SETTING THE STAGE

# CHILDREN'S SURGICAL SERVICES



**JULY 2020** 

childhealthbc.ca





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

### **Contents**

1.0	Prov	iders of Children's Surgical Services	2
2.0		ration of Surgical Services by Children	
	2.1	About the Data	
	2.2		
3.0	Refe	rences	
Appe	ndix 1:	ED and Med/Surg Visits and Days by Facility	8
Appe	ndix 2:	Map of Pediatric Surgical Discharges in BC	11
		Surgical Procedures, Children Ages 0 – 16.9 Yrs, by Treating Hospital	
		Surgical Procedures, Children Ages 0 – 16.9 Yrs, by HA of Treating Hospital &	
Home	e Resid	ence	21
Appe	ndix 5:	HA Operated Pediatric Inpatient Beds in BC	24

#### 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:

Child Health BC. Children's Surgical Services. Vancouver, BC: Child Health BC, July 1, 2020.

Child Health BC acknowledges the principle authors, O'Donnell M, Williams J, Skarsgard E, and the contribution of the Surgical Tiers Working Group members: Appleby J, Bhalla M, Blair P, Boardman A, Buonassisi T, Duncan P, Ferguson K, Froese N, Fryer M, Hatcher S, Hayashi A, Johns J, Laukkanen C, Macleod M, Maharaj M, McGeough C, Matthews ML, O'Donnell M, Reimer E, Scrivens S, Skarsgard E, Thain L, Tuff Y, Whelan P, Williams J.





# **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)
  - 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>
  - There are approximately 500 family medicine anesthesia providers in Canada. Specific numbers of GP anesthetists in BC were not available.

Table 1: BC RCPSC-Certified Anesthesiology & Surgical Specialists

	Pediatric Surgery &	Anesthesiology Specialists	Adult Surgery &
Surgical Specialty	BC Children's (Active Members only)	Elsewhere in BC	Anesthesiologists Specialists (see note below)
Anesthesia	27	3 (Victoria)	479
Cardiovascular/thoracic surgery	1	0	48
Dental	14	8+ (Victoria), 2 (Kelowna)	Unknown
General surgery	5	2 (Victoria)	284
Neurosurgery	3	0	49
Ophthalmology	14	1 (Victoria)	194
Orthopedic	8	4 (Kelowna, Surrey, Victoria & Prince George)	225
Otolaryngology	7	2 (Surrey & Victoria)	97
Plastics	10	1 (Victoria)	98
Urology	4	2 (Kelowna & Victoria)	93
Total, excl Obs/Gyne	93	25+	1,567 + dentists
Obstetrics/Gynecology	0 Gyne (BCCH)	1 Gyne (Victoria)	277
Total, incl Obs/Gyne	93	26+	1,794 + dentists

#### Sources:

- 1. Adult surgery specialists & anesthesiologists: Canadian specialty profiles, 2018. www.cma.ca/canadian-specialty-profiles
- 2. Pediatric surgery & anesthesiology specialists: Information provided by Children's Surgical Tiers of Service Working Group, 2014.

#### 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 2018/19 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 2018/19, 41,796 visits (115 per day, including NICU visits) were made by children to a BC hospital for medical/surgical reasons (21,203 medical and 20,593 surgical visits for a 51%/49% split, based on the most responsible physician (MRP). Of these, 24,878 (68 per day or 60% of total visits) were inpatient visits (80% medical and 20% surgical visits).

28,146 procedures were performed during the 41,796 visits in 2018/19. Of these, 22,031 (78%) were performed by surgeons.

Of the 22,031 procedures performed by surgeons (refer to Tables 2 - 5 for details):

- 15,627 (71%) were performed on a surgical day care basis and 6,404 (29%) on inpatients.
- The highest number were dentistry (25% of total visits), followed by otolaryngology (19%), orthopedic (14%) and general surgery (13%).
- 9,851 (45% of the total provincial procedures) were performed at Children's & Women's (C&W),
   3,911 (18%) in Island Health, 2,998 (14%) in IH, 2,687 (12%) in FH, 1,782 (8%) in NHA and 802 (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 (20% of total procedures) and IH (17% 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.
- 64% 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 (95% in VCH and 87% in VIHA). Children living in FHA were the least likely (34%).
  - Children requiring otolaryngology services were the most likely to access services in their home HA (81%), followed by general surgery (80%), oral surgery (71%), orthopedic surgery (70%) and dentistry (67%).
  - Services that children were most likely to travel to another HA to receive were neurosurgery (77% travelled to another HA) and cardiac surgery (73% travelled).





Table 2: Surgical Procedures, Children Ages 0 – 16.9 Yrs, by Surgical Specialty (CIHI, 2018/19)

		Procedures			%		%
				% Total	SDC/Total		C&W/Total
Procedure MD	Inpatient	Day Surgery	Total	Procedures	Procedures	C&W	Procedures
Anaesthesiology	33	134	167	1%	80%	142	85%
Cardiac/Thoracic Surgery	270	7	277	1%	3%	265	96%
Dentistry	39	5,434	5,473	25%	99%	2,230	41%
General Surgery	1,691	1,078	2,769	13%	39%	1,287	46%
Gynaecology	50	165	215	1%	77%	52	24%
Neurosurgery	215	19	234	1%	8%	209	89%
Ophthalmology	43	924	967	4%	96%	758	78%
Oral Surgery	93	472	565	3%	84%	209	37%
Orthopaedic Surgery	1,449	1,667	3,116	14%	53%	1,127	36%
Otolaryngology	1,069	3,210	4,279	19%	75%	892	21%
Plastic Surgery	262	844	1,106	5%	76%	548	50%
Radiology	944	349	1,293	6%	27%	1,147	89%
Urology	246	1,324	1,570	7%	84%	985	63%
Total Procedures	6,404	15,627	22,031	100%	71%	9,851	45%

Table 3: Surgical Procedures, Children 0 – 16.9 Yrs, by Surgical Specialty & HA of Treating Hospital (CIHI, 2018/19)

