfer and refer. Access to clinical management consultation for pediatric mental health and/or substance use (may be via telephone, virtual care and/or hospital outreach).	All ages emergency department (ED) with on-site pediatric unit. Open 24/7. Accepts referrals from lower-tiered networked sites within the health authority (e.g. as per patient transfer referral pathway). Pediatrician on call 24/7 & available to attend the ED as needed. Broad range of surgical specialists (not pediatric-specific) on-call 24/7 & available to the ED for consultation.	Pediatric ED in a hospital which serves their regional health authority. Regional referral service. Open 24/7. Separate and distinct pediatric and adult ED services and environments (services may be co-located). Access to pediatrician 24/7 (on-call & available to attend the ED as needed). Broad range of surgical specialists on-call 24/7 & available to the ED. Some pediatric subspecialists (medical & surgical) available on-site.	Pediatric ED in a dedicated children's hospital. Provincial and regional referral service. Open 24/7. Specialized pediatric ED service with a child-specific physical environment in the ED. Access to pediatrician 24/7 (on-call & available to attend the ED as needed). Full range of pediatric medical & surgical subspecialists on-call 24/7 & available to the ED for consultation.

[2] Inpatient unit may be combined maternity and pediatrics. 24/7 Pediatrician available on-site required.

SERVICE RESPONSIBILITIES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit[2]	Pediatric Emergency	Provincial Pediatric Emergency
				Additional pediatric subspecialists available virtually for consultation (e.g., pediatric palliative).	
2.0	Management of deteriorating conditions and critical care management (ill or injured child)	Initiates the assessment and stabilization of acutely ill/injured children while arranging & awaiting transfer to higher tier. For sites with emergency department: • Capacity in ED for continuous cardiac monitoring while awaiting transfer. • Capacity in ED for mechanical ventilation (respirator/ventilator) while awaiting transfer.	Same as previous plus: Higher pediatric volumes & access to pediatric specialists facilitates the provision of additional interventions/supports during the stabilization period. Capacity in ED for extended period of constant visual observation. Receiving ED for critically ill children requiring air transport (as per regional referral patterns).	Same as previous.	Same as previous plus: Receiving ED for critically ill children requiring air transport (as per regional and provincial referral patterns).
3.0	Management of medical / surgical issues (See critical care management section for initial management if critically ill)	Provides on-site management of children presenting with low acuity/low complexity illnesses & minor injuries. May provide on-site management of children presenting with common medium acuity/medium complexity illnesses & uncomplicated, single system injuries. Consults specialist(s) as needed. For all other children, stabilizes & arranges referral/transfer to higher tier.	Same as previous plus: In collaboration with pediatrician(s) & adult specialists, provides on-site management of children presenting with a broad range of medium acuity/medium complexity illnesses/injuries. Management may include preparation for an on-site procedure(s)/ treatment(s) &/or inpatient admission &/or referral/transfer to higher level of care.	Same as previous plus: In collaboration with adult specialists &/or pediatric sub-specialists, provides on-site management of children presenting with high acuity/medium complexity illnesses/injuries. Management may include preparation for an on-site procedure(s)/ treatment(s) &/or inpatient admission &/or referral/transfer to higher level of care.	Same as previous plus: In collaboration with pediatric sub-specialists, provides definitive on-site management of children presenting with high acuity/high complexity illnesses/injuries. Management may include preparation for an on-site procedure(s)/ treatment(s) &/or inpatient admission.

SERVICE RESPONSIBILITIES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit[2]	Pediatric Emergency	Provincial Pediatric Emergency
4.0	Management of major trauma (See critical care management section for initial management of critically injured children)	Assesses, stabilizes, & arranges transfer of children with major traumatic injuries.	Same as previous plus: In collaboration with pediatrician(s), adult specialists, and trauma team leader, provides on-site management of selected types of major pediatric trauma: • Non-surgical, non-complex major trauma (e.g., low grade solid organ injury) in children of all ages; & • Surgical, non-complex major trauma (e.g., femur fracture) in children over 6 mos. of age. [3] Refers to higher level of care for children requiring more extensive definitive care. Where no T5/T6 pediatric ED exists in HA, functions as the lead HA pediatric trauma centre for children requiring management as described above. Accepts patients requiring access to a higher level of care as per the Provincial Memorandum of Understanding (MOU)[4] (no refusal policy).	Same as previous plus: Functions as the lead HA pediatric trauma centre.	In collaboration with pediatric sub-specialists, provides definitive management for *all* types of major pediatric trauma, including those requiring complex, subspecialty care. Designated provincial pediatric trauma centre (multi-system trauma).

[3] Assumes the presence of an anesthesiologist who meets the credentialing requirements available to provide anesthesia to children over 6 mos. of age.
[4] http://leadersresource.providencehealthcare.org/sites/leadersresource.providencehealthcare.org/files/MOU-Inter-Facility%20Patient%20Transfer%20and%20Repatriation.PDF.

