SETTING
THE STAGE

CHILDREN & CRITICAL CARE SERVICES

JULY 2018

childhealthbc.ca

CHILD HEALTH BC

LEAD BENEFACTOR

save on foods

Children & Critical Care Services:
Setting the Stage for Tiers Development

Contents

Critical Care Services for Children:
Setting the Stage for Tiers Development

The Children & Critical Care (CC) Tiers module is made up of two components:

1. Setting the Stage for Tiers Development (provides the context - ***this document***)
2. Tiers to Support System and Operational Planning (provides a description of the tiers and the corresponding responsibilities and requirements)

The Children & Critical Care Tiers module focuses on services provided by *specialist* and *subspecialist* health care providers to children up to 17 years old (16.9 years) who have *highly acute* and often *highly complex* illnesses, injuries and complications. It builds on and is intended to be used in conjunction with the *Children's Emergency Department, General Medicine* and *Surgery Tiers* modules.

All facilities providing pediatric services (T1-T6) 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 &/or in ICU). 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** (refer to children's medical and surgical modules for details of what is usually provided on a pediatric inpatient unit). Provision of these services requires **specialized skills** and **enhanced staffing levels**. In BC, such services are usually provided in a pediatric-specific or a general intensive care unit.

1.0 Providers of Critical Care Services for Children

Critical Care services for children are provided by a range of physician specialists and subspecialists, in partnership with nurses, allied health and other members of the health care team. In many cases, the physicians have specific training in critical care medicine (CCM).

CCM is a relatively new Royal College of Physicians and Surgeons-recognized subspecialty. CCM has multiple different base specialties that serve as a route for entry including pediatrics, anesthesiology, cardiac surgery, emergency medicine and general surgery. Within CCM, there is an adult and a pediatric stream. In Canada, there are 21 Royal College accredited CCM training programs - 13 adult and 8 pediatric (source: Royal College website). There are 9 pediatric CCM physicians in BC, 6 at BCCH and 3 in Victoria.

2.0 Utilization of Intensive Care Units by Children

Highlights of the data used to inform the development of this module are provided in this section. Data is for 2015/16 and children ages 0 - 16.9 years unless otherwise stated.

Refer to Appendices 1 - 3 for detailed tables. Appendix 4 provides a summary of designated pediatric beds in BC, including pediatric ICU (PICU) beds. BCCH has 22 PICU beds and Victoria General has 5 beds. Additionally, the University Hospital of Northern BC (UHNBC) has 4 beds with the capacity for more intensive monitoring, up to and including continuous cardiorespiratory monitoring.

2.1 ICU Visits & Days

2.1.1 2015/16, 2014/15, 2013/14 and 2012/13 Visits and Days

In 2014/15, 1,748 children were discharged from an ICU in BC (4 - 5 admissions per day). These children occupied 6,862 ICU bed days (19 beds per day) and had an average length of stay (ALOS) of 3.9 days. These figures are slightly higher than the activity in the 2 previous years. See Table 1 (Appendix 1 for details).

Table 1: ICU Visits & Days, Children 0 - 16.9 Yrs, 2014/15, 2013/14, 2012/13 (CIHI)

Activity	2015/16	2014/15	2013/14	2012/13	Difference, 2015/16 - 2012/13
ICU Visits	1,850	1,748	1,691	1,647	203
ICU Days	5,927	6,862	6,083	5,971	(44)
ALOS	3.2	3.9	3.6	3.6	(0.4)

2.1.2 Ages of Children Treated in ICU

The highest proportion of ICU visits and days for children were aged 2 years and under: 43% of total visits and 49% of total days. 12% of BC's children were in this age group. See Table 2 (Appendix 1 for details).

Table 2: ICU Visits & Days by Facility & Age of Child, Children 0 - 16.9 Yrs (CIHI, 2015/16)

	ICU Visits				ICU Days			
Treating Hospital	Less than 2 Yrs	2 - 13.9 Yrs	14 - 16.9 Yrs	Total	Less than 2 Yrs	2 - 13.9 Yrs	14 - 16.9 Yrs	Total
BCCH	478	543	112	1,133	1,901	1,612	316	**3,829**
Victoria General	143	145	34	322	459	425	55	**939**
UHNBC (Prince George)	110	93	9	212	407	241	19	**667**
Other BC Hospitals	61	77	45	183	78	141	219	**438**
Total	**792**	**858**	**200**	**1,850**	**2,875**	**2,430**	**622**	**5,927**
% Visits/Days	**43%**	**46%**	**11%**	**100%**	**49%**	**41%**	**10%**	**100%**
% BC's Child Population	**12%**	**70%**	**18%**	**100%**	**12%**	**70%**	**18%**	**100%**

2.1.3 Visits and Days by Treating Hospital

The highest number of ICU visits and days for children were at BC Children's Hospital (BCCH), Victoria General Hospital (Vic Gen) and University Hospital of Northern BC (UHNBC). Combined, these represented 89% of total ICU visits and 92% of total ICU days. See Table 3 (Appendix 1 for details).

Table 3: ICU Visits & Days by Facility, Children 0 - 16.9 Yrs, (CIHI, 2015/16)

Treating Hospital	ICU Visits		ICU Days	
	#	% Prov Total	#	% Prov Total
BCCH	1,133	61%	3,829	65%
Victoria General	322	17%	939	16%
UHNBC (Prince George)	212	11%	667	11%
Other BC Hospitals	183	10%	492	8%
Total	**1,850**	**100%**	**5,927**	**100%**

2.1.4 Visits and Days by Location of Child's Home Residence

The highest proportion of visits and days were by children living in the Fraser Health Authority (FHA): 27% of total visits and 29% of total days. FHA has more children than any other HA.

On a per capita basis, children living in Interior, Fraser and Vancouver Coastal HAs utilized an ICU less often than children living in Vancouver Island and Northern Health Authorities.

See Table 4 (Appendix 2 for details).