				HA of Treat	ing Hospital				
Procedure MD	Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl C&W	C&W	Total, incl C&W	% Total Visits
Anaesthesiology	12	5	0	8	0	25	142	167	1%
Cardiac/Thoracic Surgery	2	4	4	2	0	12	265	277	1%
Dentistry	1020	300	79	1155	689	3243	2,230	5,473	25%
General Surgery	253	342	106	569	212	1482	1,287	2,769	13%
Gynaecology	55	23	17	38	30	163	52	215	1%
Neurosurgery	5	4	9	7	0	25	209	234	1%
Ophthalmology	42	27	26	104	10	209	758	967	4%
Oral Surgery	14	93	20	174	55	356	209	565	3%
Orthopaedic Surgery	469	553	189	481	297	1989	1,127	3,116	14%
Otolaryngology	834	1,040	222	900	391	3387	892	4,279	19%
Plastic Surgery	135	122	41	208	52	558	548	1,106	5%
Radiology	29	12	15	80	10	146	1,147	1,293	6%
Urology	128	162	74	185	36	585	985	1,570	7%
Total Procedures	2,998	2,687	802	3,911	1,782	12,180	9,851	22,031	100%
% Total Procedures	14%	12%	4%	18%	8%	55%	45%	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, 2018/19)

			Child's Hon	ne Residence				
						Total,		
						excl		Total,
Procedure MD	Interior	Fraser	Van Coastal	Van Island	Northern	Other	Other	incl Other
Anaesthesiology	26	85	29	16	6	162	5	167
Cardiac/Thoracic Surgery	25	107	66	31	30	259	18	277
Dentistry	1070	1,447	619	1166	721	5023	450	5,473
General Surgery	401	979	434	626	286	2726	43	2,769
Gynaecology	57	55	30	39	32	213	2	215
Neurosurgery	24	107	34	43	19	227	7	234
Ophthalmology	99	457	201	141	56	954	13	967
Oral Surgery	23	211	80	182	68	564	1	565
Orthopaedic Surgery	530	1,098	504	549	350	3031	85	3,116
Otolaryngology	953	1,376	573	952	413	4267	12	4,279
Plastic Surgery	173	395	189	237	103	1097	9	1,106
Radiology	180	520	286	187	94	1267	26	1,293
Urology	218	701	320	226	97	1562	8	1,570
Total Procedures	3,779	7,538	3,365	4,395	2,275	21,352	679	22,031
% Total Procedures	17%	34%	15%	20%	10%	97%		
Pop'n, 0 – 16.9 Yrs	121,992	340,300	168,840	124,404	59,648	815,184		
% Pop'n, 0 - 16.9 Yrs	15%	42%	21%	15%	7%	100%		

Table 5: % Surgical Procedures in Home HA for Children Ages 0 - 16.9 Yrs (CIHI, 2018/19)

	Child's Home Residence											
			VCH									
			(see note									
Procedure MD	IHA	FHA	below)	VIHA	NHA	Prov Avg						
Anaesthesiology	46%	5%	100%	50%	0%	32%						
Cardiac/Thoracic Surgery	8%	4%	100%	6%	0%	27%						
Dentistry	94%	20%	97%	96%	95%	67%						
General Surgery	58%	33%	98%	90%	73%	63%						
Gynaecology	93%	42%	100%	95%	94%	80%						
Neurosurgery	17%	4%	100%	16%	0%	23%						
Ophthalmology	42%	5%	100%	74%	16%	39%						
Oral Surgery	52%	41%	96%	95%	81%	71%						
Orthopaedic Surgery	81%	48%	96%	84%	83%	70%						
Otolaryngology	87%	69%	84%	93%	85%	81%						
Plastic Surgery	74%	30%	97%	85%	50%	62%						
Radiology	16%	2%	100%	42%	11%	32%						
Urology	58%	23%	98%	80%	35%	52%						
% Procedures in Home HA	77%	34%	95%	87%	75%	64%						

#### 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 109 hospitals in BC:

- Surgery was performed on children in 56/109 (51%) hospitals in 2018/19. If hospitals performing 5 or fewer procedures are excluded, 52/109 (48%) of hospitals performed surgery on children.
- Of the 52 hospitals where surgery was performed on children (>5 procedures per year):
  - 21/52 (40%) performed day care surgery only.
  - 19/52 (37%) performed fewer than 100 procedures, 30 performed between 100 and 1,000 procedures and 3/57 performed more than 1,000 procedures (BCCH, Victoria General and Surrey Memorial).
  - 20/52 (38%) have dedicated pediatric beds (see Appendix 5 for a listing) and collectively performed 84% 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. <a href="http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeEnhancedSurgicalSkills(2017-11).pdf">http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeEnhancedSurgicalSkills(2017-11).pdf</a>. 2017:1-13. Accessed July 1, 2020.
- 3. Enhanced surgical skills (ESS) and obstetrical surgical skills (OSS) in Canada. <a href="https://ess.rccbc.ca/second-page">https://ess.rccbc.ca/second-page</a>. <a href="https://ess.rccbc.ca/second-page">https://ess.rccbc.ca/second-page</a>. Accessed July 1, 2020.
- 4. Grzybowski S. The outcomes of perinatal surgical services in rural British Columbia: A population-based study; <a href="https://srpc.ca/resources/Documents/cjrm/vol18n4/pg123.pdf">https://srpc.ca/resources/Documents/cjrm/vol18n4/pg123.pdf</a>. Can J Rural Med. 2013;18(4). Accessed July 1, 2020.
- 5. BC Medical Quality Initiative. Family practice anesthesia dictionary. <a href="http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeAnesthesia(2017-11).pdf">http://Bcmqi.ca/Published%20Dictionaries/FamilyPracticeAnesthesia(2017-11).pdf</a>. 2017:1-9. Accessed July 1, 2020.
- 6. Orser, B et al. Improving Access to Safe Anesthetic Care in Rural and Remote Communities in Affluent Countries. Anesthesia & Analgesia. July 2019, vol 129, issue 1. p. 294 300. <a href="https://journals.lww.com/anesthesia-analgesia/Fulltext/2019/07000/Improving Access to Safe Anesthetic Care in Rural.46.aspx">https://journals.lww.com/anesthesia-analgesia/Fulltext/2019/07000/Improving Access to Safe Anesthetic Care in Rural.46.aspx</a>. Accessed July 1, 2020.





## 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 2018/2019. Source is the BC MoH Discharge Abstract Database.
- Emergency Department (ED) visits: Based on 2018/19 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% x total ED visits. 2018/19 MIS data was used for total ED visits.