SERVICE RESPONSIBILITIES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit[2]	Pediatric Emergency	Provincial Pediatric Emergency
7.0	Mental health &/or substance use crisis management	Assesses, stabilizes & takes action to meet immediate safety needs, including risk of harm to self (suicide) & others. Referral pathway in place to access mental health professionals for both children and youth. For designated provincial mental health facilities, psychiatric units, or observation units, receives transfers of involuntary admissions from within the HA. Arranges transfer to inpatient bed.	Same as previous.	Same as previous.	Same as previous.
8.0	Virtual support (provider to provider)	Initiates or receives virtual health consultations from specialty and higher-tiered services.	Same as previous plus: May participate as pediatric specialist(s) in provincial virtual support service.	Same as previous plus: Provides virtual consultation/support to ED providers throughout the HA on the management of children in the ED.	Same as previous plus: Provides virtual consultation/support to ED providers throughout the province on the management of children in the ED. Participates as pediatric specialist(s) in provincial virtual support service.
9.0	Pandemic planning & disaster management & emergency preparedness (DMEP)	Capable of responding to major local incidents (i.e., Code Orange).	Same as previous.	Same as previous plus: Participates in the organization & execution of HA & community-based emergency exercises (simulated incidents & table-top drills).	Same as previous plus: Coordinates the planning & education within the HA for the hospital-based, ED component of the HA pandemic & DMEP plans. Plans integrate with the provincial DMEP plan.

SERVICE RESPONSIBILITIES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit[2]	Pediatric Emergency	Provincial Pediatric Emergency
					Participates in the organization & execution of HA & community-based emergency exercises (simulated incidents & table-top drills).

5.3.2 Requirements: Providers, Clinical Support Services, Facilities and Volumes

(1) Providers and clinical support services (2) Facilities (3) Minimum service volumes.

PROVIDERS AND CLINICAL SUPPORT SERVICES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
1.0 Providers[5] and Clinical Support Services					
1.0	Physicians / NPs in ED	Nurse Practitioner (NP) &/or physician available commensurate with pediatric volume and site requirements. Current PALS or equivalent certification recommended.	Same as previous plus: At least one physician with ED specialty training (CCFP (EM) or FRCPC) or equivalent present in ED 24/7. Completion of continuing education specific to pediatric emergency care recommended.	Staffed 24/7 by physicians who practice primarily in ED (not pediatric specific). Physicians maintain knowledge & skills in the emergency care of children through pediatric focused continuing medical education. Current PALS or equivalent certification recommended.	Staffed 24/7 by physicians who practice primarily in ED. At least one physician with pediatric emergency medicine subspecialty training (RCPSC or equivalent) present in ED 24/7. Physicians complete continuing education specific to pediatric emergency care.

[5] 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.

PROVIDERS AND CLINICAL SUPPORT SERVICES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
			Trauma Team Leader service for all major trauma team activations	At least one physician with ED specialty training (CCFP (EM) or FRCPC) or equivalent present in ED 24/7. Physician leadership provided by physician with pediatric specific certification or equivalent.	Physician leadership for pediatric emergency services is provided by a pediatric emergency medicine subspecialist (RCPSC subspecialty training or equivalent). Current PALS or equivalent certification recommended.
1.2	Pediatricians		Pediatrician on call 24/7 & available on-site as needed.	Same as previous.	Same as previous.
1.3	Other physicians	(See Table 1 for details)			
1.4	Surgery	Clearly describable process exists for consultation with surgical provider(s) &/or transfer to higher tier, as required.	Same as previous plus: Anesthesiologist on-call 24/7 & available to attend the ED as needed. Range of surgical specialists (not pediatric-specific) on-call 24/7 & available to the ED for consultation. Orthopedic surgeon on-call 24/7 & available to attend ED as needed.	Same as previous plus: Anesthesiologist on-call 24/7 & available to attend the ED as needed (pediatric anaesthesiologist preferred).	Same as previous plus: Pediatric surgical specialists available 24/7 to assess & definitively manage children with all types of surgical conditions, including multi-system trauma. Pediatric anesthesiologist(s) on-call 24/7 & available to attend the ED as needed.
1.5	Remote Certified Nurses and Registered Nurses (RNs)	Remote certified nurse or registered nurse available commensurate with workload and site requirements with: • Basic Life Support (Level C). • Canadian Triage & Acuity Scale (CTAS). • Pediatric Foundations Competencies.[6]	Same as previous plus: ED nurse educator available days, Monday-Friday.	Same as previous plus: RNs with pediatric-specific ED education/ experience on-site 24/7. Specialty pediatric ED certification or equivalent recommended.	Same as previous plus: Pediatric Advanced Trauma Simulation (PATS) recommended. Clinical Resource Nurse available in ED ("bedside, in the moment"

[6] https://ubccpd.ca/course/pediatric-foundations (e learning)