Table 4: ICU Visits & Days by HA of Child's Home Residence, Children 0 - 16.9 Yrs (CIHI, 2015/16)

HA of Child's Home Residence	ICU Visits		ICU Days		
	#	% Prov Visits	#	% Prov Days	% BC Child Pop'n
IHA	231	13%	631	11%	15%
FHA	468	27%	1672	29%	42%
VCH	277	16%	960	17%	21%
VIHA	416	24%	1295	23%	15%
NHA	361	21%	1133	20%	7%
Total, BC as Home Residence	**1,753**	**100%**	**5,691**	**100%**	**100%**
Out of Prov/Unknown	97		236		
Total, All	**1,850**		**5,961**		

2.2 Reasons for ICU Visits

2.2.1 Mode of Entry

The most common routes of entry to ICU by children were direct entry or via emergency. A small number were admitted via a clinic or day care surgery from within the same hospital.

Table 5: Mode of Entry of ICU Visits, Children 0 - 16.9 Yrs (CIHI, 2015/16)

	ICU Visits					
Treating Hospital	**Direct[(1)]**	**ED**	**Clinic**	**Day Surgery**	**Other**	**Total**
BCCH	745	376	9	3	0	1,133
Victoria General	176	137		9	0	322
UHNBC (Prince George)	87	54	67	2	2	212
Other BC Hospitals	19	162	1	1	0	183
Total	**1,027**	**729**	**77**	**15**	**2**	**1,850**
% Prov Visits	**56%**	**39%**	**4%**	**1%**	**<1%**	**100%**

[(1)] Direct entry includes:

- Children admitted to ICU from another area within the same hospital (e.g., medical unit, OR, etc), excluding the Emergency Department or a clinic; and
- Children admitted to ICU from another hospital.

2.2.2 Major clinical categories/case mix groups

The most common clinical categories for admission to ICU were: respiratory (20%), circulatory (13%) and nervous system (12%). See Table 6. The most common case mix groups were cardiothoracic intervention with pump (8%), upper/lower respiratory infection (7%), poisoning/toxic effect of drug (3%), viral/unspecified pneumonia (3%), and seizure disorder, except status epilepticus (3%). See Appendix 3 for details.

Table 6: Visits by Major Clinical Category, Children 0 - 16.9 Yrs (CIHI, 2015/16)

	ICU Visits		ICU Days	
Major Clinical Category (MCC)	**#**	**% Total ICU D/C'es**	**#**	**% Total ICU Days**
Diseases & Disorders of the Respiratory System	376	20%	1,464	25%
Diseases & Disorders of the Circulatory System	235	13%	655	11%
Diseases & Disorders of the Nervous System	217	12%	546	9%
Diseases & Disorders of Ear, Nose, Mouth & Throat	194	10%	593	10%
Significant Trauma, Injury, Poisoning & Toxic Effects of Drugs	177	10%	502	8%
Newborns & Neonates with Conditions Originating in Perinatal Period	156	8%	704	12%
Diseases & Disorders of the Digestive System	131	7%	439	7%
Diseases & Disorders of the Musculoskeletal System & Connective Tissue	79	4%	214	4%
Diseases & Disorders of the Endocrine System, Nutrition & Metabolism	79	4%	158	3%
Diseases & Disorders of the Blood & Lymphatic System	51	3%	202	3%
Other Reasons for Hospitalization	40	2%	88	1%
Multisystemic or Unspecified Site Infections	40	2%	164	3%
Diseases & Disorders of the Kidney, Urinary Tract & Male Reproductive System	39	2%	93	2%

Major Clinical Category (MCC)	ICU Visits		ICU Days	
	#	% Total ICU D/C'es	#	% Total ICU Days
Diseases & Disorders of the Hepatobiliary System & Pancreas	15	1%	49	1%
Diseases & Disorders of the Eye	7	0%	9	0%
Burns	7	0%	35	1%
Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	5	0%	9	0%
Diseases & Disorders of the Female Reproductive System	2	0%	3	0%
Total, All MCCs	**1,850**	**100%**	**5,927**	**100%**

2.3 HA of Treating Hospital versus Location of Child's Home Residence

54% of children accessed ICU services in a hospital in their home HA. This ranged from 1% of children living in FH to 99% living in VCH. See Table 7.

Table 7: HA of Treating Hospital versus Location of Child's Home Residence (CIHI, 2015/16)

HA of Treating Hospital	Child's Home Residence					Total Visits, excl Other	Other	Total Visits, incl Other	% Prov Visits
	Interior	Fraser	Van Coastal	Van Island	Northern				
Interior HA	**84**	**2**	**1**			**87**	**3**	**90**	**5%**
Cariboo Memorial Hosp	29		1			30		30	2%
East Koot Reg Hosp	9					9	1	10	1%
Kelowna Gen Hosp	16	1				17		17	1%
Koot Bound Reg Hosp	7					7		7	0%
Penticton Reg Hosp	7					7	1	8	0%
Royal Inland Hosp	12	1				13	1	14	1%
Shuswap Lake Gen Hosp	2								0%
Vernon Jubilee Hosp	2					2		2	0%
Fraser HA		**4**	**1**			**5**		**5**	**0%**
Royal Columbian Hosp		4	1			5		5	0%
Vancouver Coastal HA	**1**	**2**	**8**	**1**		**12**		**12**	**1%**
Powell River Gen Hosp	1		3			4	0	4	0%
Sechelt Hosp			2			2	0	2	0%
St. Paul's Hosp			1			1	0	1	0%
Vancouver Gen Hosp		2	2	1		5	0	5	0%
Vancouver Island HA	**1**	**5**	**3**	**315**	**4**	**328**	**3**	**331**	**18%**
Victoria Gen Hosp	1	4	3	307	4	319	3	322	17%
St. Joseph's Gen Hosp				2		2	0	2	0%
West Coast Gen Hosp		1		6		7	0	7	0%
Northern HA	**1**	**2**			**270**	**273**	**6**	**279**	**15%**
Fort St. John Gen Hosp					33	33	1	34	2%
Mills Memorial Hosp					18	18	0	18	1%
Prince George Regional Hosp		2			206	208	4	212	11%
Dawson Creek and Dist Hosp					4	4	1	5	0%
G.R. Baker Mem Hosp	1				1	2	0	2	0%
Prince Rupert Regional Hosp					8	8	0	7	0%
PHSA HA	**144**	**453**	**264**	**100**	**87**			**0**	**0%**
B.C. Children's Hosp	144	453	264	100	87	1,048	83	1,133	61%
Total ICU Visits, BC	**231**	**468**	**277**	**416**	**361**	**1,753**	**97**	**1,850**	**100%**
% Treated in Home HA	**36%**	**1%**	**99%**	**76%**	**75%**	**54%**			
% BC ICU Child Visits	**13%**	**27%**	**16%**	**24%**	**21%**	**100%**			
% BC Population	**15%**	**40%**	**22%**	**15%**	**8%**	**100%**			

Note: For the purposes of this table, children from VCH that were admitted to either a VCH hospital or BCCH were assumed to have received the service in their home HA.