						Surgery	,				Med	dical		Med	/Surg	
HA/HSDA	Treating Hosp	ED Visits	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	Gen Ped Beds
Interior HA																
East Kootenay	Creston Valley Hosp	2,351	56	1	57	56		56			33	33	52	89	52	
	East Kootenay Regional Hosp	3,347	242	49	291	242	56	298	89		108	108	232	406	321	2
	Elk Valley Hosp	1,845	30	0	30	30		30		3	28	31	46	61	46	
	Elkford Htlh Ctre	224														
	Golden and District Hosp	1,301	15	0	15	15		15			15	15	29	30	29	
	Invermere and District Hosp	1,623									4	4	10	4	10	
	Sparwood Htlh Ctre	711														
Kootenay	Arrow Lakes Hosp	770									3	3	3	3	3	
Boundary	Boundary Hosp	1,860														
	Castlegar and District Community Htlh Ctre	1,634														
	Edgewood Htlh Ctre	397														
	Kootenay Boundary Reg Hosp	2,399	126	30	156	126	28	154	70	1	143	144	299	298	369	4
	Kootenay Lake Hosp	2,048	154	0	154	154		154			32	32	69	186	69	
	Slocan Community Htlh Ctre	318														
	Victorian Comm'ty Htlh Ctre	235														
Okanagan	Kelowna General Hosp	9,941	457	125	582	455	120	575	234	3	522	525	1,314	1,100	1,548	10
onanagan.	Penticton Regional Hosp	5,715	72	39	111	71	37	108	58	1	179	180	342	288	400	
	Princeton General Hosp	1,163					0,	100	30		27.5	100	0.2	200	.00	
	South Okanagan Gen Hosp	2,669														
	South Similkameen Htlh Ctre	413														
	Summerland Mem Htlh Ctre		568		568	567		567						567		
	Vernon Jubilee Hosp	7,524	134	129	263	134	140	274	221	5	198	203	449	477	670	5
Thompson	100 Mile District Gen Hosp	1,882	20.				1.0			10	7	17	7	17	7	
Cariboo	Alexis Creek Htlh Ctre	229									-					
Shuswap	Ashcroft Hosp and Community Htlh Ctre	326														
	Barriere Htlh Ctre	176														
	Blue River Htlh Ctre	33														
	Cariboo Memorial Hosp	2,929	67	8	75	67	6	73	17	2	95	97	224	170	241	
	Chase and District Htlh Ctre	641														
	Dr. Helmcken Memorial Hosp	546														
	Kamloops Urgent Family CC	971														
	Lillooet Hosp And Htlh Ctre	912	21	0	21	21		21		1	7	8	10	29	10	
	Nicola Valley Htlh Ctre	2,102	<u> </u>		<u> </u>			<u> </u>		<u> </u>						
	Queen Victoria Hosp	1,311	7	0	7	7	1	8	1	4	12	16	15	24	16	
	Royal Inland Hosp	10,782	447	186	633	445	187	632	275		361	361	810	993	1,085	9
	Shuswap Lake General Hosp	3,211	24	11	35	24	12	36	20		32	32	48	68	68	
	St. Bartholomew's Htlh Ctre	294	<del></del>													
Interior HA Tota		74,830	2,420	578	2,998	2,414	587	3,001	985	30	1,779	1,809	3,959	4,810	4,944	30





						Surgery	/				Med	dical		Med	/Surg	Gen
HA/HSDA	Treating Hosp	ED Visits	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	Ped Beds
Fraser HA			11003			VISICS				VISICS						
Fraser East	Abbotsford Regional Hosp and Cancer Centre	12,355	364	174	538	364	174	538	289		895	895	2,199	1,433	2,488	12
	Chilliwack General Hosp	8,848	98	7	105	98	7	105	12		9	9	13	114	25	4
	Fraser Canyon Hosp	1,674	30	,	103	30		103					13			<u> </u>
	Mission Memorial Hosp	3,053								2		2		2		
Fraser North	Burnaby Hosp	8,115	0	1	1		1	1	1		53	53	98	54	99	
	Eagle Ridge Hosp	7,744	203	2	205	203	3	206	3		112	112	112	318	115	
	Ridge Meadows Hosp And Health Care Centre	6,860	178	49	227	178	54	232	82	3	12	15	12	247	94	4
	Royal Columbian Hosp	9,984	132	145	277	132	147	279	304		613	613	1,367	892	1,671	12
Fraser South	Delta Hosp	3,131	33	0	33	32	2	34	2		25	25	25	59	27	
	Jim Pattison Outpatient Care and Surgery Centre	,	2	0	2	2		2						2		
	Langley Memorial Hosp	5,762	107	59	166	105	61	166	83		294	294	719	460	802	9
	Peace Arch District Hosp	5,721	1	0	1	1	<del></del>	1			2	2	2	3	2	Ť
	Surrey Memorial Hosp	43,541	706	426	1,132	706	434	1,140	634	4	1,288	1,292	3,630	2,432	4,264	16
Fraser HA Total		116,788	1,824	863	2,687	1,821	883	2,704	1,410	9	3,303	3,312	8,177	6,016	9,587	57
Vancouver Coa			, , ,		, , , ,	7-		, -				- 7 -			- /	
North	Bella Coola General Hosp	507									19	19	25	19	25	
Shore/Coast	Lions Gate Hosp	8,782	171	156	327	170	172	342	271	26	433	459	981	801	1,252	10
Garibaldi	Pemberton Htlh Ctre	833														
	Powell River General Hosp	2,685	21	2	23	21	2	23	4		17	17	35	40	39	
	R.W. Large Memorial Hosp	500									4	4	4	4	4	
	Sechelt Hosp	2,559	27	6	33	27	5	32	11	1	18	19	31	51	42	
	Squamish General Hosp	2,126	94	4	98	48		48		49	25	74	35	122	35	
	Whistler Htlh Ctre	2,926														
Richmond	Richmond Hosp	6,806	127	21	148	127	26	153	34	1	182	183	347	336	381	4
Vancouver	Mount Saint Joseph Hosp	1,197	14	0	14	14		14						14		
	St. Paul's Hosp	1,405	28	5	33	26	4	30	16	2	70	72	101	102	117	
	UBC Health Sciences Centre	1,680	40	23	63	40	24	64	39	2		2		66	39	
	Vancouver General Hosp	130	43	20	63	43	19	62	95	76	1	77	37	139	132	
Vancouver Coa		32,136	565	237	802	516	252	768	470	157	769	926	1,596	1,694	2,066	14
Vancouver Islan		1	1	1	1			1			1	1	1	1		
Central	Bamfield Htlh Ctre	260														
Vancouver	Chemainus Health Care Ctre	1,136														
Island	Cowichan District Hosp	4,623	296	47	343	296	44	340	70		181	181	358	521	428	4
	Ladysmith Comm'ty Htlh Ctre	2,261	740	4.60	004	740	450	004	240		200	200	044	4 200	4 404	
	Nanaimo Regional Gen Hosp	7,900	742	162	904	742	159	901	240		399	399	944	1,300	1,184	8
	Oceanside Htlh Ctre	4,333									24	24	40	24	40	
	Tofino General Hosp West Coast General Hosp	1,002 4,112	66	5	71	66	7	73	20	3	24 50	24 53	40 78	24 126	40 98	
North	Cormorant Island Community	275	00	5	/1	00		/3	20	3	1	1	3	126	3	
Vancouver	Htlh Ctre	2/3									1	1	3	1	3	
Island	Gold River Htlh Ctre	508														
	Kyuquot Htlh Ctre	225					<del>                                     </del>		-	-						<del>                                     </del>
	North Isld Hosp Campbell	3,154	173	39	212	173	31	204	54	2	102	104	274	308	328	1
	River and District	3,134	1,3		-12	1,3	"	254	5-	_	102	157		555	320	-
	North Isld Hosp Comox Valley	3,755	175	35	210	175	43	218	74	1	119	120	246	338	320	4
	Port Alice Htlh Ctre	97														
	Port Hardy Hosp	1,468	Ì		Ì						8	8	32	8	32	
	Port Mcneill And Dist Hosp	611									6	6	14	6	14	
	St. Joseph's General Hosp	0														
	Tahsis Htlh Ctre	399														
South	Lady Minto / Gulf Islds Hosp	1,638								2	3	5	3	5	3	
Vancouver	Royal Jubilee Hosp	2,394	121	6	127	121	20	141	27	2	30	32	51	173	78	
Island	Saanich Peninsula Hosp	2,426	223	0	223	223		223						223		
	Victoria General Hosp	12,638	1,236	585	1,821	1,232	469	1,701	932	3	1,237	1,240	4,852	2,941	5,784	16
Vanaguugu Islau	nd HA Total	55,214	3,032	879	3,911	3,028	773	3,801	1,417	13	2,160	2,173	6,895	5,974	8,312	33