PROVIDERS AND CLINICAL SUPPORT SERVICES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
		• BC PEWS ED Module.[7] • Cultural Safety and Anti-Indigenous Racism training. For sites with 24/7 emergency departments (ED), access to a nurse educator within the health authority (HA)to support ED RNs. Current PALS or equivalent certification recommended.		Pediatric ED nurse educator available days, M-F.	education support). Hours align with clinical requirements. Canuck Place Pediatric Palliative Care Clinical Care Nursing Line available 24/7.[8]
1.6	Indigenous patient liaison[9, 10]	Indigenous patient navigator/liaison during operating hours for acute care facilities by phone or virtual.			
1.7	Psychosocial Professional	For sites with 24/7 emergency departments: Access to social worker or equivalent. Access to spiritual care provider (may be virtual).	Same as previous plus: Social Worker available in ED (specific hrs. defined as per clinical need) Child life specialist available on request.	Same as previous plus: Social Worker practices exclusively with children.	Same as previous plus: Social Worker available in ED 24/7. Child life specialist(s) in ED for extended hours.
1.8	Allied Health	Clearly describable processes exist for: • Consultation with a community or hospital pharmacist during operating hours. • Accessing interpreter/ translation services 24/7.	Same as previous plus: RT with pediatric knowledge & skills available on-site 24/7. Available upon request: • Physiotherapist • Occupational therapist • Dietician • Speech-language pathologist	Same as previous plus: Clinical pharmacist with pediatric expertise available in the ED.	Same as previous except: Team members practice exclusively or almost exclusively with children.

[7] https://learninghub.phsa.ca/Courses/17618 (e learning)
[8] Canuck Place Pediatric Palliative Care Clinical Care Nursing Line available 24/7 604-742-3475 or toll free 1-877-882-2288
[9] Similar positions may include Indigenous client liaison, Wellness coach, Elder in residence, or Cultural navigator.
[10] British Columbia Cultural Safety and Humility Standard - HSO 75000:2022 (E) Standard 4.1.1 Provide First Nations, Métis, and Inuit support persons to internal teams and initiatives related to anti-racism, cultural safety and humility, and First Nations, Métis, and Inuit health and wellness programs and services.

PROVIDERS AND CLINICAL SUPPORT SERVICES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
		Access to on-site allied health professionals, such as physiotherapists, speech-language pathologists, occupational therapists, and/or dietitians, commensurate with pediatric volume.	Hospital pharmacist (generalist): Available 24/7 (on-site or on-call by phone).		
	Pain management team		On-site pain management team for consultation as required (may not be pediatric specific).	Same as previous.	On-site pediatric pain management team.
1.9	Mental health providers	Clearly describable processes exist for consultation from a mental health (MH) clinician. Examples: Local CYMH clinician, T5 child/youth MH clinician, MH clinician from adult psychiatry service (if exists), COMPASS.	MH provider or team available to respond to mental health crises in ED. Available for adults & children. MH worker &/or psychiatry liaison nurse available within the ED during peak periods. Available for adults & children. Referral pathway includes access to consultation from a child & youth psychiatrist and/or a general psychiatrist (may be virtual).	Same as previous.	Child & youth specific mental health provider or team available 24/7 to respond to mental health crises in ED. Child & youth MH worker &/or psychiatry liaison nurse available within the ED during peak periods. Referral pathway includes access to on-site consultation from a child & youth psychiatrist 24/7. Often requires consultation with medical & surgical subspecialists (e.g., neurologists, complex pain service, infectious diseases).
10.	Child maltreatment (physical abuse, sexual abuse, emotional abuse & serious neglect)	Access to Ministry of Children and Family Development (MCFD) social worker 24/7 for child protection issues. Refers cases to pediatrician or local/regional/provincial child protection team, if required. Sexual Assault Forensic examination may be provided locally through	Same as previous plus: Pediatrician competent in providing consultation & follow-up for children referred for suspected child maltreatment on-call 24/7 & available to attend the ED as needed. Refers complex cases to local/regional/provincial child protection team, if required.	Same as previous plus: Trained sexual assault examiner on-call 24/7 & available to attend the ED as needed. Includes forensic examination services	Same as previous plus: Child protection team on-call 24/7 & available to attend the ED as needed (pediatrician, psychiatrist, psychologist, social worker & RN). Child protection team available to health care providers throughout the province 24/7 for advice on child maltreatment-related situations.

PROVIDERS AND CLINICAL SUPPORT SERVICES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
		virtual SAFE support (adolescents) or by transfer to higher-level of care. [11]	Where no T5/T6 pediatric ED exists in HA,[12] trained sexual assault forensic examiner services are available.		

FACILITIES AND VOLUMES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
2.0 Facilities					
2.1	Emergency Department	Culturally appropriate, dedicated physical spaces for ceremony and cultural protocol, and visibly include Indigenous artwork, signage and territorial acknowledgement.[13] 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. [14] Capacity to meet isolation requirements.	Same as previous plus: There is an appropriate private space for children with mental health issues. On-site Secure room exists & is utilized according to the Standards & Guidelines for Secure Rooms in Designated MH Facilities & with consideration to developmental age.	Capacity to meet contact, droplet & air-born isolation requirements. ED designed for children & appropriately decorated, furnished & equipped. Appropriate private space is available for children with mental health issues. Secure room exists in ED, is dedicated for children & meets provincial standards outlined in the	Same as T5.