3.0 Literature on Volumes & Outcomes

In preparation for development of the Children & Critical Care Tiers module, a literature search was undertaken on the relationship between volumes and outcomes in adult, pediatric and neonatal ICUs. Most of the literature focused on adult and not pediatric or neonatal ICUs.

Although the literature is conflicting, most studies suggest there is a positive relationship between volumes and outcomes (higher volumes, better outcomes). Some noted the relationship existed only for high risk/complexity patients.

Adult ICUs:

- Most studies/literature reviews suggest there is a relationship between volumes and outcomes (higher volumes, better outcomes),[1-5] although some report no relationship.[6-8]
- One literature review (n=20 studies) suggested there was a high volume threshold at which point the risk benefit is lost (more than 450 cases per year per diagnostic category and more than 711 cases not specific to a diagnostic category). Optimal ICU performance was noted to be between low and high volumes.[1]
- One systematic review and meta-analysis (n=29 studies) found that 63% of the studies reported a statistically significant association between higher admission volumes and improved outcomes. The magnitude of the benefits was greatest in selected high risk conditions (cardiovascular, respiratory, severe sepsis, hepato– G.I., neurologic and postoperative admission diagnoses).[9]
- Two individual studies that focused on specific patient groups only (e.g., renal, subarachnoid hemorrhage) concluded a positive volume/outcome relationship.[10,11]
- One study of 29 ICUs in Spain reported no relationship between volumes and outcomes.[12] Another concluded the benefit was seen only in high-risk patients[13] and another only with certain diagnoses.[14]
- One study concluded the number of pressure ulcer prevalence and catheter-related bloodstream infection rates were higher in larger hospitals.[15]
- One study showed that reduced ICU bed availability was associated with increased rates of ICU readmission and ward cardiac arrest.[16] One literature review identified 70 - 75% to be the optimal ICU occupancy rate.[17] Another study did not show a relationship between ICU bed availability and occupancy.[18]

Pediatric ICUs:

- There are less studies/literature reviews published on volume and outcomes in pediatric ICUs.
- 3 articles show a relationship between PICU volume and morbidity/mortality (higher volumes, better outcomes):
    - Tilford's study[19] examined the volumes & outcomes in 16 PICUs that ranged from 4 - 20 beds (147 - 1,246 admissions/yr, with an average of 863/yr). The study reported significant effects of patient volume on both risk-adjusted mortality and patient length of stay. A 100% increase in PICU volume decreased both risk-adjusted mortality (adjusted odds ratio: .95) and reduced length of stay (incident rat ratio: .98). Factors such as fellowship training

programs, university hospital affiliation, number of PICU beds and children's hospital affiliation had no effect on risk-adjusted mortality or patient length of stay.

- Marcin's study[20] examined the volumes & outcomes in 15 PICUs (152 - 2,156 admissions/yr). On average, admission to higher-volume PICUs was associated with lower severity-adjusted mortality (odds ratio = 0.68 per 100 patient increase in volume). However, although severity-adjusted mortality rates decreased as annual PICU admission volumes increased, there was a slight increase in mortality rates among PICUs with very high annual admission volumes. This suggests that, although increasing PICU volumes are on average associated with lower mortality rates, there may be a point at which increasing volume not only does not result in further reductions in severity-adjusted mortality rates, but may be associated with some increase in mortality rates. The lowest severity-adjusted mortality rates were among PICUs with annual admission volumes between 992 and 1,491.
- Ruttman's[21] study examined the relationship between diagnostic diversity within a PICU and mortality risk. The study concluded no relationship although did note a small but significant volume effect present. A volume increase of 10 patients/month was associated with a 4% decrease of the adjusted mortality odds ratio.

- One PICU article showed a relationship between ICU volume and LOS (higher volume, shorter LOS) for critically ill children with acute asthma.[24]
- One PICU study (Markovitz[22]) examined the volumes & outcomes in 92 PICUs (186,643 patients). For patients with low severity of illness, PICU volume was not a related to mortality. For patients with high severity of illness, PICU volume is inversely related to mortality (i.e., higher PICU volumes were associated with higher risk– adjusted mortality). Potential explanations included differences in quality of care, issues with unmeasured con founding or calibration of existing severity of illness scores. Kahn[23] in a later article noted the relationship was conditional on severity of illness and that the association between higher volume and higher risk of death was largely confined to more acutely ill patients. He proposed that the study results could be attributable to limitations in the study design, including differing case-mixes between high volume and low volume PICU's.

Neonatal ICUs:

- 3 articles in the NICU literature showed a relationship between higher volumes and better outcomes.[25,26]

4.0 References

1. Abbenbroek B, Duffield CM, Elliott D. The intensive care unit volume–mortality relationship, is bigger better? An integrative literature review. *Australian Critical Care*. 2014;27(4):157-164.

2. Gaieski DF, Edwards JM, Kallan MJ, Mikkelsen ME, Goyal M, Carr BG. The relationship between hospital volume and mortality in severe sepsis. *American journal of respiratory and critical care medicine*. 2014;190(6):665-674.

3. Kanhere MH, Kanhere HA, Cameron A, Maddern GJ. Does patient volume affect clinical outcomes in adult intensive care units? *Intensive Care Med*. 2012;38(5):741-751.

4. Kahn JM. Volume, outcome, and the organization of intensive care. *Crit Care*. 2007;11(3):129.

5. Gattinoni L, Radrizzani D, Simini B, et al. Volume of activity and occupancy rate in intensive care units. association with mortality. *Intensive Care Med*. 2004;30(2):290-297.

6. Cooke CR, Kennedy EH, Wiitala WL, Almenoff PL, Sales AE, Iwashyna TJ. Despite variation in volume, veterans affairs hospitals show consistent outcomes among patients with non-postoperative mechanical ventilation. *Crit Care Med*. 2012;40(9):2569-2575.