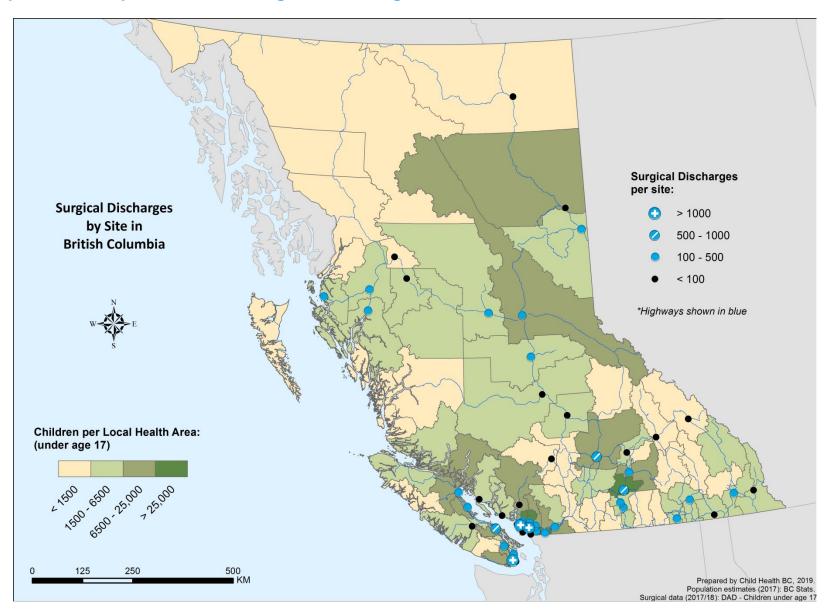


						Surgery	,				Med	dical		Med	/Surg	
HA/HSDA	Treating Hosp	ED Visits	Day Care Procs	Inpt Procs	Total Procs	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	Gen Ped Beds
Northern HA																
Northeast	Chetwynd General Hosp	1,132									2	2	3	2	3	
	Dawson Creek and Dist Hosp	2,894	106	4	110	106	3	109	8	48	44	92	57	201	65	
	Fort Nelson General Hosp	986	4	0	4	3		3		1	16	17	25	20	25	
	Fort St. John General Hosp	4,123	118	6	124	118	5	123	17	34	118	152	281	275	298	
	Hudson's Hope Htlh Ctre	79														
	Tumbler Ridge Htlh Ctre	445														
Northern	Fraser Lake Htlh Ctre	899														
Interior	G.R. Baker Memorial Hosp	2,546	225	22	247	225	22	247	23	5	6	11	12	258	35	
	Lakes District Hosp and Htlh Ctre	1,777									12	12	18	12	18	
	Mackenzie And District Hosp	920									4	4	6	4	6	
	McBride and District Hosp	259														
	St. John Hosp	1,502	97	11	108	97	9	106	9	18	32	50	49	156	58	
	Stuart Lake Hosp	888														
	The Univ Hosp of N BC	6,961	360	99	459	357	98	455	195	15	510	525	1,415	980	1,610	12
	Valemount Htlh Ctre	548														
Northwest	Atlin Htlh Ctre	413														
	Bulkley Valley District Hosp	2,179	38	2	40	38	1	39	1	14	26	40	41	79	42	
	Haida Gwaii Hosp & Htlh Ctre	428									6	6	12	6	12	
	Houston Htlh Ctre	823														
	Kitimat General Hosp	1,788	84	5	89	84	4	88	4	2	46	48	88	136	92	
	Mills Memorial Hosp	4,029	302	23	325	301	21	322	35	3	98	101	250	423	285	
	Northern Haida Gwaii Hosp and Htlh Ctre	526									11	11	12	11	12	
	Prince Rupert Regional Hosp	3,385	162	8	170	162	9	171	9		38	38	63	209	72	
	Stewart General Hosp	231														
	Stikine Htlh Ctre	207														
	Wrinch Memorial Hosp	1,184	106	0	106	106		106		5	12	17	18	123	18	
Northern HA T	otal	41,153	1,602	180	1,782	1,597	172	1,769	301	145	981	1,126	2,350	2,895	2,651	12
Provincial Hea	Ith Services Authority															
PHSA	B.C. Cancer Agency															
	B.C. Children's Hosp	48,927	6,174	3,345	9,519	6,172	2,346	8,518	8,838	1,006	3,775	4,781	22,497	13,299	31,335	97
	B.C. Women's Hosp		10	322	332	10		10			224	224	442	234	442	
PHSA Total	1	48,927	6,184	3,667	9,851	6,182	2,346	8,528	8,838	1,006	3,999	5,005		13,533		97
Grand Total		369,049		6,404		15,558			13,421	1,360				34,922		243