[11] Adult and Adolescent Sexual Assault Forensic Examination in Hospital Emergency Departments Policy 1223978 ref 1223980
[12] For the purposes of this document, BC Children's Hospital is considered part of Vancouver Coastal Health.
[13] In Plain Sight: Addressing Indigenous-specific Racism and Discrimination in B.C. Health Care. Recommendation 10
[14] 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.

FACILITIES AND VOLUMES					
		All Ages Emergency Tiers 1-6		Pediatric T5	Pediatric T6
		All Ages Emergency with no on-site Pediatric Inpatient Unit	All Ages Emergency with on-site Pediatric Inpatient Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
		Where possible, there are physical sight & sound barriers in the waiting & treatment areas that separate children from adult patients. If secure room exists, meets provincial standards outlined in the Standards & Guidelines for Secure Rooms in Designated Mental Health (MH) Facilities.[15] For sites with 24/7 ED: Triage, assessment, treatment & resuscitation areas are safe, appropriate & equipped for children.		Standards & Guidelines for Secure Rooms in Designated MH Facilities.	
3.0 Service Volumes					
3.1	*Usual* Pediatric ED visits per year			Minimum 20,000 pediatric visits/yr.	Minimum 40,000 child visits/yr.

5.4 Pediatric Emergency Care Considerations (Independent of Tier)

The provincial working groups decided to emphasize certain aspects of pediatric emergency care. While the following list covers important elements, it does not encompass all the standards for pediatric emergency care.

Pediatric educational resources can be found on RIPPL: Resources for Interdisciplinary Pediatric Practice and Learning

Child/youth suspected child abuse and neglect (physical, sexual & emotional abuse):

- Recognizes suspected cases of child abuse or neglect.
- Takes action to ensure immediate medical & safety needs are met, findings are documented, forensic evidence is collected & secured & appropriate cases are reported to MCFD &/or Delegated Aboriginal Agency (DAA) as per the Child, Family & Community Service Act.[16]

[15] https://www2.gov.bc.ca/assets/gov/health/managing-your-health/mental-health-substance-use/secure-rooms-standards-guidelines.pdf.
[16] https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96046_01

- If sexual assault forensic examiner services are available, performs examination & arranges follow-up as per provincial standards.[17]
- Sexual Assault Forensic examination may be provided locally through virtual SAFE support (adolescents) or by transfer to higher-level of care.[18]
- Refers cases to pediatrician or local/regional/provincial child protection team, if required.

Clinical deterioration:

- BC Pediatric Early Warning System (PEWS)[19] is used to identify, communicate, mitigate & escalate signs of clinical deterioration.

Critical care management:

- Minimum scope of care is provided according to established guidelines and/or established advance care plans:
  - Pediatric Basic Life Support (BLS[20])
  - Pediatric Advanced Life Support (PALS[21])
  - Advanced Trauma Life Support (ATLS[22])
  - Trauma Resuscitation in Kids (TRIK)[23]
  - Pediatric Emergency Assessment, Recognition and Stabilization (PEARS)[24]
- Identification when an Advance Care Plan or Goals of care (GOC) are in place (Consult T6 palliative care if known to be involved), capacity to affirm and respect GOC, redirect towards known team or disposition planning for appropriate location of care.
- Capacity for patient centred, family focused and team-oriented approach if a child dies in ED.

Critical care transport:

- Critical Care Transport always offers to include a family member or caregiver.[25]
- Critical Care transport will be arranged through the Patient Transfer Network and BCEHS with focused collaboration with specialized transport team(s) where available.

Facility recommendations:

  - Waiting space designated for children (space may be within the larger ED waiting room). Space includes age-appropriate entertainment for children of all ages.
  - Space for nursing mothers & baby-changing area available in ED.

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[17] BC Provincial Child Sexual Abuse Guideline: Guideline for the Management of Acute Sexual Abuse of the Pre-Pubertal Pediatric Patient (draft), Child Protection Service Unit, BC Children's Hospital, July 2018.

[18] Adult and Adolescent Sexual Assault Forensic Examination in Hospital Emergency Departments Policy 1223978 ref 1223980

[19] https://www.childhealthbc.ca/initiatives/pediatric-early-warning-system-pews

[20] https://pediatrics.aappublications.org/content/145/1/e20191358 (Accessed June 29, 2023)

[21] www.ahajournals.org/doi/10.1161/CIR.0000000000000731 (Accessed June 29, 2023)

[22] www.facs.org/quality-programs/trauma/atls (provides information purchasing a copy of the ATLS course manual) (Accessed June 29, 2023)

[23] https://cpd.royalcollege.ca/product?catalog=TRIK (Accessed June 29, 2023)

[24] https://cpr.heartandstroke.ca/s/pears?language=en_US

[25] https://cps.ca/en/blog-blogue/decolonizing-health-care-confronting-medical-colonialism-against-indigenous-children

- Available private, caring spaces to foster meaningful family interactions (e.g., unimpeded access to the child, bed space, etc.).

