

SETTING  
THE STAGE

# CHILDREN'S SURGICAL SERVICES

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# Children’s Surgical Services: Setting the Stage for Tiers Development

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### HOW TO CITE THE CHILDREN’S SURGICAL SERVICES:

We encourage you to share these documents with others and we welcome their use as a reference. Please cite each document in the module in keeping with the citation on the table of contents of each of the three documents. If referencing the full module, please cite as:

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## Children's Surgical Services: Setting the Stage for Tiers Development

The Children's Surgical Tiers of Service module is made up of three components:

1. Documents that provide context and were developed to inform the Surgical Tiers module
  - a. *Children's Surgical Services: Setting the Stage for Tiers Development (this document)*
  - b. Summary of the Evidence Volume-Outcome Relationship in Pediatric Surgery<sup>1</sup>
2. Children's Surgical Services: Tiers in Brief to Support System Planning (Provides a high-level overview of key aspects of the module.)
3. Children's Surgical Services: Tiers in Full to Support Operational Planning (Provides significant detail of key aspects of the module: (1) clinical service. (2) knowledge sharing/training; and (3) quality improvement/ research.)

### 1.0 Providers of Children's Surgical Services

Children's surgical services are provided by surgical and anesthesia providers in partnership with nurses, allied health and other members of the health care team.

In BC, surgical and anesthesia providers have one of the following types of qualifications:

1. Royal College of Physicians and Surgeons of Canada (RCPSC)-certified (see Table 1).
  - a) Adult surgery specialists and anesthesiologists:
    - Surgeons and anesthesiologists who have completed a post-graduate specialty residency program and the relevant RCPSC examination. Residencies are usually five years.
    - Surgical and anesthesiology residency programs include a pediatric component.
  - b) Pediatric surgery and anesthesiology specialists:
    - Specialty-trained surgeons and anesthesiologists who have completed additional training in pediatrics.
    - In Canada, pediatric general surgery is the only pediatric surgical subspecialty recognized by the RCPSC. Pediatric general surgery requires completion of a two-year residency program and the RCPSC examination.
    - Pediatric training for other surgical specialties and for anesthesiology occurs through fellowships which range from one to four years in length. No subspecialty RCPSC examination is required.
2. Family practice physicians with specialty training
  - a) Family practice physicians with enhanced surgical skills:
    - Family practice physicians who have completed a College of Family Physicians of Canada (CFPC) approved one-year training program in enhanced surgical skills or equivalent training in a program outside of Canada acceptable to the College of Physicians and Surgeons of BC (CPSBC) and the governing body of the HA.<sup>2</sup>

- In 2013, 40 family practice physicians with enhanced surgical skills were practicing in 14 communities in BC;<sup>3</sup> about two-thirds of these were trained outside of Canada.<sup>4</sup>
- b) Family practice anesthesia providers:
- Family practice physicians who have completed a CFPC accredited one-year training program in family practice anesthesia or equivalent training in a program outside of Canada acceptable to the CPSBC and the governing body of the HA. Training program should have included specific training in pediatric, obstetrical and adult anesthesia.<sup>5</sup>
  - In 2011, 500 – 700 GP-anesthetists were practicing in Canada, mostly in Ontario, the West and the North.<sup>6</sup> Specific numbers of GP anesthetists in BC were not available.

**Table 1: BC RCPSC-Certified Anesthesiology & Surgical Specialists**

Surgical Specialty	Pediatric Surgery & Anesthesiology Specialists		Adult Surgery & Anesthesiologists Specialists (see note below)
	BC Children's (Active Members only)	Elsewhere in BC	
Anesthesia	27	3 (Victoria)	484
Cardiothoracic Surgery	1	0	51
Dental	14	8+ (Victoria), 2 (Kelowna)	Unknown
General/Vascular	5	2 (Victoria)	289
Neurosurgery	3	0	47
Ophthalmology	14	1 (Victoria)	199
Orthopedic	8	4 (Kelowna, Surrey, Victoria & Prince George)	234
Otolaryngology	6	2 (Surrey & Victoria)	91
Plastics	5	1 (Victoria)	95
Urology	4	2 (Kelowna & Victoria)	97
<b>Total, excl Obs/Gyne</b>	<b>87</b>	<b>25+</b>	<b>1,587 + dentists</b>

*Sources:*

1. Adult surgery specialists & anesthesiologists: Canadian Medical Association Masterfile, January 2014.
2. Pediatric surgery & anesthesiology specialists: Information provided by Children's Surgical Tiers of Service Working Group.

*Definitions:*

1. Adult surgery & anesthesiology specialist: Physician certified by the RCPSC in surgical specialty or anesthesiology. Training includes a pediatric component.
2. Pediatric surgery & anesthesiology specialist: Physician certified by the RCPSC in surgical specialty or anesthesiology. Has completed a pediatric fellowship in the relevant specialty. Practice may be mixed adults and children or exclusively with children.

*Note:* Many adult surgery and adult anesthesiology specialists do not perform surgery/provide anesthesia on children.

## 2.0 Utilization of Surgical Services by Children

### 2.1 About the Data

Highlights of the data used to inform the development of this module are provided in this section. Detailed data and a visual representation (map) are available in Appendices 1 - 5.

Data is provided for inpatient (including babies in NICU) and day care service utilization. Unfortunately no comparable provincial-level data exists for hospital outpatient or community-based services.

Data is for 2017/18 and children ages 0 - 16.9 years. Surgical procedures were assigned to the surgical specialty of the procedural physician. For example, if a general surgeon performed a thoracic procedure, the procedure was assigned to general surgery (not thoracic surgery).

### 2.2 Inpatient and Day Care Visits/Procedures

In 2017/18, 41,485 visits (114 per day, including NICU visits) were made by children to a BC hospital for medical/surgical reasons (21,175 medical and 20,310 surgical visits for a 51%/49% split, based on the most responsible physician (MRP). Of these, 25,273 (69 per day or 61% of total visits) were inpatient visits (79% medical and 21% surgical visits).

27,755 procedures were performed during the 41,485 visits in 2017/18. Of these, 21,716 (78%) were performed by surgeons.

Of the 21,716 procedures performed by surgeons (refer to Tables 2 - 5 for details):

- 15,162 (70%) were performed on a surgical day care basis and 6,554 (30%) on inpatients.
- The highest number were dentistry (22% of total visits), followed by otolaryngology (21%), orthopedic (15%) and general surgery (12%).
- 9,663 (44% of the total provincial procedures) were performed at Children's & Women's (C&W), 3,622 (17%) in Island Health, 3,120 (14%) in IH, 2,802 (13%) in FH, 1,696 (8%) in NHA and 813 (4%) in VCH.
- The highest number were performed on children living in FHA (34% of the total provincial procedures), followed by children living in Island Health (19% of total procedures) and IH (18% of total procedures). On a per capita basis, the number was lower in FHA/VCH (49% of the total surgical visits vs 63% of the population) than in the other HAs.
- 67% were performed in a hospital in the HA in which the child was residing.
  - Children living in VCH and VIHA were the most likely to access services in their home HA (94% in VCH and 84% in VIHA). Children living in FHA were the least likely (35%).
  - Children requiring otolaryngology services were the most likely to access services in their home HA (84%), followed by gynecology (81%), orthopedic surgery (75%), oral surgery (74%), dentistry (70%) and general surgery (66%).
  - Services that children were most likely to travel to another HA to receive were neurosurgery (79% travelled to another HA) and cardiac surgery (76% travelled).

**Table 2: Surgical Procedures, Children Ages 0 – 16.9 Yrs, by Surgical Specialty (CIHI, 2017/18)**

Procedure MD	Procedures			% Total Procedures	% SDC/Total Procedures	C&W	% C&W/Total Procedures
	Inpatient	Day Surgery	Total				
Anaesthesiology	28	95	123	1%	77%	105	85%
Cardiac/Thoracic Surgery	296	8	304	1%	3%	287	94%
Dentistry	24	4,845	4,869	22%	100%	2,215	45%
General Surgery	1,704	972	2,676	12%	36%	1,223	46%
Gynaecology	54	133	187	1%	71%	44	24%
Neurosurgery	227	20	247	1%	8%	234	95%
Ophthalmology	46	949	995	5%	95%	738	74%
Oral Surgery	89	457	546	3%	84%	170	31%
Orthopaedic Surgery	1,465	1,707	3,172	15%	54%	1,010	32%
Otolaryngology	1,114	3,391	4,505	21%	75%	791	18%
Plastic Surgery	309	759	1,068	5%	71%	535	50%
Radiology	914	723	1,637	8%	44%	1,479	90%
Urology	247	1,102	1,349	6%	82%	795	59%
<b>Total Procedures</b>	<b>6,517</b>	<b>15,161</b>	<b>21,678</b>	<b>100%</b>	<b>70%</b>	<b>9,626</b>	<b>44%</b>