# **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
- 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).

Dunandura MD		Age o	of Child		Total
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Interior HA					
Cariboo Memorial Hospital		24	35	16	75
Dentistry		23	14	1	38
General Surgery		1	17	13	31
Gynaecology			3	2	5
Radiology			1		1
Creston Valley Hospital		32	22	3	57
Dentistry		32	21	1	54
General Surgery				2	2
Otolaryngology			1		1
East Kootenay Regional Hospital	1	89	143	58	291
Dentistry		10	7	1	18
General Surgery		1	16	6	23
Gynaecology			1	3	4
Ophthalmology			1		1
Orthopaedic Surgery		9	27	26	62
Otolaryngology		68	87	17	172
Radiology	1				1
Urology		1	4	5	10
Elk Valley Hospital		17	13		30
Dentistry		17	13		30
Golden and District Hospital		5	6	4	15
Dentistry		5	4	1	10
General Surgery				1	1
Orthopaedic Surgery			2	2	4
Kelowna General Hospital	50	128	239	165	582
Cardiac/Thoracic Surgery				1	1
Dentistry		9	19	4	32
General Surgery		7	30	25	62
Gynaecology			3	16	19
Neurosurgery		1	1	2	4
Ophthalmology	3	16	11	4	34
Oral Surgery			9	5	14
Orthopaedic Surgery	2	9	37	39	87
Otolaryngology	14	61	63	24	162
Plastic Surgery	9	12	39	38	98
Radiology		9	9	2	20
Urology	22	4	18	5	49
Kootenay Boundary Regional Hospital	1	27	77	51	156
General Surgery		3	11	7	21
Gynaecology			1	3	4
Orthopaedic Surgery		5	23	28	56
Otolaryngology		17	33	5	55





Procedure MD			Total		
Procedure IVID	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	TOTAL
Plastic Surgery	1		3	3	7
Radiology				1	1
Urology		2	6	4	12
Kootenay Lake Hospital	1	68	77	8	154
Dentistry	1	66	74	2	143
General Surgery				1	1
Gynaecology				3	3
Ophthalmology		2	2	1	5
Orthopaedic Surgery			1	1	2
Lillooet Hospital And Health Centre		14	6	1	21
Dentistry		14	6	1	21
Penticton Regional Hospital	4	32	40	35	111
Anaesthesiology	1				1
General Surgery		1	6	6	13
Gynaecology		1		1	2
Orthopaedic Surgery		8	19	20	47
Otolaryngology	3	13	8	1	25
Radiology		1			1
Urology		8	7	7	22
Queen Victoria Hospital		1	5	1	7
Dentistry		1	4		5
General Surgery			1	1	2
Royal Inland Hospital	7	211	279	136	633
Anaesthesiology			1	10	11
Cardiac/Thoracic Surgery			1		1
Dentistry		116	99	7	222
General Surgery		3	16	15	34
Gynaecology				8	8
Neurosurgery			1	-	1
Ophthalmology			2		2
Orthopaedic Surgery		15	58	54	127
Otolaryngology	3	66	83	15	167
Plastic Surgery	3	3	4	20	30
Radiology	1	1	2	1	5
Urology	_	7	12	6	25
Shuswap Lake General Hospital		3	17	15	35
Dentistry		2	6	1	9
General Surgery		1	9	9	19
Gynaecology		_		2	2
Orthopaedic Surgery			2	3	5
Summerland Memorial Health Centre		323	223	22	568
Dentistry		275	158	5	438
Otolaryngology		48	65	17	130
Vernon Jubilee Hospital		66	130	67	263
General Surgery		6	24	14	44
Gynaecology		0	3	5	8
Orthopaedic Surgery		8	37	34	<u>0</u> 79
		48	60	14	122
Otolaryngology		48	6	14	10
Urology Interior HA Total	64	1,040	1,312	582	2,998





Procedure MD			of Child					
	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total			
Fraser HA								
Abbotsford Regional Hospital and	_							
Cancer Centre	1	167	280	90	538			
Anaesthesiology	1	2			3			
Dentistry		96	68	8	172			
General Surgery		2	30	19	51			
Gynaecology			1	4	5			
Oral Surgery			4	4	8			
Orthopaedic Surgery		22	79	33	134			
Otolaryngology		30	66	8	104			
Plastic Surgery		2	10	6	18			
Radiology				3	3			
Urology		13	22	5	40			
Burnaby Hospital				1	1			
Gynaecology				1	1			
Chilliwack General Hospital		28	35	42	105			
General Surgery				7	7			
Ophthalmology		1			1			
Oral Surgery			2	4	6			
Orthopaedic Surgery				15	15			
Otolaryngology		27	32	13	72			
Urology			1	3	4			
Delta Hospital			_	33	33			
General Surgery				7	7			
Gynaecology				1	1			
Ophthalmology				6	6			
Oral Surgery				4	4			
Orthopaedic Surgery				12	12			
				1	1			
Plastic Surgery				ł				
Radiology				1	1			
Urology				1	1			
Eagle Ridge Hospital		48	71	86	205			
Dentistry		6	2	1	9			
General Surgery		_	1	8	9			
Gynaecology				1	1			
Oral Surgery		1	1	2	4			
Orthopaedic Surgery			8	49	57			
Otolaryngology		37	48	14	99			
Plastic Surgery		3	4	9	16			
Urology		1	7	2	10			
Jim Pattison Outpatient Care and								
Surgery Centre, Surrey				2	2			
Plastic Surgery				2	2			
Langley Memorial Hospital	2	12	76	76	166			
Anaesthesiology	1				1			
General Surgery			12	19	31			
Gynaecology	1		1	3	5			
Oral Surgery		1	23	22	46			
Orthopaedic Surgery		4	14	16	34			
Otolaryngology		7	23	15	45			
Radiology			1		1			
Urology			2	1	3			