7. Shahin J, Harrison DA, Rowan KM. Relation between volume and outcome for patients with severe sepsis in united kingdom: Retrospective cohort study. *BMJ*. 2012;344:e3394.

8. Kluge GH, Brinkman S, van Berkel G, et al. The association between ICU level of care and mortality in the netherlands. *Intensive Care Med*. 2015;41(2):304-311.

9. Nguyen Y, Wallace DJ, Yordanov Y, et al. The volume-outcome relationship in critical care: A systematic review and meta-analysis. *CHEST Journal*. 2015;148(1):79-92.

10. Vaara ST, Pettilä V, Reinikainen M, Kaukonen K. Population-based incidence, mortality and quality of life in critically ill patients treated with renal replacement therapy: A nationwide retrospective cohort study in Finnish intensive care units. *Crit Care*. 2012;16(1):R13.

11. Vespa P, Diringer MN. High-volume centers. *Neurocritical care*. 2011;15(2):369-372.

12. Fernández R, Altaba S, Cabre L, et al. Relationship between volume and survival in closed intensive care units is weak and apparent only in mechanically ventilated patients. *The Journal of the American Society of Anesthesiologists*. 2013;119(4):871-879.

13. Glance LG, Li Y, Osler TM, Dick A, Mukamel DB. Impact of patient volume on the mortality rate of adult intensive care unit patients. *Crit Care Med*. 2006;34(7):1925-1934.

14. Durairaj L, Torner JC, Chrischilles EA, Sarrazin MSV, Yankey J, Rosenthal GE. Hospital volume-outcome relationships among medical admissions to ICUs. *CHEST Journal*. 2005;128(3):1682-1689.

15. Manojlovich M, Antonakos CL, Ronis DL. The relationship between hospital size and ICU type on select adverse patient outcomes. *Hosp Top*. 2010;88(2):33-42.

16. Town JA, Churpek MM, Yuen TC, Huber MT, Kress JP, Edelson DP. Relationship between ICU bed availability, ICU readmission, and cardiac arrest in the general wards. *Crit Care Med*. 2014;42(9):2037-2041.

17. Tierney LT, Conroy KM. Optimal occupancy in the ICU: A literature review. *Australian Critical Care*. 2014;27(2):77-84.

18. Iwashyna TJ, Kramer AA, Kahn JM. Intensive care unit occupancy and patient outcomes. *Crit Care Med*. 2009;37(5):1545-1557.

19. Tilford JM, Simpson PM, Green JW, Lensing S, Fiser DH. Volume–outcome relationships in pediatric intensive care units. *Pediatrics*. 2000;106(2):289-294.

20. Marcin JP, Song J, Leigh JP. The impact of pediatric intensive care unit volume on mortality: A hierarchical instrumental variable analysis. *Pediatr Crit Care Med*. 2005;6(2):136-141.

21. Ruttimann UE, Patel KM, Pollack MM. Relevance of diagnostic diversity and patient volumes for quality and length of stay in pediatric intensive care units. *Pediatric Critical Care Medicine*. 2000;1(2):133-139.

22. Markovitz BP, Kukuyeva I, Soto-Campos G, Khemani RG. PICU volume and outcome: A severity-adjusted analysis. *Pediatr Crit Care Med*. 2016;17(6):483-489.

23. Kahn JM. Volume-outcome relationships in pediatric intensive care. *Pediatr Crit Care Med*. 2016;17(6):563-564.

24. Gupta P, Tang X, Gossett JM, et al. Association of center volume with outcomes in critically ill children with acute asthma. *Annals of Allergy, Asthma & Immunology*. 2014;113(1):42-47.

25. Chung JH, Phibbs CS, Boscardin WJ, Kominski GF, Ortega AN, Needleman J. The effect of neonatal intensive care level and hospital volume on mortality of very low birth weight infants. *Med Care*. 2010;48(7):635-644.

26. Phibbs CS, Baker LC, Caughey AB, Danielsen B, Schmitt SK, Phibbs RH. Level and volume of neonatal intensive care and mortality in very-low-birth-weight infants. *N Engl J Med*. 2007;356(21):2165-2175.

Appendix 1: ICU Visits & Days, All BC Hospitals, 2015/16 & 2014/15 (Children Ages 16.9 & Under)