**Table 3: Surgical Procedures, Children 0 – 16.9 Yrs, by Surgical Specialty & HA of Treating Hospital (CIHI, 2017/18)**

Procedure MD	HA of Treating Hospital						Total, excl C&W	C&W	Total, incl C&W	% Total Visits
	Interior	Fraser	Van Coastal	Van Island	Northern					
Anaesthesiology	6	2		10			18	105	123	1%
Cardiac/Thoracic Surgery	2	8	6		1		17	287	304	1%
Dentistry	874	213	85	859	623		2654	2,215	4,869	22%
General Surgery	255	369	120	500	209		1453	1,223	2,676	12%
Gynaecology	49	26	11	31	26		143	44	187	1%
Neurosurgery	3	2	4	4			13	234	247	1%
Ophthalmology	60	22	20	137	18		257	738	995	5%
Oral Surgery	10	108	18	194	46		376	170	546	3%
Orthopaedic Surgery	508	649	211	486	308		2162	1,010	3,172	15%
Otolaryngology	994	1,120	235	977	388		3714	791	4,505	21%
Plastic Surgery	134	134	25	196	44		533	535	1,068	5%
Radiology	63	11	19	59	6		158	1,479	1,637	8%
Urology	162	138	59	168	27		554	795	1,349	6%
<b>Total Procedures</b>	<b>3,120</b>	<b>2,802</b>	<b>813</b>	<b>3,621</b>	<b>1,696</b>		<b>12,052</b>	<b>9,626</b>	<b>21,678</b>	<b>100%</b>
% Total Procedures	14%	13%	4%	17%	8%		56%	44%	100%	

Note: Surgical procedures were assigned to the surgical specialty of the procedural physician. For example, if a general surgeon performed a thoracic procedure, the procedure would be assigned to general surgery (not thoracic surgery).

**Table 4: Surgical Procedures, Children Ages 0 – 16.9 Yrs, by Surgical Specialty & HA of Child’s Home Residence (CIHI, 2017/18)**

Procedure MD	Child's Home Residence						Other	Total, incl Other
	Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other		
Anaesthesiology	20	54	18	23	6	121	2	123
Cardiac/Thoracic Surgery	37	125	51	35	15	263	41	304
Dentistry	940	1,336	610	891	633	4410	459	4,869
General Surgery	361	947	454	580	290	2632	44	2,676
Gynaecology	50	55	21	32	28	186	1	187
Neurosurgery	41	93	42	41	22	239	8	247
Ophthalmology	123	416	199	178	60	976	19	995
Oral Surgery	16	195	72	196	63	542	4	546
Orthopaedic Surgery	570	1,098	524	531	359	3082	90	3,172
Otolaryngology	1,069	1,381	612	1014	417	4493	12	4,505
Plastic Surgery	178	379	170	234	91	1052	16	1,068
Radiology	231	668	363	223	125	1610	27	1,637
Urology	237	580	238	209	73	1337	12	1,349
<b>Total Procedures</b>	<b>3,873</b>	<b>7,327</b>	<b>3,374</b>	<b>4,187</b>	<b>2,182</b>	<b>20,943</b>	<b>735</b>	<b>21,678</b>
<b>% Total Procedures</b>	<b>18%</b>	<b>34%</b>	<b>16%</b>	<b>19%</b>	<b>10%</b>	<b>97%</b>		
Pop'n, 0 – 16.9 Yrs	115,908	330,865	166,518	117,107	58,550	788,948		
<b>% Pop'n, 0 - 16.9 Yrs</b>	<b>15%</b>	<b>42%</b>	<b>21%</b>	<b>15%</b>	<b>7%</b>	<b>100%</b>		

**Table 5: % Surgical Procedures in Home HA for Children Ages 0 - 16.9 Yrs (CIHI, 2017/18)**

Procedure MD <sup>1</sup>	Child's Home Residence					Prov Avg
	IHA	FHA	VCH <sup>2</sup>	VIHA	NHA	
Anaesthesiology	30%	4%	100%	43%	0%	30%
Cardiac/Thoracic Surgery	5%	6%	100%	0%	7%	24%
Dentistry	92%	16%	96%	94%	95%	70%
General Surgery	66%	38%	99%	84%	71%	66%
Gynaecology	98%	45%	95%	94%	93%	81%
Neurosurgery	7%	2%	100%	10%	0%	21%
Ophthalmology	47%	5%	98%	76%	30%	44%
Oral Surgery	63%	47%	86%	97%	73%	74%
Orthopaedic Surgery	84%	55%	94%	87%	79%	75%
Otolaryngology	92%	72%	80%	94%	86%	84%
Plastic Surgery	74%	33%	97%	82%	48%	62%
Radiology	26%	2%	100%	26%	4%	31%
Urology	67%	23%	99%	78%	36%	54%
<b>% Procedures in Home HA</b>	<b>79%</b>	<b>35%</b>	<b>94%</b>	<b>84%</b>	<b>74%</b>	<b>67%</b>

**Notes:**

1. Surgical procedures were assigned to the surgical specialty of the procedural physician. For example, if a general surgeon performed a thoracic procedure, the procedure would be assigned to general surgery (not thoracic surgery).
2. For the purposes of this table, children from VCH that had a procedure at C&W or a VCH hospital were assumed to have received the service in their home HA.

Of the 108 hospitals in BC:

- Surgery was performed on children in 57/108<sup>i</sup> (53%) hospitals in 2017/18 (CIHI).
- Of the 57 hospitals where surgery was performed on children:
  - 24/57 (42%) performed day care surgery only (defined as 5 or fewer inpatient procedures per year).
  - 23/57 (40%) performed fewer than 100 procedures, 31 performed between 100 and 1,000 procedures and 3/57 performed more than 1,000 procedures (BCCH, Victoria General and Surrey Memorial).
  - 20/57 (35%) have dedicated pediatric beds (see Appendix 5 for a listing) and collectively performed 87% of the total pediatric surgical volume.

### 3.0 References

1. Hanley G. Summary of the evidence volume-outcome relationship in pediatric surgery. <http://Childhealthbc.ca/tiers-service/childrens-surgical-services>. 2013:1-15.
2. BC Medical Quality Initiative. Family practice enhanced surgical skills dictionary. [http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeEnhancedSurgicalSkills\(2017-11\).pdf](http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeEnhancedSurgicalSkills(2017-11).pdf). [June 28, 2019]. 2017:1-13.
3. Enhanced surgical skills (ESS) and obstetrical surgical skills (OSS) in canada: Demographics . <https://Ess.rccbc.ca/second-page/>. <https://ess.rccbc.ca/second-page/>. Accessed 16/28, 2019.
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5. BC Medical Quality Initiative. Family practice anesthesia clinical privileges. [http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeAnesthesia\(2017-11\).pdf](http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeAnesthesia(2017-11).pdf). 2017:1-9.
6. Society of Rural Physicians of Canada in cooperation with the College of Family Physicians of Canada and the Canadian Anesthesiologists Society. Joint position paper on training for rural family physicians in anesthesia; <http://Www.srpc.ca/pdf/jppeng.pdf>; 2011.

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<sup>i</sup> 58/76 (75%) if hospitals with no inpatient beds are excluded.