Medications, Intravenous (IVs) and blood draws:

- Medications are administered to pediatric patients using weight-based pediatric dosages & appropriately sized equipment. If it is not possible to weigh a child, a reference tool is utilized to estimate the child's weight as accurately as possible (i.e., age/weight reference charts, Broselow Pediatric Emergency Tape).
- Smart IV pumps[26] available for all children on IVs.
- Process in place to manage difficult pediatric blood draws & IV starts.

Mental health &/or substance use crisis management:

- Engages in relational practice and relationship building with children, youth & family.
- Assesses social and structural determinants of health to inform services provided. Offers self-determination within health services.
- Assesses, stabilizes & takes action to meet immediate safety needs, including risk of harm to self (suicide) & others.
- Utilizes best and wise practices for least restraint and to manage symptoms of acute intoxication & substance withdrawal.[27]
- In collaboration with child/family, develops post-ED discharge safety plan based on psychosocial assessment. May include transfer to a higher-tiered ED or inpatient bed.
- Documented processes in place for:
    - Evaluating the "best & safest" location given local resources to provide treatment for children who are (1) physically aggressive; (2) at high risk of elopement; &/or (3) acutely suicidal; and
    - Admission/transfer children/youth to an appropriate designated facility involuntarily under the MH Act (www2.gov.bc.ca).
- For facilities with a secure room(s), utilizes room(s) according to the Standards & Guidelines for Secure Rooms in Designated MH Facilities[28] & with consideration to developmental age.

Pain management and anxiolysis. Pain: acute, chronic, complex, & procedural.

- Initial and on-going assessment of pain using age, developmentally & culturally appropriate, evidence-based pain assessment tool(s).[29]
- Provides age, developmentally & culturally appropriate, evidence-based psychological and physical pain-relieving interventions (non-pharmacological approaches).
- Administers weight-based doses of analgesics.
- Any parenteral analgesics require close monitoring.
- Manages complications of analgesia (e.g., manage airway, administer antidotes).
- Consult with on-site child life specialist for non-pharmacological pain-relieving interventions (alternate focus, comfort positioning preparation, procedural support, and play-based interventions).

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[26] A "smart pump" has customizable software with a library of medications that can be programmed for different patient groups and provide alerts such as clinical advisories, soft stops and hard stops.

[27] Child Health BC. Provincial Substance Intoxication and Withdrawal Management Guideline for Acute Care Settings, 2023.

[2828] www2.gov.bc.ca/assets/gov/health/managing-your-health/mental-health-substance-use/secure-rooms-standards-guidelines.pdf.

[29] 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

[29] Education Resources and Practice Support Documents: Pediatric Pain and Comfort, Child Health BC, https://www.childhealthbc.ca/foundations/resource_bundle/pediatric_pain_comfort

- Identifies when a symptom management care plan is in place for a seriously ill child and consults higher tiered services.

Pandemic planning & disaster management & emergency preparedness (DMEP)

- Emergency disaster preparedness plans include functional areas and play a primary role in responding to local incidents.
- For higher tiered sites: Contributes pediatric ED expertise to the development of community-integrated provincial & HA pandemic & DMEP plans, including the management of a pandemic & mass casualty incidents & disasters (DMEP planning is led by the Health Emergency Management BC (HEMBC)).

Procedural sedation:

- Where appropriate staffing, monitoring, and resuscitation equipment available, administers weight-based doses of analgesics, sedatives, and dissociative anesthetics.
- Regularly assesses and documents level of sedation using an age and developmentally appropriate, validated sedation assessment tool(s).
- Processes in place to manage side effects of medications given and care for patient when the actual level of sedation is deeper than intended.
- Manages complications of sedative agents.

Recommended pediatric emergency courses for nurses:

- Current Pediatric Advanced Life Support (PALS), Pediatric Emergency Assessment, Recognition & Stabilization (PEARS) or equivalent certification.
- Emergency Practice, Interventions & Care (EPICC – Pediatrics) OR Emergency Nursing Pediatric Course (ENPC).
- Providers have a responsibility to contribute and support culturally safe care and have taken indigenous cultural safety and humility and anti-indigenous racism training.[30]
- For additional training and educational materials please visit: RIPPL: Resources for Interdisciplinary Pediatric Practice and Learning

Trauma informed and culturally safe care:

- Care provided is trauma informed with a focus on cultural safety and Anti-Indigenous Racism.[31,32] . Engages in a practice of Indigenous Cultural Safety and Humility as part of the service delivery approach.[33]
- Care is provided in culturally safe spaces.[34,35]

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[30] 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.
[31] Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls. Recommendation 8e: The need for accessible and culturally appropriate health, mental health, and addictions services for Indigenous women.
[32] 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.
[33] British Columbia Cultural Safety and Humility Standard - HSO 75000:2022(E). Standard 7 Design and Deliver Culturally Safe Services. 7.2.3 "The team assesses First Nations, Métis, and Inuit clients' health in a culturally safe and trauma- and violence-informed way."
[34] British Columbia Cultural Safety and Humility Standard - HSO 75000:2022(E). Standard 4 Invest in Financial and Physical Infrastructure.
[35] 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.