		=			
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	f Child 6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Peace Arch District Hospital				1	1
Ophthalmology				1	1
Ridge Meadows Hospital And Health					
Care Centre		89	92	46	227
Dentistry		73	37	3	113
General Surgery			14	5	19
Gynaecology				3	3
Oral Surgery			1	2	3
Orthopaedic Surgery		11	33	25	69
Urology		5	7	8	20
Royal Columbian Hospital	4	28	124	121	277
Cardiac/Thoracic Surgery				1	1
Dentistry	1				1
General Surgery		2	28	33	63
Gynaecology			1	3	4
Neurosurgery				4	4
Ophthalmology	1				1
Oral Surgery			1		1
Orthopaedic Surgery		19	73	49	141
Otolaryngology		1	2	2	5
Plastic Surgery	1	6	16	24	47
Radiology	1		1	3	5
Urology			2	2	4
Surrey Memorial Hospital	16	351	604	161	1,132
Anaesthesiology	1				1
Cardiac/Thoracic Surgery				3	3
Dentistry		3	1	1	5
General Surgery	1	9	95	50	155
Gynaecology			2	1	3
Ophthalmology	1	5	9	3	18
Oral Surgery	1	2	14	4	21
Orthopaedic Surgery		28	38	25	91
Otolaryngology	12	271	376	56	715
Plastic Surgery		13	19	6	38
Radiology			1	1	2
Urology		20	49	11	80
Fraser HA Total	23	723	1,282	659	2,687
Vancouver Coastal HA					
Lions Gate Hospital		56	159	112	327
General Surgery		1	34	27	62
Gynaecology			4	5	9
Neurosurgery				1	1
Oral Surgery				2	2
Orthopaedic Surgery		11	41	45	97
Otolaryngology		44	74	17	135
Plastic Surgery		1	5	10	15
Radiology		1	-	1	1
Urology		1	1	4	5
- : - : - 01		1	<u> </u>	·	





Procedure MD		Total			
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	TOTAL
Mount Saint Joseph Hospital				14	14
General Surgery				3	3
Ophthalmology				4	4
Plastic Surgery				4	4
Urology				3	3
Powell River General Hospital		2	8	13	23
Dentistry		1	5	10	16
General Surgery		1	2	2	5
Gynaecology				1	1
Ophthalmology			1		1
Richmond Hospital		15	82	51	148
General Surgery			5	10	15
Gynaecology			2		2
Orthopaedic Surgery		2	16	20	38
Otolaryngology		7	21	10	38
Plastic Surgery			3	3	6
Urology		6	35	8	49
Sechelt Hospital		10	20	3	33
Dentistry		9	8		17
General Surgery			12	2	14
Gynaecology				1	1
Ophthalmology		1			1
Squamish General Hospital		45	37	16	98
Dentistry		25	18	3	46
Orthopaedic Surgery			2	8	10
Otolaryngology		20	15	4	39
Plastic Surgery			1	1	2
Urology			1		1
St. Paul's Hospital			3	30	33
General Surgery				2	2
Orthopaedic Surgery			1	14	15
Otolaryngology			1	6	7
Plastic Surgery			1	2	3
Radiology				3	3
Urology				3	3
UBC Health Sciences Centre			1	62	63
Gynaecology				2	2
Neurosurgery				3	3
Ophthalmology				4	4
Oral Surgery			1	16	17
Orthopaedic Surgery				25	25
Otolaryngology				2	2
Plastic Surgery				6	6
Radiology				2	2
Urology				2	2





Procedure MD		Total			
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Vancouver General Hospital		5	21	37	63
Cardiac/Thoracic Surgery			1	3	4
General Surgery			2	3	5
Gynaecology				2	2
Neurosurgery			1	4	5
Ophthalmology			6	10	16
Oral Surgery			1		1
Orthopaedic Surgery			1	3	4
Otolaryngology				1	1
Plastic Surgery				5	5
Radiology		1	5	3	9
Urology		4	4	3	11
Vancouver Coastal HA Total	0	133	331	338	802
Vancouver Island HA					
Campbell River and District General					
Hospital		50	94	68	212
Dentistry				5	5
General Surgery		2	10	11	23
Gynaecology				1	1
Oral Surgery		3	13	18	34
Orthopaedic Surgery		3	16	10	29
Otolaryngology		39	31	13	83
Plastic Surgery		3	22	9	34
Radiology			1		1
Urology			1	1	2
Comox Valley Hospital		65	96	49	210
Dentistry		33	35	15	83
General Surgery		1	5	2	8
Gynaecology			1	3	4
Ophthalmology		2	2		4
Orthopaedic Surgery		4	9	17	30
Otolaryngology		20	37	8	65
Radiology		1		1	2
Urology		4	7	3	14
Cowichan District Hospital		144	145	54	343
Dentistry		99	40	3	142
General Surgery			12	12	24
Gynaecology			1	1	2
Oral Surgery			3	1	4
Orthopaedic Surgery		5	38	25	68
Otolaryngology		34	41	7	82
Plastic Surgery		1		1	2
Urology		5	10	4	19





Procedure MD		Total			
Procedure IVID	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Nanaimo Regional General Hospital	1	420	388	95	904
Anaesthesiology		2			2
Dentistry		324	200	8	532
General Surgery		2	32	18	52
Gynaecology			1	6	7
Ophthalmology		2	1		3
Oral Surgery		1	16	17	34
Orthopaedic Surgery		13	33	15	61
Otolaryngology	1	71	92	14	178
Plastic Surgery		2	6	12	20
Radiology		2	1	1	4
Urology		1	6	4	11
Royal Jubilee Hospital		41	38	48	127
Cardiac/Thoracic Surgery				2	2
Dentistry		36	24	1	61
Ophthalmology			3	1	4
Oral Surgery		5	6		11
Orthopaedic Surgery				4	4
Plastic Surgery			5	39	44
Urology				1	1
Saanich Peninsula Hospital		96	97	30	223
Dentistry		92	76	6	174
Orthopaedic Surgery		1	17	22	40
Plastic Surgery		3	4	2	9
Victoria General Hospital	337	552	696	236	1,821
Anaesthesiology	3	2	1		6
Dentistry	3	35	54	8	100
General Surgery	114	118	175	46	453
Gynaecology			1	23	24
Neurosurgery			7		7
Ophthalmology	12	28	43	10	93
Oral Surgery	4	49	26	12	91
Orthopaedic Surgery	17	39	130	63	249
Otolaryngology	88	194	167	43	492
Plastic Surgery	32	25	36	6	99
Radiology	19	23	26	5	73
Urology	45	39	30	20	134
West Coast General Hospital		31	34	6	71
Dentistry		29	29		58
General Surgery			4	5	9
Urology		2	1	1	4
Vancouver Island HA Total	338	1,399	1,588	586	3,911