## Appendix 1: ED and Med/Surg Visits and Days by Facility

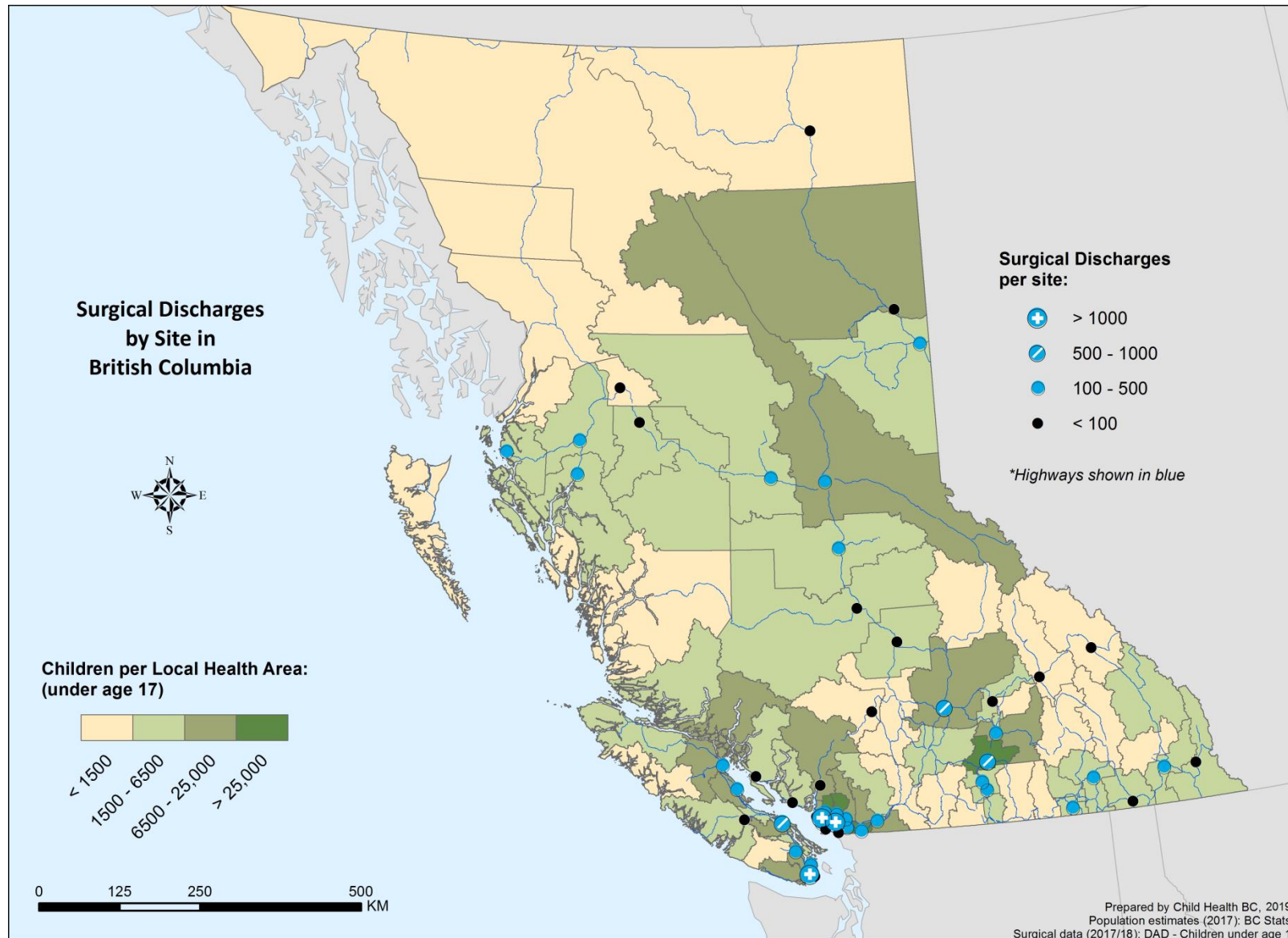
- Includes children ages 0 - 16.9 years.
- Surgical procedures: Procedures performed on children by a surgeon regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and in day care settings.
- Med/surg visits and days: Visits and days sorted by MRP. Includes children in PICUs, med/surg units and in day care settings (excludes children in NICUs).
- Day care visits = Surgical or medical day care visits in which an anesthetic was provided.
- Medical and surgical data is for fiscal year 2017/2018. Source is the BC MoH Discharge Abstract Database.
- Emergency Department (ED) visits: Based on 2017/18 National Ambulatory Care Reporting System (NACRS) data for children ages 0-16.9 for sites that submit to NACRS. Where NACRS data was not available, visits were calculated as 15% of total ED visits. 2017/18 MIS data was used for total ED visits.

Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
		Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
<b>Interior</b>	<b>74,688</b>	<b>2,450</b>	<b>670</b>	<b>3,120</b>	<b>2,446</b>	<b>669</b>	<b>3,115</b>	<b>1,161</b>	<b>30</b>	<b>1,840</b>	<b>1,870</b>	<b>4,247</b>	<b>4,985</b>	<b>5,408</b>	<b>30</b>
<b>East Kootenay</b>	<b>11,642</b>	<b>385</b>	<b>48</b>	<b>433</b>	<b>385</b>	<b>57</b>	<b>442</b>	<b>124</b>	<b>5</b>	<b>167</b>	<b>172</b>	<b>287</b>	<b>614</b>	<b>411</b>	<b>2</b>
Creston Valley Hospital	2,445	51		51	51		51	0	2	17	19	28	70	28	
East Kootenay Regional Hosp	3,464	289	48	337	289	57	346	124	1	89	90	163	436	287	2
Elk Valley Hospital	1,817	26		26	26		26		2	37	39	57	65	57	
Elkford Health Centre	238														
Golden and District Hosp	1,261	19		19	19		19			16	16	25	35	25	
Invermere and District Hosp	1,655									8	8	14	8	14	
Sparwood Health Centre	762														
<b>Kootenay Boundary</b>	<b>9,668</b>	<b>245</b>	<b>33</b>	<b>278</b>	<b>245</b>	<b>30</b>	<b>275</b>	<b>67</b>	<b>0</b>	<b>221</b>	<b>221</b>	<b>511</b>	<b>496</b>	<b>578</b>	<b>4</b>
Arrow Lakes Hospital	777									1	1	1	1	1	
Boundary Hospital	2,061									2	2	8	2	8	
Castlegar & Dist Comm Hlth Ctre	1,579														
Edgewood Health Centre	363														
Kootenay Boundary Regional Hospital	2,328	124	30	154	124	26	150	61		177	177	424	327	485	4
Kootenay Lake Hospital	2,004	121	3	124	121	4	125	6		41	41	78	166	84	
Slocan Community Health Centre	330														
Victorian Comm Hlth Cntr of Kaslo	226														
<b>Okanagan</b>	<b>27,877</b>	<b>1,236</b>	<b>359</b>	<b>1,595</b>	<b>1,235</b>	<b>357</b>	<b>1,592</b>	<b>557</b>	<b>10</b>	<b>953</b>	<b>963</b>	<b>2,330</b>	<b>2,555</b>	<b>2,887</b>	<b>15</b>
Kelowna General Hospital	10,518	526	159	685	526	147	673	256	6	506	512	1,358	1,185	1,614	10
Penticton Regional Hospital	5,676	73	41	114	73	47	120	68	1	189	190	398	310	466	
Princeton General Hospital	1,094														
South Okanagan General Hosp	2,709														
South Similkameen Health Ctre	408														
Summerland Memorial Hlth Ctre		466		466	465		465						465		
Vernon Jubilee Hospital	7,472	171	159	330	171	163	334	233	3	258	261	574	595	807	5
<b>Thompson Cariboo Shuswap</b>	<b>25,501</b>	<b>584</b>	<b>230</b>	<b>814</b>	<b>581</b>	<b>225</b>	<b>806</b>	<b>413</b>	<b>15</b>	<b>499</b>	<b>514</b>	<b>1,119</b>	<b>1,320</b>	<b>1,532</b>	<b>9</b>
100 Mile District General Hosp	1,817	4		4	4		4	0	12	11	23	25	27	25	
Alexis Creek Health Centre	201														
Ashcroft Hospital	310														
Barriere Health Centre	255														
Blue River Health Centre	42														
Cariboo Memorial Hosp	2,962	48	9	57	48	8	56	18		70	70	166	126	184	
Chase and District Health Centre	651														
Dr. Helmcken Memorial Hospital	517									2	2	4	2	4	
Lillooet Hosp and H Ctre	935	15		15	15		15	0	1	8	9	16	24	16	
Nicola Valley Health Centre	2,102														

Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
		Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Queen Victoria Hospital	1,346	4	4	8	4	4	8	4		15	15	19	23	23	
Royal Inland Hospital	10,898	483	207	690	480	205	685	361	2	367	369	849	1,054	1,210	9
Shuswap Lake General Hospital	3,150	30	10	40	30	8	38	30		26	26	40	64	70	
St. Bartholomew's Health Ctre	315														
<b>Fraser</b>	<b>121,834</b>	<b>1,826</b>	<b>976</b>	<b>2,802</b>	<b>1,820</b>	<b>1,035</b>	<b>2,855</b>	<b>1,592</b>	<b>11</b>	<b>3,519</b>	<b>3,530</b>	<b>8,486</b>	<b>6,385</b>	<b>10,078</b>	<b>57</b>
<b>Fraser East</b>	<b>27,622</b>	<b>380</b>	<b>228</b>	<b>608</b>	<b>380</b>	<b>226</b>	<b>606</b>	<b>344</b>	<b>1</b>	<b>984</b>	<b>985</b>	<b>2,397</b>	<b>1,591</b>	<b>2,741</b>	<b>16</b>
Abbotsford Regional Hosp and Cancer Centre	13,389	337	224	561	337	222	559	339	1	972	973	2,377	1,532	2,716	12
Chilliwack General Hospital	9,505	43	4	47	43	4	47	5		12	12	20	59	25	4
Fraser Canyon Hospital	1,490														
Mission Memorial Hospital	3,238														
<b>Fraser North</b>	<b>34,711</b>	<b>505</b>	<b>217</b>	<b>722</b>	<b>504</b>	<b>245</b>	<b>749</b>	<b>451</b>	<b>1</b>	<b>750</b>	<b>751</b>	<b>1,509</b>	<b>1,500</b>	<b>1,960</b>	<b>16</b>
Burnaby Hospital	8,796	1	1	2	1	3	4	3		74	74	87	78	90	
Eagle Ridge Hospital	8,117	208		208	208	1	209	1		117	117	117	326	118	
Ridge Meadows Hospital	7,494	155	38	193	154	54	208	129		8	8	8	216	137	4
Royal Columbian Hospital	10,304	141	178	319	141	187	328	318	1	551	552	1,297	880	1,615	12
<b>Fraser South</b>	<b>59,501</b>	<b>941</b>	<b>531</b>	<b>1,472</b>	<b>936</b>	<b>564</b>	<b>1,500</b>	<b>797</b>	<b>9</b>	<b>1,785</b>	<b>1,794</b>	<b>4,580</b>	<b>3,294</b>	<b>5,377</b>	<b>25</b>
Delta Hospital	3,382	43	1	44	41	1	42	1		52	52	52	94	53	
Jim Pattison Outpt Care and Surgery Ctre		5		5	5		5	0	6		6	0	11	0	
Langley Memorial Hospital	6,394	144	64	208	142	72	214	108	1	383	384	984	598	1,092	9
Peace Arch District Hospital	6,353								1	3	4	3	4	3	
Surrey Memorial Hospital	43,372	749	466	1,215	748	491	1,239	688	1	1,347	1,348	3,541	2,587	4,229	16
<b>Vancouver Coastal</b>	<b>32,891</b>	<b>587</b>	<b>226</b>	<b>813</b>	<b>531</b>	<b>250</b>	<b>781</b>	<b>506</b>	<b>141</b>	<b>821</b>	<b>962</b>	<b>1,624</b>	<b>1,743</b>	<b>2,130</b>	<b>14</b>
<b>North Shore/Coast Garibaldi</b>	<b>21,256</b>	<b>361</b>	<b>141</b>	<b>502</b>	<b>305</b>	<b>154</b>	<b>459</b>	<b>226</b>	<b>83</b>	<b>540</b>	<b>623</b>	<b>1,132</b>	<b>1,082</b>	<b>1,358</b>	<b>10</b>
Bella Coola General Hospital	417									20	20	37	20	37	
Lions Gate Hospital	8,674	191	129	320	191	142	333	198	26	450	476	986	809	1,184	10
Pemberton D and T Centre	817														
Powell River General Hospital	2,806	27	5	32	27	6	33	18	1	16	17	31	50	49	
R.W. Large Memorial Hospital	508									5	5	8	5	8	
Sechelt Hospital	2,523	15	2	17	15	2	17	6		26	26	40	43	46	
Squamish General Hospital	2,338	128	5	133	72	4	76	4	56	23	79	30	155	34	
Whistler D and T Centre	3,173														
<b>Richmond</b>	<b>7,006</b>	<b>93</b>	<b>38</b>	<b>131</b>	<b>93</b>	<b>46</b>	<b>139</b>	<b>75</b>	<b>1</b>	<b>215</b>	<b>216</b>	<b>375</b>	<b>355</b>	<b>450</b>	<b>4</b>
Richmond Hospital	7,006	93	38	131	93	46	139	75	1	215	216	375	355	450	4
<b>Vancouver</b>	<b>4,629</b>	<b>133</b>	<b>47</b>	<b>180</b>	<b>133</b>	<b>50</b>	<b>183</b>	<b>205</b>	<b>57</b>	<b>66</b>	<b>123</b>	<b>117</b>	<b>306</b>	<b>322</b>	<b>0</b>
Mount Saint Joseph Hospital	1,165	14		14	14		14	0	1	1	2	5	16	5	
St. Paul's Hospital	1,451	25	4	29	25	5	30	8	2	63	65	104	95	112	
UBC Health Sciences Centre	1,870	54	12	66	54	12	66	13		0	0	66	13		
Vancouver General Hospital	143	40	31	71	40	33	73	184	54	2	56	8	129	192	
<b>Vancouver Island</b>	<b>56,071</b>	<b>2,778</b>	<b>843</b>	<b>3,621</b>	<b>2,778</b>	<b>765</b>	<b>3,543</b>	<b>1,265</b>	<b>12</b>	<b>2,105</b>	<b>2,117</b>	<b>6,733</b>	<b>5,660</b>	<b>7,998</b>	<b>33</b>
<b>Central Vancouver Island</b>	<b>24,530</b>	<b>947</b>	<b>189</b>	<b>1,136</b>	<b>947</b>	<b>196</b>	<b>1,143</b>	<b>332</b>	<b>3</b>	<b>641</b>	<b>644</b>	<b>1,539</b>	<b>1,787</b>	<b>1,871</b>	<b>12</b>
Bamfield Health Centre	175														
Chemainus Health Care Centre	986														
Cowichan District Hospital	4,698	275	34	309	275	38	313	64	1	177	178	437	491	501	4
Ladysmith Comm Hlth Ctre	2,313														
Nanaimo Regional General Hosp	7,826	622	148	770	622	150	772	256		404	404	1,023	1,176	1,279	8
Oceanside Health Centre	3,864														
Tofino General Hospital	940									26	26	33	26	33	
West Coast General Hospital	3,728	50	7	57	50	8	58	12	2	34	36	46	94	58	
<b>North Vancouver Island</b>	<b>12,127</b>	<b>356</b>	<b>80</b>	<b>436</b>	<b>356</b>	<b>77</b>	<b>433</b>	<b>153</b>	<b>0</b>	<b>222</b>	<b>222</b>	<b>519</b>	<b>655</b>	<b>672</b>	<b>5</b>
Cormorant Island Comm Hlth Ctre	224														
Gold River Health Centre	486														
Kyuquot Health Centre	195														

Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
		Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
North Island Hosp Campbell River	2,980	172	34	206	172	32	204	55		93	93	203	297	258	1
North Island Hosp Comox Valley	3,674	86	24	110	86	21	107	44	0	60	60	101	167	145	4
Port Alice Health Centre	124														
Port Hardy Hospital	1,302									12	12	22	12	22	
Port McNeill And District Hospital	634									5	5	8	5	8	
St. Joseph's General Hospital	2,104	98	22	120	98	24	122	54	0	52	52	185	174	239	
Tahsis Health Centre	404														
<b>South Vancouver Island</b>	<b>19,414</b>	<b>1,475</b>	<b>574</b>	<b>2,049</b>	<b>1,475</b>	<b>492</b>	<b>1,967</b>	<b>780</b>	<b>9</b>	<b>1,242</b>	<b>1,251</b>	<b>4,675</b>	<b>3,218</b>	<b>5,455</b>	<b>16</b>
Lady Minto / Gulf Islands Hospital	1,656								1	3	4	8	4	8	
Royal Jubilee Hospital	2,470	34	4	38	34	14	48	14	2	32	34	33	82	47	
Saanich Peninsula Hospital	2,502	207		207	207		207						207	0	
Victoria General Hospital	12,786	1,234	570	1,804	1,234	478	1,712	766	6	1,207	1,213	4,634	2,925	5,400	16
<b>Northern</b>	<b>41,167</b>	<b>1,512</b>	<b>184</b>	<b>1,696</b>	<b>1,511</b>	<b>188</b>	<b>1,699</b>	<b>417</b>	<b>112</b>	<b>1,017</b>	<b>1,129</b>	<b>2,628</b>	<b>2,828</b>	<b>3,045</b>	<b>12</b>
<b>Northeast</b>	<b>9,602</b>	<b>231</b>	<b>16</b>	<b>247</b>	<b>230</b>	<b>18</b>	<b>248</b>	<b>39</b>	<b>63</b>	<b>201</b>	<b>264</b>	<b>438</b>	<b>512</b>	<b>477</b>	<b>0</b>
Chetwynd General Hospital	1,115									5	5	7	5	7	
Dawson Creek and District Hosp	2,906	106	10	116	105	13	118	28	26	62	88	99	206	127	
Fort Nelson General Hospital	1,008	4		4	4		4	0	4	10	14	17	18	17	
Fort St. John General Hospital	4,097	121	6	127	121	5	126	11	33	124	157	315	283	326	
Hudson's Hope D & T Centre	34														
Tumbler Ridge D & T Centre	442														
<b>Northern Interior</b>	<b>16,607</b>	<b>597</b>	<b>133</b>	<b>730</b>	<b>597</b>	<b>136</b>	<b>733</b>	<b>300</b>	<b>30</b>	<b>550</b>	<b>580</b>	<b>1,649</b>	<b>1,313</b>	<b>1,949</b>	<b>12</b>
Fraser Lake D And T Centre	797														
G.R. Baker Memorial Hospital	2,591	235	22	257	235	22	257	24	5	7	12	7	269	31	
Lakes District Hospital & Hlth Ctr	1,793									15	15	23	15	23	
Mackenzie And District Hospital	924									6	6	19	6	19	
McBride and District Hospital	274									2	2	4	2	4	
St. John Hospital	1,607	67	12	79	67	12	79	12	18	36	54	62	133	74	
Stuart Lake Hospital	907														
The University Hosp of Nrthrn BC	7,189	295	99	394	295	102	397	264	7	484	491	1,534	888	1,798	12
Valemount D & T Centre	525														
<b>Northwest</b>	<b>14,958</b>	<b>684</b>	<b>35</b>	<b>719</b>	<b>684</b>	<b>34</b>	<b>718</b>	<b>78</b>	<b>19</b>	<b>266</b>	<b>285</b>	<b>541</b>	<b>1,003</b>	<b>619</b>	<b>0</b>
Atlin Health Centre	432														
Bulkley Valley District Hospital	2,222	45	2	47	45	2	47	2	13	26	39	47	86	49	
Haida Gwaii Hosp and Hlth Ctre	451									10	10	18	10	18	
Houston D and T Centre	823														
Kitimat General Hospital	1,680	114		114	114		114	0	2	36	38	66	152	66	
Mills Memorial Hospital	3,992	254	24	278	254	24	278	63	2	98	100	204	378	267	
Northern Haida Gwaii Hosp and Hlth Ctre	504									4	4	7	4	7	
Prince Rupert Regional Hospital	3,292	170	8	178	170	8	178	13	1	75	76	141	254	154	
Stewart General Hospital	208														
Stikine D & T Centre	158														
Wrinch Memorial Hospital	1,196	101	1	102	101		101	0	1	17	18	58	119	58	
<b>Provincial Health Services Authority</b>	<b>47,872</b>	<b>5,971</b>	<b>3,655</b>	<b>9,626</b>	<b>6,008</b>	<b>2,293</b>	<b>8,301</b>	<b>9,600</b>	<b>812</b>	<b>3,909</b>	<b>4,721</b>	<b>22,030</b>	<b>13,022</b>	<b>31,630</b>	<b>97</b>
B.C. Cancer Agency															
B.C. Children's Hospital	47,872	5,965	3,332	9,297	6,001	2,293	8,294	9,600	812	3,732	4,544	21,739	12,838	31,339	97
B.C. Women's Hospital		6	323	329	7		7	0		177	177	291	184	291	
<b>Grand Total</b>	<b>374,523</b>	<b>15,124</b>	<b>6,554</b>	<b>21,678</b>	<b>15,094</b>	<b>5,200</b>	<b>20,294</b>	<b>14,541</b>	<b>1,118</b>	<b>13,211</b>	<b>14,329</b>	<b>45,748</b>	<b>34,623</b>	<b>60,289</b>	<b>243</b>