HA of Treating Hosp	Treating Hospital	2015/16								2014/15								
		Visits					Days			Visits						Days		
		< 2 Yrs	2 - 13.9 Yrs	14 - 16.9 Yrs	Total	% Total	Pt Days	% Tot	Avg LOS	<6 Mos	6 Mos - 1.9 Yrs	2 - 13.9 Yrs	14 - 16.9 Yrs	Total	% Total	Pt Days	% Tot	Avg LOS
IHA	Vernon Jubilee Hosp		1	1	2	0%	3	0%	1.5			2	1	3	0%	3	0%	1.0
	Kelowna General Hosp	1	10	6	17	1%	35	1%	2.1			4	8	12	1%	28	0%	2.3
	Penticton Reg Hosp	2	4	2	8	0%	14	0%	1.8		1	3	1	5	0%	6	0%	1.2
	Royal Island Hosp	3	6	5	14	0%	21	0%	1.5	1		2	3	6	0%	20	0%	3.3
	Shuswap Lake Gen Hosp			2	2	0%	3	0%	1.5					0	0%	0	0%	0.0
	Cariboo Mem Hosp	18	9	3	30	2%	54	1%	1.8	2	8	15	2	27	2%	42	1%	1.6
	Kootenay Boundary Hosp	2	3	2	7	1%	14	0%	2.0	1		5	4	10	1%	20	0%	2.0
	E Kootenay Reg Hosp	3	4	3	10	0%	16	0%	1.6			2	2	4	0%	10	0%	2.5
FHA	Royal Columbian Hosp		1	4	5	0%	108	2%	21.6			1		1	0%	1	0%	1.0
	Ridge Meadows				0	0%	0	0%	0.0				1	1	0%	2	0%	2.0
	Chilliwack Gen Hosp				0	0%	0	0%	0.0					0	0%	0	0%	0.0
	Surrey Memorial				0	0%	0	0%	0.0				1	1	0%	1	0%	1.0
	Burnaby Hosp				0	0%	0	0%	0.0					0	0%	0	0%	0.0
VCH	Vancouver Gen Hosp			5	5	1%	38	1%	7.6				13	13	1%	61	1%	4.7
	Lion's Gate Hosp				0	0%	0	0%	0.0				1	1	0%	1	0%	1.0
	St Paul's Hosp			1	1	0%	21	0%	21.0					0	0%	0	0%	0.0
	Powell River Gen Hosp		4		4	0%	11	0%	2.8	1	2	3		6	0%	12	0%	2.0
	St Mary's Hosp (Sechelt)		2		2	0%	2	0%	1.0			3	2	5	0%	10	0%	2.0
	Mt St Joseph Hosp				0	0%	0	0%	0.0				1	1	0%	1	0%	1.0
VIHA	Vic Gen & Royal Jubilee Hosp	143	145	34	322	15%	939	16%	2.9	83	53	102	28	266	15%	1,413*	21%	5.3
	Royal Jubilee Hosp				0	0%	0	0%	0.0				1	1	0%	2	0%	2.0
	Nanaimo Reg Gen Hosp				0	0%	0	0%	0.0				1	1	0%	2	0%	2.0
	St Joseph's Hosp		1	1	2	0%	2	0%	1.0				1	1	0%	1	0%	1.0
	Campbell R & District Hosp				0	0%	0	0%	0.0				1	1	0%	1	0%	1.0
	West Coast Gen Hosp	4	2	1	7	0%	10	0%	1.4	2	2	2	1	7	0%	8	0%	1.1
	Cowichan District Hosp				0	0%	0	0%	0.0					0	0%	0	0%	0.0
NHA	Ft St John Hosp	13	18	3	34	2%	63	1%	1.9	7	15	20	1	43	2%	78	1%	1.8
	Univ Hosp of N BC	110	93	9	212	14%	667	11%	3.1	73	49	101	16	239	14%	692	10%	2.9
	Dawson Creek Hosp	1	3	1	5	0%	22	0%	4.4					0	0%	0	0%	0.0
	Prince Rupert Hosp	3	3	2	8	0%	8	0%	1.0	1		4	2	7	0%	0	0%	0.0
	GR Baker Hosp		2		2	0%	2	0%	1.0					0	0%	0	0%	0.0
	Mills Memorial	11	4	3	18	0%	45	1%	2.5	2	3	2		7	0%	9	0%	1.3
PHSA	BC Children's Hosp	478	543	112	1,133	62%	3,829	65%	3.4	285	196	478	120	1,079	62%	4,429	65%	4.1
Total		792	858	200	1,850	100%	**5,927**	**100%**	**3.2**	458	329	749	212	1,748	100%	**6,862**	**100%**	**3.9**
% Total		43%	46%	11%	100%					26%	19%	43%	12%	100%				
% BC's Child Population		**12%**	**70%**	**18%**	**100%**					**11%**		**69%**	**20%**	**100%**				

Orange	PICU available

* One case stayed in PICU for 301 days (partially explaining the significant increase in PICU days over 2013/14).

Appendix 2: ICU Visits & Days by Location of Child's Home Residence, 2015/16

(Children Ages 16.9 & Under)

Pt HA	Treating Hosp	Visits	Days	% Visits	% Days	% Prov Child Pop'n
IHA	B.C. Children's Hosp	144	484			
	Cariboo Memorial Hosp	29	45			
	East Kootenay Regional Hosp	9	15			
	G.R. Baker Memorial Hosp	1	1			
	Kelowna General Hosp	16	34			
	Kootenay Boundary Reg Hosp	7	14			
	Penticton Regional Hosp	7	8			
	Powell River General Hosp	1	2			
	Royal Inland Hosp	12	18			
	Shuswap Lake General Hosp	2	3			
	Vernon Jubilee Hosp	2	3			
	Victoria General Hosp	1	4			
	IHA Total	**231**	**631**	**12%**	**11%**	**15%**
FHA	B.C. Children's Hosp	453	1,539			
	Kelowna General Hosp	1	1			
	Prince George Regional Hosp	2	2			
	Royal Columbian Hosp	4	92			
	Royal Inland Hosp	1	2			
	Vancouver General Hosp	2	27			
	Victoria General Hosp	4	8			
	West Coast General Hospital	1	1			
	FHA Total	**468**	**1672**	**25%**	**28%**	**42%**
VCH	B.C. Children's Hosp	264	892			
	Cariboo Memorial Hosp	1	9			
	Powell River General Hosp	3	9			
	Royal Columbian Hosp	1	16			
	Sechelt Hosp	2	2			
	St. Paul's Hosp	1	21			
	Vancouver General Hosp	2	8			
	Victoria General Hosp	3	3			
	Van Coastal Total	**277**	**960**	**15%**	**16%**	**21%**

Pt HA	Treating Hosp	Visits	Days	% Visits	% Days	% Prov Child Pop'n
Island H	B.C. Children's Hosp	100	372			
	Victoria General Hosp	307	909			
	St. Joseph's General Hosp	2	2			
	Vancouver General Hosp	1	3			
	West Coast General Hosp	6	9			
	Island H Total	**416**	**1295**	**22%**	**22%**	**15%**
NHA	B.C. Children's Hosp	87	339			
	Victoria General Hosp	4	11			
	Fort St. John General Hosp	33	62			
	Mills Memorial Hosp	18	45			
	Prince George Reg Hosp	206	648			
	Dawson Creek and Dist Hosp	4	19			
	G.R. Baker Memorial Hosp	1	1			
	Prince Rupert Regional Hosp	8	8			
	NHA Total	**361**	**1133**	**20%**	**19%**	**7%**
OOP/ Unspec	B.C. Children's Hosp	85	203			
	Victoria General Hosp	3	4			
	Fort St. John General Hosp	1	1			
	Prince George Reg Hosp	4	17			
	Dawson Creek and Dist Hosp	1	3			
	East Kootenay Reg Hosp	1	1			
	Penticton Regional Hosp	1	6			
	Royal Inland Hosp	1	1			
	OOP/Unknown Total	**97**	**236**	**5%**	**4%**	
		1,850	**5,927**	**100%**	**100%**	

Appendix 3: ICU Visits by Major Clinical Category & Case Mix, 2015/16

(Children Ages 16.9 & Under)