Durandama AAD		Total			
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Northern HA					
Bulkley Valley District Hospital		13	15	12	40
Dentistry		1	3		4
General Surgery		1		2	3
Gynaecology				2	2
Orthopaedic Surgery			1	2	3
Otolaryngology		11	11	6	28
Dawson Creek and District Hospital		32	46	32	110
Dentistry		20	10	1	31
General Surgery		5	14	12	31
Gynaecology				7	7
Orthopaedic Surgery		7	22	12	41
Fort Nelson General Hospital		3		1	4
Otolaryngology		3			3
Radiology				1	1
Fort St. John General Hospital	1	55	41	27	124
Dentistry		37	7	1	45
General Surgery	1	5	21	22	49
Ophthalmology		2		1	3
Orthopaedic Surgery			3	2	5
Otolaryngology		11	10	1	22
G.R. Baker Memorial Hospital		102	120	25	247
Dentistry		41	26	3	70
General Surgery		4	5	5	14
Orthopaedic Surgery	<u> </u>		1	-	1
Otolaryngology		56	87	16	159
Plastic Surgery	<u> </u>	1	1	1	3
Kitimat General Hospital	1	30	41	17	89
Dentistry	_	22	17	_,	39
General Surgery			1	2	3
Orthopaedic Surgery	1	8	23	15	47
Mills Memorial Hospital	<del>-</del>	158	136	31	325
Dentistry	<del> </del>	120	73	6	199
General Surgery		120	13	9	22
Gynaecology	<del> </del>		1	4	5
Ophthalmology			2	-	2
Otolaryngology		36	44	11	91
Urology	<del>                                     </del>	2	3	1	6
Prince George Regional Hospital	39	88	209	123	459
Dentistry	1	27	31	2	61
General Surgery	6	10	31	20	67
Gynaecology	<del>                                       </del>	1	1	7	9
Ophthalmology	1	3	1	1	5
Oral Surgery	15	10	21	9	55
Orthopaedic Surgery	4	13	75	67	159
Otolaryngology	3	4	73	2	16
Plastic Surgery	8	9	17	14	48
Radiology	2	3	4	14	9
	<del></del>	8	21	1	30
Urology		٥	<u>  21</u>	1 1	30





Donald and MD		Total			
Procedure MD	<1.9 Yrs	2.0 - 5.9 Yrs	6.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total
Prince Rupert Regional Hospital		58	75	37	170
Dentistry		42	37	1	80
General Surgery		5	12	6	23
Gynaecology			1	6	7
Orthopaedic Surgery		2	12	22	36
Otolaryngology		8	13	2	23
Plastic Surgery		1			1
St. John's Hospital		47	48	13	108
Dentistry		27	24	3	54
Orthopaedic Surgery			3	2	5
Otolaryngology		20	21	8	49
Wrinch Memorial Hospital		64	40	2	106
Dentistry		64	40	2	106
Northern HA Total	41	650	771	320	1,782
Provincial Health Services Authority					
B.C. Children's Hospital	1,573	3,352	3,449	1,145	9,519
Anaesthesiology	2	14	42	84	142
Cardiac/Thoracic Surgery	141	52	51	14	258
Dentistry	46	1,371	737	76	2,230
General Surgery	309	328	367	152	1,156
Gynaecology	1	3	17	18	39
Neurosurgery	59	33	81	20	193
Ophthalmology	120	298	281	46	745
Oral Surgery	2	15	136	56	209
Orthopaedic Surgery	38	150	579	360	1,127
Otolaryngology	128	290	362	82	862
Plastic Surgery	129	196	159	63	547
Radiology	345	285	279	119	1,028
Urology	253	317	358	55	983
B.C. Women's Hospital	322			10	332
Cardiac/Thoracic Surgery	7				7
General Surgery	131				131
Gynaecology	3			10	13
Neurosurgery	16				16
Ophthalmology	13				13
Otolaryngology	30				30
Plastic Surgery	1				1
Radiology	119				119
Urology	2				2
PHSA Total	1,895	3,352	3,449	1,155	9,851
Grand Total	2,361	7,297	8,733	3,640	22,031
% Total Surgical Procedures	11%	33%	40%	17%	100%





# 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, 2018/19.
- 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).

		Child's Home Residence							
Procedure MD	HA of Treating Hospital	Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other	Other	Total, incl Other
Pop'n, 0 - 16.9 Y	′rs	121,923	340,622	165,850	124,430	59,718	812,543		
Anaesthesiol-	Interior	12					12	0	12
ogy	Fraser		4				4	1	5
	Vancouver Coastal								
	Vancouver Island				8		8	0	8
	Northern								
	PHSA	14	81	29	8	6	138	4	142
	Total	26	85	29	16	6	162	5	167
	% treated in home HA	46%	5%	100%	50%	0%	33%		
	Per 1,000 pop'n children	0.2	0.2	0.2	0.1	0.1	0.2		
Cardiac/	Interior	2					2	0	2
Thora-cic	Fraser		4				4	0	4
Surgery	Vancouver Coastal	1		3			4	0	4
	Vancouver Island				2		2	0	2
	Northern								
	PHSA	22	103	63	29	30	247	18	265
	Total	25	107	66	31	30	259	18	277
	% treated in home HA	8%	4%	100%	6%	0%	29%		
	Per 1,000 pop'n children	0.2	0.3	0.4	0.2	0.5	0.3		
_	Interior	1003	1	6		5	1015	5	1020
Dentistry	Fraser	2	294	2	1	1	300	0	300
	Vancouver Coastal	1	1	77			79	0	79
	Vancouver Island	1	2	13	1123	3	1142	13	1155
	Northern	14				675	689	0	689
	PHSA	49	1149	521	42	37	1798	432	2230
	Total	1,070	1,447	619	1,166	721	5,023	450	5,473
	% treated in home HA	94%	20%	99%	96%	94%	74%		
	Per 1,000 pop'n children	8.8	4.2	3.7	9.4	12.1	6.2		
General	Interior	234	1	4		1	240	13	253
Surgery	Fraser	7	324	5	1		337	5	342
	Vancouver Coastal	5	7	91	1		104	2	106
	Vancouver Island		1		562		563	6	569
	Northern		1			208	209	3	212
	PHSA	155	645	334	62	77	1273	14	1287
	Total	401	979	434	626	286	2,726	43	2,769
	% treated in home HA	58%	33%	98%	90%	73%	64%		
	Per 1,000 pop'n children	3.3	2.9	2.6	5.0	4.8	3.4		