## Appendix 2: Map of Pediatric Surgical Discharges in BC



## Appendix 3: Surgical Procedures, Children Ages 0 – 16.9 Yrs, by Treating Hospital

- Includes children ages 0 - 16.9 years. Source is the BC MoH Discharge Abstract Database, 2017/18 fiscal year.
- Procedures by procedural physician regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and day care settings.
- Surgical procedures are assigned to the surgical specialty of the procedural physician. For example, if a general surgeon performed a thoracic procedure, the procedure is assigned to general surgery (not thoracic surgery).

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
<b>Interior</b>	<b>13</b>	<b>65</b>	<b>1,067</b>	<b>1,411</b>	<b>564</b>	<b>3,120</b>
<b>100 Mile District General Hospital</b>			<b>1</b>	<b>3</b>		<b>4</b>
Dentistry			1	3		4
<b>Cariboo Memorial Hospital</b>			<b>18</b>	<b>23</b>	<b>16</b>	<b>57</b>
Dentistry			16	9		25
General Surgery			2	13	14	29
Gynaecology				1	2	3
<b>Creston Valley Hospital</b>			<b>32</b>	<b>16</b>	<b>3</b>	<b>51</b>
Dentistry			32	16	2	50
Otolaryngology					1	1
<b>East Kootenay Regional Hospital</b>		<b>2</b>	<b>109</b>	<b>165</b>	<b>61</b>	<b>337</b>
Anaesthesiology			1	1		2
Dentistry			18	16		34
General Surgery			1	5	9	15
Gynaecology				1	10	11
Ophthalmology				2		2
Orthopaedic Surgery			4	31	20	55
Otolaryngology		2	80	103	18	203
Radiology					1	1
Urology			5	6	3	14
<b>Elk Valley Hospital</b>			<b>12</b>	<b>10</b>	<b>4</b>	<b>26</b>
Dentistry			12	10	3	25
General Surgery					1	1
<b>Golden and District Hospital</b>			<b>10</b>	<b>2</b>	<b>7</b>	<b>19</b>
Dentistry			9	2		11
General Surgery					4	4
Orthopaedic Surgery					3	3
Otolaryngology			1			1
<b>Kelowna General Hospital</b>	<b>5</b>	<b>52</b>	<b>174</b>	<b>291</b>	<b>163</b>	<b>685</b>
Anaesthesiology				1	1	2
Cardiac/Thoracic Surgery					2	2
Dentistry			9	14	1	24
General Surgery	1		8	41	14	64
Gynaecology	1				6	7
Ophthalmology		8	27	18	2	55
Oral Surgery			2	3	5	10
Orthopaedic Surgery		7	15	44	68	134
Otolaryngology		13	70	101	23	207
Plastic Surgery	1	5	9	31	32	78
Radiology	1	4	20	22	2	49

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Urology	1	15	14	16	7	53
<b>Kootenay Boundary Regional Hospital</b>		<b>1</b>	<b>36</b>	<b>78</b>	<b>39</b>	<b>154</b>
Dentistry			1	1		2
General Surgery				5	8	13
Gynaecology			1	1	4	6
Orthopaedic Surgery			5	21	17	43
Otolaryngology		1	25	34	5	65
Plastic Surgery				12		12
Radiology				1		1
Urology			4	3	5	12
<b>Kootenay Lake Hospital</b>			<b>63</b>	<b>55</b>	<b>6</b>	<b>124</b>
Dentistry			62	52	1	115
General Surgery					1	1
Gynaecology				2	2	4
Ophthalmology			1	1	1	3
Orthopaedic Surgery					1	1
<b>Lillooet Hospital And Health Centre</b>			<b>11</b>	<b>4</b>		<b>15</b>
Dentistry			11	4		15
<b>Penticton Regional Hospital</b>		<b>7</b>	<b>20</b>	<b>50</b>	<b>37</b>	<b>114</b>
General Surgery			4	15	8	27
Gynaecology				2	4	6
Orthopaedic Surgery		2	3	16	21	42
Otolaryngology		5	6	13	2	26
Urology			7	4	2	13
<b>Queen Victoria Hospital</b>			<b>2</b>	<b>4</b>	<b>2</b>	<b>8</b>
General Surgery			2	4	2	8
<b>Royal Inland Hospital</b>	<b>5</b>	<b>3</b>	<b>223</b>	<b>326</b>	<b>133</b>	<b>690</b>
Anaesthesiology	1					1
Dentistry			80	91	13	184
General Surgery			2	24	14	40
Gynaecology					4	4
Neurosurgery				1	2	3
Orthopaedic Surgery		1	18	71	56	146
Otolaryngology			91	107	14	212
Plastic Surgery	3	1	13	11	16	44
Radiology	1	1	3	5	1	11
Urology			16	16	13	45
<b>Shuswap Lake General Hospital</b>	<b>1</b>		<b>13</b>	<b>21</b>	<b>5</b>	<b>40</b>
Anaesthesiology	1					1
Dentistry			12	8		20
General Surgery			1	10	5	16
Gynaecology				1		1
Orthopaedic Surgery				2		2
<b>Summerland Memorial Health Centre</b>			<b>253</b>	<b>198</b>	<b>15</b>	<b>466</b>
Dentistry			230	129	6	365
Otolaryngology			23	69	9	101
<b>Vernon Jubilee Hospital</b>	<b>2</b>		<b>90</b>	<b>165</b>	<b>73</b>	<b>330</b>
General Surgery			5	16	16	37
Gynaecology	1			2	4	7
Orthopaedic Surgery			5	43	34	82
Otolaryngology	1		76	89	12	178



Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Radiology			1			1
Urology			3	15	7	25
<b>Fraser</b>	<b>6</b>	<b>24</b>	<b>737</b>	<b>1,367</b>	<b>668</b>	<b>2,802</b>
<b>Abbotsford Regional Hospital and Cancer Centre</b>			<b>170</b>	<b>292</b>	<b>99</b>	<b>561</b>
Dentistry			58	46	6	110
General Surgery			4	45	23	72
Gynaecology				1	6	7
Oral Surgery				5	4	9
Orthopaedic Surgery			38	98	34	170
Otolaryngology			65	64	11	140
Plastic Surgery				7	6	13
Radiology					2	2
Urology			5	26	7	38
<b>Burnaby Hospital</b>				<b>1</b>	<b>1</b>	<b>2</b>
Orthopaedic Surgery				1		1
Urology					1	1
<b>Chilliwack General Hospital</b>			<b>8</b>	<b>22</b>	<b>17</b>	<b>47</b>
General Surgery				2	1	3
Gynaecology					2	2
Ophthalmology			2			2
Oral Surgery				1	2	3
Orthopaedic Surgery				3	6	9
Otolaryngology			6	10	3	19
Urology				6	3	9
<b>Delta Hospital</b>					<b>44</b>	<b>44</b>
General Surgery					13	13
Ophthalmology					7	7
Oral Surgery					8	8
Orthopaedic Surgery					10	10
Otolaryngology					1	1
Plastic Surgery					3	3
Radiology					2	2
<b>Eagle Ridge Hospital</b>			<b>46</b>	<b>79</b>	<b>83</b>	<b>208</b>
Dentistry			4	6		10
General Surgery					7	7
Gynaecology					2	2
Oral Surgery				3	3	6
Orthopaedic Surgery				10	49	59
Otolaryngology			35	48	11	94
Plastic Surgery			6	9	9	24
Urology			1	3	2	6
<b>Jim Pattison Outpatient Care and Surgery Centre, Surrey</b>				<b>2</b>	<b>3</b>	<b>5</b>
General Surgery					2	2
Plastic Surgery				2	1	3
<b>Langley Memorial Hospital</b>			<b>22</b>	<b>99</b>	<b>87</b>	<b>208</b>
General Surgery				13	27	40
Gynaecology				1	1	2
Oral Surgery			5	34	20	59
Orthopaedic Surgery			5	27	24	56