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Burns	**7**	**0%**	**35**	**1%**
Burn with Burn Intervention/Skin Graft	2		28	
Non-Extensive Burn	5		7	
Diseases & Disorders of Ear, Nose, Mouth & Throat	**194**	**10%**	**593**	**10%**
Croup	14		18	
Disease of Oral Cavity/Salivary Gland/Jaw	5		6	
Disequilibrium/Hearing Loss	1		2	
Epiglottitis	1		1	
Glottis Intervention	14		66	
Hard/Soft Palate/Gingiva Intervention	14		44	
Influenza/Acute Upper Respiratory Infection	33		144	
Larynx/Trachea Intervention with Ear/Nose/Throat Diagnosis	16		125	
Lymphatic Intervention with Ear/Nose/Throat Diagnosis	2		2	
MCC 03 Unrelated Intervention	2		14	
Miscellaneous Ear/Nose/Throat Disorder	15		54	
Nose/Nasal Cartilage Intervention	1		1	
Oral Cavity/Pharynx Intervention	52		65	
Other Ear Intervention	2		3	
Other Musculoskeletal Intervention on Head	3		4	
Otitis Media with/without Ventilation Tube	2		3	
Sinus Intervention	1		8	
Sinusitis	1		1	
Skin Intervention with Ear/Nose/Throat Diagnosis	2		2	
Sleep Apnea	10		26	
Tonsillitis/Pharyngitis	3		4	
Diseases & Disorders of the Blood & Lymphatic System	**51**	**3%**	**202**	**3%**
Acute Leukemia except Myeloid	4		6	
Acute Lymphadenitis	1		1	
Acute Myeloid Leukemia	6		15	
Agranulocytosis	2		4	
Bone Marrow/Stem Cell Transplant	1		3	
Chemotherapy/Radiotherapy Admission for Neoplasm	4		8	
Hemoglobinopathy	5		76	
Intervention with Blood/Lymphatic System Diagnosis except Neoplasm	1		3	
Intervention with Lymphoma	2		12	
Intervention with Other Blood Malignant Neoplasm	3		14	
Non-Malignant Neoplasm of Other Site	3		4	
Other Anemia	2		3	
Other Chemotherapy	11		11	
Other Disease/Disorder of Blood/Lymphatic System	1		21	
Other Leukemia	1		1	
Purpura/Other Hemorrhagic Disorder	3		11	
Splenectomy	1		9	
Diseases & Disorders of the Circulatory System	**235**	**13%**	**655**	**11%**
Arrhythmia without Coronary Angiogram	6		8	
Cardiac Valve Repair except Percutaneous Transluminal Approach	3		4	
Cardiac Valve Replacement	10		19	

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Congenital Cardiac Disorder	2		2	
Heart Failure with Coronary Angiogram	1		34	
Heart Failure without Coronary Angiogram	2		3	
Heart or Lung Transplant	2		76	
Implantation of Cardioverter/Defibrillator	2		28	
Major Cardiothoracic Intervention with Pump	146		321	
Major Cardiothoracic Intervention without Pump	17		73	
MCC 05 Unrelated Intervention	2		2	
Minor Cardiothoracic Intervention	6		14	
Myocardial Infarction/Shock/Arrest without Coronary Angiogram	2		3	
Other/Miscellaneous Cardiac Disorder	11		38	
Other/Miscellaneous Vascular Intervention	12		16	
Pacemaker Implantation	1		1	
Percutaneous Transluminal Cardiothoracic Intervention except Percutaneous Coronary Intervention	5		7	
Syncope	4		5	
Unstable Angina/Atherosclerotic Heart Disease without Coronary Angiogram	1		1	
Diseases & Disorders of the Digestive System	**131**	**7%**	**439**	**7%**
Colostomy/Enterostomy	7		29	
Complex Hernia Repair	1		1	
Complicated Appendectomy	5		16	
Endoscopic Large Intestine/Rectum Resection without Colostomy	1		9	
Esophagitis/Gastritis/Miscellaneous Digestive Disease	3		3	
Gastrointestinal Hemorrhage	2		2	
Gastrointestinal Obstruction	2		2	
Inflammatory Bowel Disease	2		13	
MCC 06 Unrelated Intervention	5		126	
Minor Lower Gastrointestinal Intervention	2		2	
Minor Upper Gastrointestinal Intervention	7		12	
Non-Complex Hernia Repair	28		30	
Non-Major Excision/Repair of Upper Gastrointestinal Tract, Planned	7		15	
Non-Major Excision/Repair of Upper Gastrointestinal Tract, Unplanned	4		5	
Non-severe Enteritis	12		28	
Open Large Intestine/Rectum Resection without Colostomy, Planned	6		25	
Open Large Intestine/Rectum Resection without Colostomy, Unplanned	5		45	
Other Gastrointestinal Disorder	14		27	
Other Intervention with Gastrointestinal Diagnosis	3		10	
Repair/Fixation & Other Moderate Intervention on Lower Gastrointestinal Tract	1		1	
Severe Enteritis	1		2	
Symptom/Sign of Digestive System	13		36	
Diseases & Disorders of the Endocrine System, Nutrition & Metabolism	**79**	**4%**	**158**	**3%**
Cystic Fibrosis	1		1	
Dehydration	1		1	
Diabetes	49		75	
Disorder of Fluid/Electrolyte Balance	3		6	
Disorder of Metabolism	6		13	
Disorder related to Nutrition	15		54	
Other Intervention with Endocrine System Diagnosis	1		2	
Pituitary/Pineal Gland Intervention	1		2	
Skin/Soft Tissue Intervention with Endocrine System Diagnosis	1		3	
Thyroid/Parathyroid/Thymus Gland Intervention	1		1	