- 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.[36]

When resuscitation is deemed futile and post-death care:

- Provides imminently dying care and/or after death care.
- Includes compassionate care of the child's body, supportive care of the family, notification of death, completion of paperwork, and discussion of organ donation when appropriate and as directed by BC Transplant.
- Assesses and manages distressing symptoms in the imminently dying child utilizing a 3 P approach to symptom care.[37]
- Supports families to connect with interdisciplinary supports (Elders, Spiritual care, social workers, counsellors, pediatric subspecialties etc.) to screen/assess/support emotional/ spiritual distress, needs (may be virtual).
- Capacity for patient centred, family focused and team-oriented approach ((e.g., post death care linking to additional supports, consulting subspecialty services, may include virtual supports).
- Available caring spaces to foster meaningful family interaction (e.g., unimpeded access to the child, bed space, etc.).
- Provides support for staff to care for children imminently dying or death; including supports related to moral distress. Processes in place to support critical incidence debriefing for staff.
- Manages challenging ethical issues and moral distress in the best interest of the child, conflict between futile or potentially inappropriate interventions.
- Engages resources and other pediatric subspecialties to support goals of care conversations or compassionate communication surrounding death and dying that is inclusive of spiritual, cultural, and personal needs as expressed by the family.

6.0 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.

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[36] BC Declaration on the Rights of Indigenous Peoples (DRIPA), DRIPA Action Plan. Theme 3: Ending Indigenous-specific Racism and Discrimination. Outcomes: Indigenous Peoples feel safe accessing the health-care system, knowing that they will receive high quality care, be treated with respect, and receive culturally safe and appropriate services. Indigenous women, girls, and 2SLGBTQQIA+f people enjoy full protection and guarantees against all forms of violence and discrimination.

[37] 3P Approach: Pain management is provided with a combination of psychological, physical, and pharmacological strategies, or methods, to treat and manage pain. Education Resources and Practice Support Documents: Pediatric Pain and Comfort, Child Health BC, https://www.childhealthbc.ca/foundations/resource_bundle/pediatric pain comfort.

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
1.0	Education, Quality and Research									
1.1	Pediatric competencies	Systems[38] 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.

[38] "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	Participates in the development of local and HA guidelines, standards, protocols, and procedures. Participates in working groups to develop/implement provincial guidelines standards, protocols, and procedures as requested. Systems exist for local dissemination implementation and use of guidelines standards, protocols, and procedures.						Systems are in place for the dissemination, implementation and use of HA and provincial guidelines, standards, protocols, and procedures. Participates in working groups and provides pediatric expertise in the development/ implementation of local, HA and provincial guidelines, standards, protocols, and procedures as requested.	Provides pediatric clinical expertise (specialty/subspecialty) in the development of provincial guidelines, standards, protocols, and procedures. Co-sponsorship in the development of provincial clinical guideline guidelines, standards, protocols, and procedures. Participation of BCCH Professional Practice in provincial guideline, standards, protocols, and procedures development.	Co-sponsors, and leads the development and maintenance of provincial guidelines, standards, protocols, and procedures informed by current best and wise practices. Systems are in place to the engage provincial partners in the development and maintenance of provincial guidelines, standards, protocols, and procedures. Works with provincial partners to disseminate and implement provincial guidelines, standards, protocols, and procedures. Participation of CHBC in provincial and Children & Women's committees to contribute to the development of guidelines, standards, protocols, and procedures.
1.4	Child and youth-specific indicators and measures[39] to inform system planning, evaluation, and	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, admission rates). Takes local action to address issues.						Systems are in place to develop, monitor and report on HA-specific child and youth health indicators and measures. Incorporates the indicators and measures identified as part of the core set of provincial child and youth health indicators. Takes actions to address issues.	Provides child and youth specialty/subspecialty expertise in the development of provincial child and youth indicators and measures. Systems are in place to authorize and release HA data (where	In collaboration with provincial partners, Identifies provincial child and youth health and indicators. Develops a provincial system for monitoring and reporting on a core set of provincial child

[39] '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).