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Otolaryngology			12	22	11	45
Radiology				1	1	2
Urology				1	3	4
<b>Ridge Meadows Hospital And Health Care Centre</b>			<b>73</b>	<b>74</b>	<b>46</b>	<b>193</b>
Dentistry			63	25		88
General Surgery			1	8	14	23
Gynaecology					3	3
Ophthalmology			1			1
Oral Surgery				2		2
Orthopaedic Surgery			7	32	23	62
Urology			1	7	6	14
<b>Royal Columbian Hospital</b>	<b>3</b>		<b>31</b>	<b>162</b>	<b>123</b>	<b>319</b>
Anaesthesiology					1	1
Cardiac/Thoracic Surgery					4	4
General Surgery			1	43	22	66
Gynaecology				1	3	4
Neurosurgery				1	1	2
Ophthalmology	3			1		4
Oral Surgery					2	2
Orthopaedic Surgery			26	88	58	172
Otolaryngology			4	1		5
Plastic Surgery				24	30	54
Radiology				1	1	2
Urology				2	1	3
<b>Surrey Memorial Hospital</b>	<b>3</b>	<b>24</b>	<b>387</b>	<b>636</b>	<b>165</b>	<b>1,215</b>
Anaesthesiology					1	1
Cardiac/Thoracic Surgery					4	4
Dentistry			4	1		5
General Surgery			13	93	37	143
Gynaecology				1	5	6
Ophthalmology			1	3	4	8
Oral Surgery				9	10	19
Orthopaedic Surgery		1	29	56	24	110
Otolaryngology	2	19	311	423	61	816
Plastic Surgery		4	12	16	5	37
Radiology	1			2		3
Urology			17	32	14	63
<b>Vancouver Coastal</b>	<b>2</b>	<b>2</b>	<b>137</b>	<b>332</b>	<b>340</b>	<b>813</b>
<b>Lions Gate Hospital</b>	<b>1</b>	<b>2</b>	<b>61</b>	<b>152</b>	<b>104</b>	<b>320</b>
General Surgery			1	36	25	62
Gynaecology					3	3
Ophthalmology					1	1
Oral Surgery				2	1	3
Orthopaedic Surgery		1	5	45	61	112
Otolaryngology		1	54	65	5	125
Plastic Surgery			1	3	5	9
Radiology	1					1
Urology				1	3	4
<b>Mount Saint Joseph Hospital</b>				<b>3</b>	<b>11</b>	<b>14</b>
General Surgery				1	5	6



Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Ophthalmology				1	3	4
Otolaryngology				1	2	3
Urology					1	1
<b>Powell River General Hospital</b>			<b>2</b>	<b>14</b>	<b>16</b>	<b>32</b>
Dentistry			2	5	11	18
General Surgery				8	5	13
Gynaecology				1		1
<b>Richmond Hospital</b>	<b>1</b>		<b>11</b>	<b>70</b>	<b>49</b>	<b>131</b>
General Surgery				10	11	21
Gynaecology				1	2	3
Orthopaedic Surgery				17	18	35
Otolaryngology			5	15	8	28
Plastic Surgery				3	2	5
Radiology	1					1
Urology			6	24	8	38
<b>Sechelt Hospital</b>			<b>7</b>	<b>8</b>	<b>2</b>	<b>17</b>
Dentistry			5	6		11
General Surgery			2	2	2	6
<b>Squamish General Hospital</b>			<b>52</b>	<b>57</b>	<b>24</b>	<b>133</b>
Dentistry			33	23		56
General Surgery				1	2	3
Gynaecology					1	1
Orthopaedic Surgery				2	8	10
Otolaryngology			19	31	12	62
Plastic Surgery					1	1
<b>St. Paul's Hospital</b>				<b>2</b>	<b>27</b>	<b>29</b>
Cardiac/Thoracic Surgery					1	1
Gynaecology					1	1
Orthopaedic Surgery				1	13	14
Otolaryngology				1	6	7
Plastic Surgery					5	5
Urology					1	1
<b>UBC Health Sciences Centre</b>				<b>1</b>	<b>65</b>	<b>66</b>
Gynaecology					2	2
Ophthalmology					6	6
Oral Surgery				1	14	15
Orthopaedic Surgery					28	28
Otolaryngology					9	9
Plastic Surgery					2	2
Radiology					3	3
Urology					1	1
<b>Vancouver General Hospital</b>			<b>4</b>	<b>25</b>	<b>42</b>	<b>71</b>
Cardiac/Thoracic Surgery				2	3	5
General Surgery				3	6	9
Neurosurgery				1	3	4
Ophthalmology				5	4	9
Orthopaedic Surgery					12	12
Otolaryngology					1	1
Plastic Surgery					3	3
Radiology			3	7	4	14
Urology			1	7	6	14

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
<b>Vancouver Island</b>	<b>95</b>	<b>222</b>	<b>1,333</b>	<b>1,438</b>	<b>533</b>	<b>3,621</b>
<b>Campbell River and District General Hospital</b>			<b>59</b>	<b>87</b>	<b>60</b>	<b>206</b>
General Surgery			3	11	10	24
Gynaecology				1	2	3
Oral Surgery			7	8	15	30
Orthopaedic Surgery			6	16	12	34
Otolaryngology			41	39	8	88
Plastic Surgery			2	12	13	27
<b>Comox Valley Hospital</b>		<b>1</b>	<b>41</b>	<b>49</b>	<b>19</b>	<b>110</b>
Anaesthesiology					1	1
Dentistry			19	12	4	35
General Surgery			1	3	4	8
Ophthalmology			3			3
Orthopaedic Surgery		1	3	9	1	14
Otolaryngology			14	19	7	40
Urology			1	6	2	9
<b>Cowichan District Hospital</b>			<b>131</b>	<b>127</b>	<b>51</b>	<b>309</b>
Dentistry			66	44	5	115
General Surgery			1	8	11	20
Gynaecology					1	1
Ophthalmology			1	1		2
Oral Surgery				1	3	4
Orthopaedic Surgery			13	16	13	42
Otolaryngology			47	50	10	107
Plastic Surgery			1	2	6	9
Urology			2	5	2	9
<b>Nanaimo Regional General Hospital</b>	<b>2</b>	<b>4</b>	<b>334</b>	<b>333</b>	<b>97</b>	<b>770</b>
Anaesthesiology		2				2
Dentistry	1		239	138	4	382
General Surgery			1	26	15	42
Gynaecology	1			1	3	5
Ophthalmology			9	4	1	14
Oral Surgery			2	18	27	47
Orthopaedic Surgery		1	8	37	19	65
Otolaryngology			69	83	13	165
Plastic Surgery			5	20	12	37
Radiology		1	1		1	3
Urology				6	2	8
<b>Royal Jubilee Hospital</b>				<b>4</b>	<b>34</b>	<b>38</b>
General Surgery					4	4
Ophthalmology				1		1
Orthopaedic Surgery					4	4
Otolaryngology					1	1
Plastic Surgery				2	23	25
Radiology					1	1
Urology				1	1	2
<b>Saanich Peninsula Hospital</b>			<b>125</b>	<b>63</b>	<b>19</b>	<b>207</b>
Dentistry			125	53	3	181
Gynaecology					1	1
Orthopaedic Surgery				10	14	24