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Diseases & Disorders of the Eye	**7**	**0%**	**9**	**0%**
Extraocular Intervention except Lacrimal System	4		5	
Lens Extraction/Insertion	1		1	
Other Ophthalmic Intervention	1		2	
Other Ophthalmology Disorder	1		1	
Diseases & Disorders of the Female Reproductive System	**2**	**0%**	**3**	**0%**
Therapeutic Intervention on Female Reproductive System, Laparoscopic Approach	1		2	
Vulva/Perineum Intervention	1		1	
Diseases & Disorders of the Hepatobiliary System & Pancreas	**15**	**1%**	**49**	**1%**
Cirrhosis/Alcoholic Hepatitis	1		7	
Disorder of Biliary Tract	1		1	
Disorder of Pancreas except Malignancy	1		3	
Liver Disease except Cirrhosis/Malignancy	1		1	
Liver/Pancreas/Duodenum Transplant	1		3	
Major Hepatobiliary Intervention	8		15	
MCC 07 Unrelated Intervention	1		17	
Non-Major Hepatobiliary Intervention	1		2	
Diseases & Disorders of the Kidney, Urinary Tract & Male Reproductive System	**39**	**2%**	**93**	**2%**
Kidney Disease	1		2	
Kidney Transplant	2		4	
Lower Urinary Tract Infection	15		44	
Major Intervention on Male Reproductive System	1		1	
Major Intervention on Upper Urinary Tract	5		8	
Malignant Neoplasm of Urinary System	1		1	
MCC 11 Unrelated Intervention	1		1	
Non-Major Intervention on Lower Urinary Tract, Planned	1		2	
Non-Major Intervention on Male Reproductive System	5		6	
Other Disorder of Kidney/Ureter	1		2	
Other Intervention with Urinary System Diagnosis	3		14	
Radical Excision/Reconstruction of Bladder	2		6	
Renal Failure	1		2	
Diseases & Disorders of the Musculoskeletal System & Connective Tissue	**79**	**4%**	**214**	**4%**
Back Pain/Strain	1		1	
C1/C2/Thoracic Spine Intervention	40		118	
Craniofacial Bone Intervention with Musculoskeletal Diagnosis	7		10	
Fixation of Lower Limb except Ankle/Foot	2		6	
Major Foot Intervention except Soft Tissue without Infection	1		3	
Osteotomy of Lower Limb except Foot	8		35	
Other Foot Intervention, except Soft Tissue	2		2	
Other Major MSK Intervention with Malignant Neoplasm	1		7	
Other Musculoskeletal Intervention except Soft Tissue	1		1	
Other Musculoskeletal Soft Tissue Intervention	2		5	
Other Repair Bone of Leg except Ankle/Foot	1		2	
Other Syndrome/Deformity	1		2	
Pain/Stiffness, except Back	1		1	
Soft Tissue Intervention of Lower Limb	2		2	
Spinal Vertebrae Intervention	4		9	
Strain/Sprain/Joint/Tendon Disorder	2		2	
Systemic Connective Tissue Disorder	3		8	

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Diseases & Disorders of the Nervous System	**217**	**12%**	**546**	**9%**
Bone Marrow/Stem Cell Transplant	1		2	
Cerebrovascular Disorder	1		2	
Craniotomy for Drainage	7		9	
Cranium Intervention	1		1	
Drainage/Release of Brain	4		4	
Excision/Repair of Brain	42		97	
Hemorrhagic Event of Central Nervous System	2		2	
Infection/Inflammation of Central Nervous System except Meningitis	7		21	
Insertion of Shunt/Brain Monitor	11		85	
Ischemic Event of Central Nervous System	3		13	
Management of Nervous System Device/Other Minor Intervention	6		7	
MCC 01 Unrelated Intervention	3		6	
Meningitis except Viral	7		16	
Migraine/Other Headache	2		3	
Neuromuscular Disorder	2		9	
Neuropathy/Polyneuropathy	2		8	
Other Degenerative Disease of Nervous System	8		30	
Other Disorder of Central Nervous System	8		19	
Other Disorder of Nerve	1		1	
Other Dysfunction of Central Nervous System	2		3	
Other Site/Non-Major Intervention on Spine/Spinal Canal/Vertebra	2		30	
Other Vascular Intervention with Nervous System Diagnosis	2		3	
Seizure Disorder, except Status Epilepticus	60		122	
Status Epilepticus	28		46	
Thoracic/Major Intervention on Spine/Spinal Canal/Vertebra	4		6	
Viral Meningitis	1		1	
Diseases & Disorders of the Respiratory System	**376**	**20%**	**1,464**	**25%**
Aspiration Pneumonia	7		56	
Asthma	54		109	
Bacterial Disease of Respiratory System	3		28	
Bacterial Pneumonia	15		87	
Disease of Pleura	1		2	
Infectious/Parasitic Disease of Respiratory System	1		6	
MCC 04 Unrelated Intervention	5		29	
Open Lung Resection	8		10	
Other Intervention with Respiratory Diagnosis	4		10	
Other Respiratory Diagnosis	31		104	
Other Respiratory Intervention	15		25	
Pleurectomy	4		9	
Pneumothorax	1		1	
Postprocedural Respiratory Disorder	2		3	
Respiratory Failure	9		49	
Symptom/Sign of Respiratory System	16		32	
Upper/Lower Respiratory Infection	138		715	
Viral/Unspecified Pneumonia	62		189	