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
	quality improvement	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.						Participates in the development, monitoring and reporting on core sets of provincial child and youth health indicators and measures. Takes actions to address issues. Systems are in place to authorize and release HA data (where appropriate) that contributes to provincial quality improvement and research. 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.	appropriate) that contributes to provincial quality improvement and research. 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	and youth health quality indicators and measures. Takes actions to address issues. 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
		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.[40]								
1.5	Adverse events, good catches (near misses) hazards, and learning from excellence	Reviews local 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 areas of improvement and spread positive practice.						Systems 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 outcomes. Determines root causes and trends. Develops, implements, evaluates, and shares actions within the HA to reduce future occurrences and spread high-quality practice. Involves providers, children, youth	Participates in the Child Health Provincial Quality Committee (a multi-agency committee protected as per Section 51 of the BC Evidence Act[42]). 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.	Leads the Child Health Provincial Quality Committee. Responsibilities include: • Reviews provincial quality/patient safety/risk events and trends (e.g., reports generated from the BC Patient Safety Learning System). Determines root causes. • Facilitates multi-incident, multi-HA provincial case reviews as appropriate.

[40] The First Nations Principles of OCAP® - The First Nations Information Governance Centre (fnigc.ca)

[42] 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
								and families and HA partners, as applicable. Facilitates the inclusion of child and youth health expertise in case reviews, if requested. Systems are protected by Section 51 of the BC Evidence Act[41]. Physicians and staff with child and youth health expertise and others (e.g., young people and families) participate in case reviews, as appropriate. Participates in the Child Health Provincial Quality Committee (a multi-agency committee protected as per Section 51 of the BC Evidence Act. Brings forward events with provincial applicability to provincial quality committee for review and shared learning.		Involves providers, children, youth and families and HA partners, as applicable. • Develops, implements, and evaluates actions to reduce future patient safety/risk events. Involves providers, children, youth and families and HA partners, as applicable. Facilitates the sharing of recommendations and best practices from case reviews which may have applicability for provincial learning. Facilitates collaboration with Health Authority quality committees and health authority-based quality and risk teams as appropriate.
1.6	Involvement in quality improvement (QI) initiatives and Research	Participates in local QI and research initiatives. • Systems are in place to identify and lead local QI initiatives. Participates in HA and provincial QI initiatives providing expertise on local context as requested.						Identify and lead HA specific QI and research initiatives. • Systems are in place to identify and lead HA-specific QI initiatives. • Systems are in place to identify and lead HA-specific research initiatives.	Systems are in place to identify and lead specialty/subspecialty provincial and national QI initiatives. Systems are in place to identify and lead specialty/subspecialty provincial and national research initiatives.	Systems are in place to identify and lead provincial QI initiatives. Systems are in place to identify and co-lead provincial research initiatives.

[41] 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
		Participates in HA and provincial research initiatives providing expertise on local context as requested.						Provides child and youth health expertise, as requested, to local, HA and provincial (sub-specialty) QI initiatives. Provides child and youth health expertise, as requested, to local, HA and provincial (subspecialty) research initiatives. 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.	Provides child and youth health expertise to provincial (specialty/subspecialty) QI initiatives. Provides child and youth health expertise in provincial (specialty/subspecialty) research initiatives. Established research program in relevant specialty/sub-specialty area, with appropriate staffing, resourcing, space, etc. Collaborates with CHBC and other entities to disseminate QI/research findings (knowledge translation) and integrate into practice throughout the province. Participates in provincial and national research networks in relevant specialty/subspecialty area.	Facilitates partnerships with BCCHRI and other research and QI entities. Works with HAs, BCCH, BCCHRI or other entities to disseminate and integrate QI/research findings into practice throughout the province (knowledge translation).
1.7	Child/youth/ family partnership	Engages diverse groups of children/youth/families, including from rural, remote, and Indigenous communities[43] 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 networks relevant to specialty/subspecialty area.	Participates in provincial and national networks focused on child and youth health/pediatric care.

[43] https://www.bcpcm.ca/

		Local Responsibilities						Regional HA Responsibilities	Provincial Responsibilities, in collaboration with HAs/Partners	
		T1	T2	T3	T4	T5	T6		BCCH	CHBC/HIN
								Participates in provincial and national benchmarking programs.	Participates in provincial and national networks focused on child and youth health/pediatric care. Participates in provincial and national benchmarking programs.	Facilitates HA participation in provincial and national benchmarking programs.

Table 2: Specialist/Subspecialist Physician Interdependencies

✓24/7 = available for on-site consultation as needed.
✓M-F days = available for on-site consultation days M-F (T5: minimum of 46 weeks/yr.).