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Plastic Surgery					1	1
<b>St. Joseph's General Hospital</b>			<b>33</b>	<b>67</b>	<b>20</b>	<b>120</b>
Dentistry			8	10	3	21
General Surgery				5	1	6
Gynaecology					2	2
Ophthalmology			1	1		2
Orthopaedic Surgery			6	23	5	34
Otolaryngology			17	23	7	47
Urology			1	5	2	8
<b>Victoria General Hospital</b>	<b>93</b>	<b>217</b>	<b>592</b>	<b>676</b>	<b>226</b>	<b>1,804</b>
Anaesthesiology	1	1	4		1	7
Dentistry		5	33	43	4	85
General Surgery	52	40	113	136	45	386
Gynaecology	1			2	16	19
Neurosurgery				3	1	4
Ophthalmology	5	19	38	43	10	115
Oral Surgery		2	58	41	12	113
Orthopaedic Surgery	4	11	40	140	74	269
Otolaryngology	10	70	228	184	37	529
Plastic Surgery	6	19	26	36	10	97
Radiology	9	11	15	18	2	55
Urology	5	39	37	30	14	125
<b>West Coast General Hospital</b>			<b>18</b>	<b>32</b>	<b>7</b>	<b>57</b>
Dentistry			16	24		40
General Surgery				5	5	10
Urology			2	3	2	7
<b>Northern</b>	<b>4</b>	<b>27</b>	<b>586</b>	<b>786</b>	<b>293</b>	<b>1,696</b>
<b>Bulkley Valley District Hospital</b>			<b>17</b>	<b>20</b>	<b>10</b>	<b>47</b>
Dentistry			7	7		14
General Surgery			1	3	4	8
Gynaecology					2	2
Orthopaedic Surgery				1	2	3
Otolaryngology			9	9	2	20
<b>Dawson Creek and District Hospital</b>		<b>1</b>	<b>32</b>	<b>56</b>	<b>27</b>	<b>116</b>
Dentistry			22	12		34
General Surgery		1	5	13	4	23
Gynaecology					5	5
Orthopaedic Surgery			5	29	17	51
Radiology				1	1	2
Urology				1		1
<b>Fort Nelson General Hospital</b>			<b>3</b>	<b>1</b>		<b>4</b>
Otolaryngology			3	1		4
<b>Fort St. John General Hospital</b>			<b>49</b>	<b>52</b>	<b>26</b>	<b>127</b>
Dentistry			26	9		35
General Surgery			8	18	18	44
Gynaecology			1		1	2
Ophthalmology			2	2		4
Orthopaedic Surgery			1	4	6	11
Otolaryngology			11	19	1	31
<b>G.R. Baker Memorial Hospital</b>			<b>109</b>	<b>125</b>	<b>23</b>	<b>257</b>
Dentistry			41	19	5	65

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
General Surgery			1	3	3	7
Orthopaedic Surgery					2	2
Otolaryngology			66	102	12	180
Plastic Surgery			1		1	2
Urology				1		1
<b>Kitimat General Hospital</b>			<b>22</b>	<b>54</b>	<b>38</b>	<b>114</b>
Dentistry			13	20		33
General Surgery			3	4	5	12
Orthopaedic Surgery			6	30	33	69
<b>Mills Memorial Hospital</b>		<b>1</b>	<b>135</b>	<b>118</b>	<b>24</b>	<b>278</b>
Dentistry			96	69	5	170
General Surgery			5	15	13	33
Gynaecology				1	1	2
Ophthalmology			6	2		8
Otolaryngology		1	28	31	5	65
<b>Prince George Regional Hospital</b>	<b>4</b>	<b>25</b>	<b>85</b>	<b>184</b>	<b>96</b>	<b>394</b>
Cardiac/Thoracic Surgery					1	1
Dentistry			26	23	3	52
General Surgery	1	3	6	29	16	55
Gynaecology			3		6	9
Ophthalmology		2		3	1	6
Oral Surgery	2	5	5	26	8	46
Orthopaedic Surgery		1	16	66	47	130
Otolaryngology		3	9	10	6	28
Plastic Surgery	1	6	13	14	4	38
Radiology		2	2			4
Urology		3	5	13	4	25
<b>Prince Rupert Regional Hospital</b>			<b>52</b>	<b>91</b>	<b>35</b>	<b>178</b>
Dentistry			40	45		85
General Surgery				14	11	25
Gynaecology				3	3	6
Orthopaedic Surgery			1	16	20	37
Otolaryngology			10	12	1	23
Plastic Surgery			1	1		2
<b>St. John's Hospital</b>			<b>25</b>	<b>43</b>	<b>11</b>	<b>79</b>
Dentistry			16	19		35
Orthopaedic Surgery				1	4	5
Otolaryngology			8	23	6	37
Plastic Surgery			1		1	2
<b>Wrinch Memorial Hospital</b>			<b>57</b>	<b>42</b>	<b>3</b>	<b>102</b>
Dentistry			57	41	2	100
General Surgery				1	1	2
<b>Provincial Health Services Authority</b>	<b>907</b>	<b>1,070</b>	<b>3,267</b>	<b>3,372</b>	<b>1,010</b>	<b>9,626</b>
<b>B.C. Children's Hospital</b>	<b>585</b>	<b>1,070</b>	<b>3,267</b>	<b>3,370</b>	<b>1,005</b>	<b>9,297</b>
Anaesthesiology	2		7	42	54	105
Cardiac/Thoracic Surgery	102	45	59	52	19	277
Dentistry	11	15	1,368	754	66	2,214
General Surgery	124	146	282	369	152	1,073
Gynaecology			2	16	17	35
Neurosurgery	36	43	41	87	19	226
Ophthalmology	22	127	296	243	42	730

Procedure MD	Age of Child					Total
	<6 Mos	6 Mos - 1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	
Oral Surgery		2	8	115	45	170
Orthopaedic Surgery	9	38	162	522	278	1,009
Otolaryngology	33	81	257	329	73	773
Plastic Surgery	35	130	142	170	54	531
Radiology	193	236	414	391	127	1,361
Urology	18	207	229	280	59	793
<b>B.C. Women's Hospital</b>	<b>322</b>			<b>2</b>	<b>5</b>	<b>329</b>
Cardiac/Thoracic Surgery	10					10
Dentistry	1					1
General Surgery	150					150
Gynaecology	2			2	5	9
Neurosurgery	8					8
Ophthalmology	8					8
Orthopaedic Surgery	1					1
Otolaryngology	18					18
Plastic Surgery	4					4
Radiology	118					118
Urology	2					2
<b>Grand Total</b>	<b>1,027</b>	<b>1,410</b>	<b>7,127</b>	<b>8,706</b>	<b>3,408</b>	<b>21,678</b>
<b>% Total Surgical Procedures</b>	<b>5%</b>	<b>7%</b>	<b>33%</b>	<b>40%</b>	<b>16%</b>	<b>100%</b>

## Appendix 4: Surgical Procedures, Children Ages 0 – 16.9 Yrs, by HA of Treating Hospital & Child’s Home Residence

- Includes children ages 0 - 16.9 years. Source is the BC MoH Discharge Abstract Database, 2017/18.
- Procedures by procedural physician regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and day care settings.
- Surgical procedures are assigned to the surgical specialty of the procedural physician. For example, if a general surgeon performed a thoracic procedure, the procedure is assigned to general surgery (not thoracic surgery).

Procedure MD	HA of Treating Hospital	Child's Home Residence							
		Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other	Other	Total, incl Other
Pop'n, 0 - 16.9 Yrs		115,908	330,865	166,518	117,107	58,550	788,948		
Anaesthe- siology	Interior	6					6		6
	Fraser		2				2		2
	Vancouver Coastal								
	PHSA	14	52	18	13	6	103	2	105
	Vancouver Island				10		10		10
	Northern								
	<b>Total</b>	<b>20</b>	<b>54</b>	<b>18</b>	<b>23</b>	<b>6</b>	<b>121</b>	<b>2</b>	<b>123</b>
	% treated in home HA	30%	4%	100%	43%	0%	30%		
Per 1,000 pop'n children	0.2	0.2	0.1	0.2	0.1	0.2			
Cardiac/ Thoracic Surgery	Interior	2					2		2
	Fraser		8				8		8
	Vancouver Coastal	1	2	3			6		6
	PHSA	34	115	48	35	14	246	41	287
	Vancouver Island								
	Northern					1	1		1
	<b>Total</b>	<b>37</b>	<b>125</b>	<b>51</b>	<b>35</b>	<b>15</b>	<b>263</b>	<b>41</b>	<b>304</b>
	% treated in home HA	5%	6%	100%	0%	7%	24%		
Per 1,000 pop'n children	0.3	0.4	0.3	0.3	0.3	0.3			
Dentistry	Interior	867	1	2	1	2	873	1	874
	Fraser	3	208	2			213		213
	Vancouver Coastal	1	1	83			85		85
	PHSA	48	1125	505	49	32	1759	456	2215
	Vancouver Island	1	1	17	840		859		859
	Northern	20		1	1	599	621	2	623
	<b>Total</b>	<b>940</b>	<b>1,336</b>	<b>610</b>	<b>891</b>	<b>633</b>	<b>4,410</b>	<b>459</b>	<b>4,869</b>
	% treated in home HA	92%	16%	96%	94%	95%	70%		
Per 1,000 pop'n children	8.1	4.0	3.7	7.6	10.8	5.6			
General Surgery	Interior	237	3	2		1	243	12	255
	Fraser	3	358	2			363	6	369
	Vancouver Coastal	1	9	106			116	4	120
	PHSA	117	573	343	93	83	1209	14	1223
	Vancouver Island	3	4	1	487		495	5	500
	Northern					206	206	3	209
	<b>Total</b>	<b>361</b>	<b>947</b>	<b>454</b>	<b>580</b>	<b>290</b>	<b>2,632</b>	<b>44</b>	<b>2,676</b>
	% treated in home HA	66%	38%	99%	84%	71%	66%		
Per 1,000 pop'n children	3.1	2.9	2.7	5.0	5.0	3.3			
Gynaecology	Interior	49					49	0	49
	Fraser		25	1			26	0	26
	Vancouver Coastal	1	1	8		1	11	0	11
	PHSA		29	12	2	1	44	0	44
	Vancouver Island				30		30	1	31
	Northern					26	26	0	26
	<b>Total</b>	<b>50</b>	<b>55</b>	<b>21</b>	<b>32</b>	<b>28</b>	<b>186</b>	<b>1</b>	<b>187</b>
	% treated in home HA	98%	45%	95%	94%	93%	81%		
Per 1,000 pop'n children	0.4	0.2	0.1	0.3	0.5	0.2			