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	**5**	**0%**	**9**	**0%**
Cellulitis	1		4	
Muscle/Tendon/Soft Tissue Intervention with Skin Diagnosis	1		1	
Other Disease/Disorder of Skin/Subcutaneous Tissue	1		1	
Other Skin/Subcutaneous Tissue Intervention	1		2	
Trauma of Skin/Subcutaneous Tissue/Breast	1		1	
Multisystemic or Unspecified Site Infections	**40**	**2%**	**164**	**3%**
Fever	9		36	
Multisystemic/Unspecified Site Infection with Intervention	3		36	
Other Infectious/Parasitic Disease	8		25	
Other/Unspecified Sepsis	11		48	
Other/Unspecified Viral Illness	7		10	
Sepsis due to Staphylococcus Aureus/Pseudomonas/Enterococcus	2		9	
Newborns & Neonates with Conditions Originating in Perinatal Period	**156**	**8%**	**704**	**12%**
Newborn/Neonate 1500+ gm with Major Cardiovascular Intervention	35		295	
Newborn/Neonate 1500+ grams with Major Gastro/Respiratory Intervention	5		14	
Newborn/Neonate 1500+ grams with Other Major Intervention	2		7	
Newborn/Neonate 2000-2499 grams, Gestational Age <35 Weeks	1		21	
Newborn/Neonate 2000-2499 grams, Gestational Age 35-36 Weeks	2		10	
Newborn/Neonate 2000-2499 grams, Gestational Age 37+ Weeks	6		7	
Newborn/Neonate 2500+ grams, Anomaly of Nervous/Respiratory/Digestive System	6		8	
Newborn/Neonate 2500+ grams, Aspiration Syndrome/Fetal Asphyxia	1		2	
Newborn/Neonate 2500+ grams, Cardiovascular Anomaly	11		82	
Newborn/Neonate 2500+ grams, Haemolytic Disease	1		1	
Newborn/Neonate 2500+ grams, Jaundice	3		5	
Newborn/Neonate 2500+ grams, Major Respiratory Complication	17		76	
Newborn/Neonate 2500+ grams, Other Congenital Anomaly	1		3	
Newborn/Neonate 2500+ grams, Other Major Problem	4		13	
Newborn/Neonate 2500+ grams, Other Minor Problem	33		74	
Newborn/Neonate 2500+ grams, Other Moderate Problem	7		29	
Newborn/Neonate 2500+ grams, Other Respiratory Problem	10		25	
Newborn/Neonate 2500+ grams, Septicemia/Other Neonatal Infection	11		32	
Other Reasons for Hospitalization	**40**	**2%**	**88**	**1%**
Awaiting Placement	2		6	
Convalescence	6		28	
Follow-Up Treatment/Examination	5		9	
Multiple/Unspecified Congenital Anomaly	1		1	
Observation/Evaluation	13		16	
Other Admission with Non-Major Intervention	3		3	
Other Factor Causing Hospitalization	8		15	
Pain Management	1		9	
Palliative Care	1		1	
Significant Trauma, Injury, Poisoning & Toxic Effects of Drugs	**177**	**10%**	**502**	**8%**
Complication of Transplanted Organ	5		34	
Concussion	16		17	
Fixation/Repair Hip/Femur	9		30	
Fracture of Femur	1		13	
Fracture of Skull/Facial Bone	4		5	

Major Clinical Category/Case Mix Group	ICU Visits		ICU Days	
	#	% Total	#	% Total
Fracture/Dislocation/Rupture of Pelvis/Sacrum/Coccyx	2		2	
Internal Fixation of Facial Bone	1		1	
Intracranial Injury with Injury to Other Organ	3		4	
Major Thoraco-abdominal/Vascular Intervention with Trauma/Complication of Treatment	5		103	
Multiple Injuries to Internal Organ	6		10	
Multiple Intracranial Injury	3		3	
Nerve Intervention with Trauma	1		2	
Open Wound/Other/Unspecified Minor Injury	9		19	
Organ Transplant with Trauma/Complication of Treatment	1		17	
Other Fracture/Dislocation of Arm/Shoulder	2		2	
Other Intervention on Bone of Upper Body with Trauma/Complication of Treatment	1		2	
Other Intervention with Trauma/Complication of Treatment	1		1	
Other Major Bone Intervention with Trauma/Complication of Treatment	1		3	
Other Thoraco-abdominal Intervention with Trauma/Complication of Treatment	5		21	
Poisoning/Toxic Effect of Drug	62		98	
Post-Operative Complication except Hemorrhage	3		7	
Reduction/Fixation/Repair of Ankle/Foot	1		1	
Reduction/Fixation/Repair Upper Body/Limb except Fixation/Repair of Shoulder	1		1	
Replacement/Fixation/Repair of Tibia/Fibula/Knee	1		6	
Significant Injury/Exposure to Element	3		3	
Single Injury to Internal Organ	9		17	
Single Intracranial Injury	5		7	
Skin/Soft Tissue Intervention with Trauma with Flap/Graft	2		11	
Skin/Soft Tissue Intervention with Trauma without Flap/Graft	1		1	
Skull/Intracranial Intervention with Trauma/Complication of Treatment	8		39	
Spinal Injury	1		1	
Spinal Intervention with Trauma/Complication of Treatment	4		21	
Grand Total	**1,850**	**100%**	**5,927**	**100%**

Appendix 4: HA Operated Pediatric Inpatient Beds in BC (includes MH & SU beds)

HA	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds[1]	Child & Youth MH Beds	Youth SU Beds[2]	Total Ped Beds	NICU Beds
IHA	Kelowna General	10			8		18	12
	Kootenay Boundary (Trail)	4					4	
	Penticton Regional	11					11	
	East Kootenay (Cranbrook)	2					2	
	Vernon	5					5	
	Royal Inland	9			2		11	8
	Ashnola (Keremeos)					22[3]	22	
FHA	Abbotsford Regional	12					12	10
	Langley Memorial	9					9	
	Chilliwack General		4				4	
	Royal Columbian	12					12	24
	Ridge Meadows		4				4	
	Surrey Memorial	16			20		36	28[4]
	Burnaby							8
	Creekside Withdrawal Management Centre					6	6	
	Last Door Recovery Centre					10[5]	10	
VCH	Lions Gate & Carlile Centre	10			10		20	9
	Richmond		4				4	6
	St Paul's							9
	Peak House					8	8	
	Young Bears Lodge					5	5	
Island H	Nanaimo Regional	8					8	9
	St Joseph's General	4					4	
	Victoria General	16		5			21	22
	Cowichan District (Duncan)	4					4	
	Campbell River	1					1	
	Ledger House				14[6]		14	
NHA	University Hospital of Northern B.C.	12[7]			6		18	9
	Nechako Centre					8[8]		
PHSA	B.C. Children's Hospital	97		22	54[9]		173	
	BC Women's							60
TOTAL		**242**	**12**	**27**	**114**	**59**	**446**	**214**

Source: Survey of health planners & ED working group in each HA and internet.

Note: Several hospitals in BC do not have dedicated pediatric beds but admit children to beds on an adult inpatient unit(s). These hospitals are not included on the list above.

[1] Beds have the capacity for invasive monitoring, inotropic drugs and mechanical ventilation.
[2] Excludes beds in home-based settings.
[3] Includes beds for ages 17 - 24.
[4] Plan to increase to 48 beds in the future.
[5] Contracted beds and number of beds fluctuates.
[6] 14 beds: 5 child, 6 youth & 3 special care beds.
[7] 4 beds have the capacity for more intensive monitoring, up to and including continuous cardiorespiratory monitoring.
[8] Includes 1 detox bed.
[9] Includes 14 beds at Looking Glass (up to age 24), a residential eating disorders program operated by PHSA (BC Mental Health & Substance Use Services and BCCH) in collaboration with the Looking Glass Foundation.