Service	Availability			
	All Ages Emergency with no on-site Pediatric Unit	All Ages Emergency with on-site Pediatric Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
Medical Providers				
Pediatric allergy				
Pediatric biochemical/metabolic diseases				✓24/7
Pediatric cardiology			✓M-F days. Strive for 24/7 coverage & available on-site as needed	✓24/7
Pediatric child protection medical specialist (e.g., Pediatrician)	Referral within the health authority For higher volume[44] sites ✓ 24/7	✓ 24/7	✓ 24/7	✓ 24/7
Adult critical care medicine (CCM)				
Pediatric critical care medicine (PCCM)	Virtual support from T5/T6 Pediatric Critical Care Service			T6 Critical Care Service (Pediatric CCM specialists 24/7)
Pediatric Palliative Care	✓24/7 virtual	✓24/7 virtual	✓24/7 virtual	✓24/7 virtual
Pediatric dermatology				
Medical genetics				
Emergency medicine physicians	Access to MD 24/7 (on-site or on-call & available on-site as needed) For higher volume sites MD in ED 24/7	MD(s) with ED specialty training (CCFP (EM) or FRCPC) or equivalent in ED 24/7.	Combination of MD(s) with ED specialty training (CCFP (EM) or FRCPC or equivalent) & PEM sub-specialty training (RCPSC or equivalent) in ED 24/7.	Same as T5 plus: At least one MD with PEM subspecialty training (RCPSC) or equivalent in ED 24/7
Pediatric emergency medicine				
Pediatric endocrinology				✓24/7
Gastroenterologist that provides care to adults & children				
Pediatric gastroenterology				✓24/7
Pediatric hematology/oncology				✓24/7
Pediatric immunology				
Adult infectious diseases		✓24/7	✓24/7	
Pediatric infectious diseases				✓24/7
Pediatric nephrology				✓24/7
Neurologist that provides care to children & adults				
Pediatric neurology				✓24/7

[44] Higher volume sites have usual pediatric emergency visits of 3,000 or greater per year.

Service	Availability			
	All Ages Emergency with no on-site Pediatric Unit	All Ages Emergency with on-site Pediatric Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
Pediatrician		✓24/7	✓24/7	✓24/7
Developmental pediatrician				
General psychiatrist	✓24/7 by phone from within HA For higher volume sites ✓24/7	✓After hours		
Children & youth psychiatrist		✓days, 7 d/week	✓24/7	✓24/7
Diagnostic radiologist that provides care to children & adults	✓24/7 (may be provided by remote service from within HA)			
Pediatric diagnostic radiology				✓ 24/7
Interventional radiologist that provides care to children & adults		✓24/7 Emergent procedures (≥14 yrs.)	✓24/7 Emergent procedures (all ages)	
Pediatric interventional radiology				✓ 24/7
Pediatric respiratory medicine				
Pediatric rheumatology				
Transfusion medicine MD that provides care to children & adults		✓M-F days	✓24/7	
Pediatric transfusion medicine MD				✓24/7
Pediatric pain specialist				✓24/7
Surgical Providers				
Anesthesia provider that provides airway support to children & adults	If on-site OR available, see footnote[45] For higher volume sites ✓24/7 anesthesia provider (FP anesthesia provider or anesthesiologist)	✓24/7 anesthesiologist	✓24/7 (pediatric anesthesiology preferred)	
Pediatric anesthesiologist				✓24/7
Pediatric bone marrow transplant				
Pediatric cardiac surgery				✓24/7
Dentist/oral maxillofacial surgeon that provides care to children & adults		✓24/7	✓24/7	
Pediatric dentist/oral maxillofacial surgeon				✓24/7
General surgeon that provides care to children & adults	If on-site operating room available, see footnote[46] For higher volume sites ✓24/7 surgical provider (FP with enhanced surgical skills or general surgeon) (pending alignment with refreshed surgical module)	✓24/7 general surgeon	✓24/7 general surgeon (at times when no pediatric surgeon available)	
Pediatric general surgery			On-site consultation M-F days. Strive for 24/7 coverage & available on-site as needed	✓24/7
Neonatology		T4 NICU	T4 NICU	T6 NICU

[45] Anesthesia provider available to attend on-site as per on-call schedule. When no provider on-call, agreements are in place with neighbouring site(s) for MD telephone consultation &/or transfer. May be FP anesthetist.

[46] Surgical provider available to attend on-site as per on-call schedule. When no provider on-call, agreements are in place with neighbouring site(s) for MD telephone consultation &/or transfer. May be FP MD with enhanced surgical skills.

Service	Availability			
	All Ages Emergency with no on-site Pediatric Unit	All Ages Emergency with on-site Pediatric Unit	Regional Pediatric Emergency	Provincial Pediatric Emergency
Neurosurgeon that provides care to children & adults		✓24/7 if no T5/T6 within HA	✓24/7	
Pediatric neurosurgery				✓24/7
Obstetrics & gynecology		✓24/7	✓24/7	✓24/7

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9.0 Appendix 1: Change Log

Document	Date	Description of Change
Child Health BC. Children and Emergency Department Services. Vancouver, BC: Child Health BC		
Initial approval (CHBC Steering Committee +/- relevant Provincial Steering Committees).	2014	Initial CHBC Tiers of Service Module
Minor revisions	2015-2019	Revisions to update content based on feedback received and current best and wise practices.
Major revisions	2023	Significant revisions based on partner feedback and best and wise practices. Additional content for palliative care and pain care added. CHBC 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 Emergency Service		
Initial approvals by the CHBC and ECBC Steering Committees.	November 2024 (CHBC) December 2024 (ECBC)	Updated content. Document repositioned and aligned with the Provincial Tiers of Service framework.