Procedure MD	HA of Treating Hospital	Child's Home Residence							
		Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other	Other	Total, incl Other
Neuro-surgery	Interior	3					3	0	3
	Fraser		2				2	0	2
	Vancouver Coastal	1	1		1		3	1	4
	PHSA	37	90	42	36	22	227	7	234
	Vancouver Island				4		4	0	4
	Northern								
	<b>Total</b>	<b>41</b>	<b>93</b>	<b>42</b>	<b>41</b>	<b>22</b>	<b>239</b>	<b>8</b>	<b>247</b>
	% treated in home HA	7%	2%	100%	10%	0%	21%		
Per 1,000 pop'n children	0.4	0.3	0.3	0.4	0.4	0.3			
Ophthalmology	Interior	58	1				59	1	60
	Fraser	1	20	1			22	0	22
	Vancouver Coastal	1	9	7	2		19	1	20
	PHSA	63	386	189	41	42	721	17	738
	Vancouver Island			2	135		137	0	137
	Northern					18	18	0	18
	<b>Total</b>	<b>123</b>	<b>416</b>	<b>199</b>	<b>178</b>	<b>60</b>	<b>976</b>	<b>19</b>	<b>995</b>
	% treated in home HA	47%	5%	98%	76%	30%	44%		
Per 1,000 pop'n children	1.1	1.3	1.2	1.5	1.0	1.2			
Oral Surgery	Interior	10					10	0	10
	Fraser		92	8		7	107	1	108
	Vancouver Coastal		16	2			18	0	18
	PHSA	6	87	60	5	9	167	3	170
	Vancouver Island			2	191	1	194	0	194
	Northern					46	46	0	46
	<b>Total</b>	<b>16</b>	<b>195</b>	<b>72</b>	<b>196</b>	<b>63</b>	<b>542</b>	<b>4</b>	<b>546</b>
	% treated in home HA	63%	47%	86%	97%	73%	74%		
Per 1,000 pop'n children	0.1	0.6	0.4	1.7	1.1	0.7			
Orthopaedic Surgery	Interior	478	8		2	2	490	18	508
	Fraser	7	606	23	4	2	642	7	649
	Vancouver Coastal	3	35	157	5	5	205	6	211
	PHSA	74	443	335	55	63	970	40	1010
	Vancouver Island	1	5	9	464	2	481	5	486
	Northern	7	1		1	285	294	14	308
	<b>Total</b>	<b>570</b>	<b>1,098</b>	<b>524</b>	<b>531</b>	<b>359</b>	<b>3,082</b>	<b>90</b>	<b>3,172</b>
	% treated in home HA	84%	55%	94%	87%	79%	75%		
Per 1,000 pop'n children	4.9	3.3	3.1	4.5	6.1	3.9			
Otolaryngology	Interior	983	2	2	2	4	993	1	994
	Fraser	8	1001	102	3	4	1118	2	1120
	Vancouver Coastal	1	49	181	3		234	1	235
	PHSA	48	327	310	49	50	784	7	791
	Vancouver Island		2	17	957		976	1	977
	Northern	29				359	388	0	388
	<b>Total</b>	<b>1,069</b>	<b>1,381</b>	<b>612</b>	<b>1,014</b>	<b>417</b>	<b>4,493</b>	<b>12</b>	<b>4,505</b>
	% treated in home HA	92%	72%	80%	94%	86%	84%		
Per 1,000 pop'n children	9.2	4.2	3.7	8.7	7.1	5.7			
Plastic Surgery	Interior	131				1	132	2	134
	Fraser	3	124	5		1	133	1	134
	Vancouver Coastal		4	21			25	0	25
	PHSA	42	251	144	42	45	524	11	535
	Vancouver Island	2			192		194	2	196
	Northern					44	44	0	44
	<b>Total</b>	<b>178</b>	<b>379</b>	<b>170</b>	<b>234</b>	<b>91</b>	<b>1,052</b>	<b>16</b>	<b>1,068</b>
	% treated in home HA	74%	33%	97%	82%	48%	62%		
Per 1,000 pop'n children	1.5	1.1	1.0	2.0	1.6	1.3			

Procedure MD	HA of Treating Hospital	Child's Home Residence							Total, incl Other
		Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other	Other	
Radiology	Interior	61				1	62	1	63
	Fraser		11				11	0	11
	Vancouver Coastal	6	4	4	3	1	18	1	19
	PHSA	164	653	359	161	118	1455	24	1479
	Vancouver Island				59		59	0	59
	Northern					5	5	1	6
	<b>Total</b>	<b>231</b>	<b>668</b>	<b>363</b>	<b>223</b>	<b>125</b>	<b>1,610</b>	<b>27</b>	<b>1,637</b>
	% treated in home HA	26%	2%	100%	26%	4%	31%		
Per 1,000 pop'n children	2.0	2.0	2.2	1.9	2.1	2.0			
Urology	Interior	159	3				162	0	162
	Fraser	1	134	2			137	1	138
	Vancouver Coastal	1	26	28	4		59	0	59
	PHSA	75	416	208	41	46	786	9	795
	Vancouver Island		1		164	1	166	2	168
	Northern	1				26	27	0	27
	<b>Total</b>	<b>237</b>	<b>580</b>	<b>238</b>	<b>209</b>	<b>73</b>	<b>1,337</b>	<b>12</b>	<b>1,349</b>
	% treated in home HA	67%	23%	99%	78%	36%	54%		
Per 1,000 pop'n children	2.0	1.8	1.4	1.8	1.2	1.7			
All Procedures	Interior	3,044	18	6	5	11	3,084	36	3,120
	Fraser	26	2,591	146	7	14	2,784	18	2,802
	Vancouver Coastal	17	157	600	18	7	799	14	813
	PHSA	722	4,547	2,573	622	531	8,995	631	9,626
	Vancouver Island	7	13	48	3,533	4	3,605	16	3,621
	Northern	57	1	1	2	1,615	1,676	20	1,696
	<b>Total</b>	<b>3,873</b>	<b>7,327</b>	<b>3,374</b>	<b>4,187</b>	<b>2,182</b>	<b>20,943</b>	<b>735</b>	<b>21,678</b>
	% treated in home HA	79%	35%	94%	84%	74%	67%		
Per 1,000 pop'n children	33.4	22.1	20.3	35.8	37.3	26.5			



## Appendix 5: HA Operated Pediatric Inpatient Beds in BC

HA	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds <sup>ii</sup>	Child & Youth MH Beds	Youth SU Beds <sup>iii</sup>	Total Ped Beds	NICU Beds
IHA	Kelowna General	10			8		18	12
	Kootenay Boundary (Trail)	4					4	
	East Kootenay (Cranbrook)	2					2	
	Vernon	5					5	
	Royal Inland	9			2		11	8
	Ashnola (Keremeos)					22 <sup>iv</sup>	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 <sup>v</sup>
	Burnaby							8
	Creekside Withdrawal Management Centre					6	6	
VCH	Last Door Recovery Centre					10 <sup>vi</sup>	10	
	Lions Gate & Carlile Centre	10			10		20	9
	Richmond		4				4	6
	St Paul's							9
	Peak House					8	8	
Island H	Young Bears Lodge					5	5	
	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	
NHA	Ledger House				14 <sup>vii</sup>		14	
	University Hospital of Northern B.C.	12 <sup>viii</sup>			6		18	9
PHSA	Nechako Centre					8 <sup>ix</sup>		
	B.C. Children's Hospital	97		22	54 <sup>x</sup>		173	
<b>TOTAL</b>	BC Women's							60
		<b>231</b>	<b>12</b>	<b>27</b>	<b>114</b>	<b>59</b>	<b>435</b>	<b>214</b>

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.**

<sup>ii</sup> Beds have the capacity for invasive monitoring, inotropic drugs and mechanical ventilation.

<sup>iii</sup> Excludes beds in home-based settings.

<sup>iv</sup> Includes beds for ages 17 - 24.

<sup>v</sup> Plan to increase to 48 beds in the future.

<sup>vi</sup> Contracted beds and number of beds fluctuates.

<sup>vii</sup> 14 beds: 5 child, 6 youth & 3 special care beds.

<sup>viii</sup> 4 beds have the capacity for more intensive monitoring, up to and including continuous cardiorespiratory monitoring.

<sup>ix</sup> Includes 1 detox bed.

<sup>x</sup> 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.