Interior   Fraser   Coastal   Van Island   Northern   Other   Other			Child's Home Residence							
Fraser	Procedure MD	HA of Treating Hospital	Interior	Fraser	_	Van Island	Northern	,	Other	Total, incl Other
Vancouver Coastal   1		Interior	53				1	54	1	55
Vancouver Island	Gynaecology	Fraser		23				23	0	23
Northern		Vancouver Coastal	1	4	12			17	0	17
PHSA		Vancouver Island		1		37		38	0	38
Total		Northern					30	30	0	30
% treated in home HA   93%   42%   100%   95%   94%   81%		PHSA	3	27	18	2	1	51	1	52
Per 1,000 pop'n children   0.5   0.2   0.2   0.3   0.5   0.3		Total	57	55	30	39	32	213	2	215
Interior		% treated in home HA	93%	42%	100%	95%	94%	81%		
Neurosurgery    Fraser		Per 1,000 pop'n children	0.5	0.2	0.2	0.3	0.5	0.3		
Vancouver Coastal   2		Interior	4					4	1	5
Vancouver Island	Neurosurgery	Fraser		4				4	0	4
Northern		Vancouver Coastal		2	4	3		9	0	9
PHSA 20 101 30 33 19 203 6 209  Total 24 107 34 43 19 227 7 234  % treated in home HA 17% 4% 100% 16% 0% 22%  Per 1,000 pop'n children 0.2 0.3 0.2 0.3 0.3 0.3  Ophthalmology Faser 23 1 2 1 27 0 27  Vancouver Coastal 3 11 8 1 3 26 0 26  Vancouver Island 104 104 0 104  Northern 99 457 201 141 56 954 13 967  % treated in home HA 42% 5% 100% 74% 16% 40%  Per 1,000 pop'n children 0.8 1.3 1.2 1.1 0.9 1.2  Interior 12 1 1 1 4 0 14  Fraser 87 3 93 0 93  Vancouver Coastal 2 11 5 2 20 0 0 20  Vancouver Coastal 3 11 5 2 2 20 0 14  Fortal 99 457 201 141 56 954 13 967  Watcouver Coastal 12 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Vancouver Island				7		7	0	7
Total		Northern							0	0
We treated in home HA		PHSA	20	101	30	33	19	203	6	209
Per 1,000 pop'n children   0.2   0.3   0.2   0.3   0		Total	24	107	34	43	19	227	7	234
Interior		% treated in home HA	17%	4%	100%	16%	0%	22%		
Ophthalmology         Fraser Vancouver Coastal         23         1         2         1         27         0         27           Vancouver Island         3         11         8         1         3         26         0         26           Northern         9         9         1         10         9         9         1         10           PHSA         54         423         192         34         43         746         12         758           Total         99         457         201         141         56         954         13         967           % treated in home HA         42%         5%         100%         74%         16%         40%           Per 1,000 pop'n children         0.8         1.3         1.2         1.1         0.9         1.2           Interior         12         1         1         1         0         1         4           Fraser         87         3         3         93         0         93         3         0         93           Vancouver Island         172         2         174         0         174         0         174           Northern		Per 1,000 pop'n children	0.2	0.3	0.2	0.3	0.3	0.3		
Vancouver Coastal   3		Interior	42					42	0	42
Vancouver Island   104   104   0   104   Northern   9   9   1   10   Northern   104   Northern   105   Northern	Ophthalmology	Fraser		23	1	2	1	27	0	27
Northern		Vancouver Coastal	3	11	8	1	3	26	0	26
PHSA		Vancouver Island				104		104	0	104
Total         99         457         201         141         56         954         13         967           % treated in home HA         42%         5%         100%         74%         16%         40%           Per 1,000 pop'n children         0.8         1.3         1.2         1.1         0.9         1.2           Interior         12         1         1         14         0         14           Fraser         87         3         3         93         0         93           Vancouver Coastal         2         11         5         2         20         0         20           Vancouver Island         172         2         174         0         174           Northern         55         55         55         0         55           PHSA         9         112         72         8         7         208         1         209           Total         23         211         80         182         68         564         1         565           % treated in home HA         52%         41%         96%         95%         81%         71%         71%         Per 1,000 pop'n children         0.2<		Northern					9	9	1	10
% treated in home HA         42%         5%         100%         74%         16%         40%           Per 1,000 pop'n children         0.8         1.3         1.2         1.1         0.9         1.2           Interior         12         1         1         14         0         14           Fraser         87         3         3         93         0         93           Vancouver Coastal         2         11         5         2         20         0         20           Vancouver Island         172         2         174         0         174           Northern         55         55         0         55           PHSA         9         112         72         8         7         208         1         209           Total         23         211         80         182         68         564         1         565           PHSA         9         112         72         8         7         208         1         209           Total         23         211         80         182         68         564         1         565           W treated in home HA         52%		PHSA	54	423	192	34	43	746	12	758
Per 1,000 pop'n children   0.8   1.3   1.2   1.1   0.9   1.2   1   14   0   14   14   0   14   15   15   17   17   17   17   17   18   18   18		Total	99	457	201	141	56	954	13	967
Oral Surgery    Interior   12		% treated in home HA	42%	5%	100%	74%	16%	40%		
Oral Surgery         Fraser         87         3         3         93         0         93           Vancouver Coastal         2         11         5         2         20         0         20           Vancouver Island         172         2         174         0         174           Northern         55         55         0         55           PHSA         9         112         72         8         7         208         1         209           Total         23         211         80         182         68         564         1         565           % treated in home HA         52%         41%         96%         95%         81%         71% <t< td=""><td></td><td>Per 1,000 pop'n children</td><td>0.8</td><td>1.3</td><td>1.2</td><td>1.1</td><td>0.9</td><td>1.2</td><td></td><td></td></t<>		Per 1,000 pop'n children	0.8	1.3	1.2	1.1	0.9	1.2		
Vancouver Coastal 2 11 5 2 20 0 20 Vancouver Island 172 2 174 0 174 Northern 55 55 55 0 55 PHSA 9 112 72 8 7 208 1 209 Total 23 211 80 182 68 564 1 565 % treated in home HA 52% 41% 96% 95% 81% 71% Per 1,000 pop'n children 0.2 0.6 0.5 1.5 1.1 0.7  Orthopaedic Surgery Fraser 4 531 12 1 548 5 553 Vancouver Coastal 3 36 131 5 1 176 13 189 Vancouver Island 1 5 8 461 475 6 481 Northern 5 1 289 295 2 297 PHSA 88 515 352 80 56 1091 36 1127 Total 530 1,098 504 549 350 3,031 85 3,116 % treated in home HA 81% 48% 97% 84% 83% 73%		Interior	12	1			1	14	0	14
Vancouver Island         172         2         174         0         174           Northern         55         55         0         55           PHSA         9         112         72         8         7         208         1         209           Total         23         211         80         182         68         564         1         565           % treated in home HA         52%         41%         96%         95%         81%         71%           Per 1,000 pop'n children         0.2         0.6         0.5         1.5         1.1         0.7           Orthopaedic Surgery         Interior         429         10         1         2         4         446         23         469           Fraser         4         531         12         1         548         5         553           Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297     <	Oral Surgery	Fraser		87	3		3	93	0	93
Northern 9 112 72 8 7 208 1 209  Total 23 211 80 182 68 564 1 565  % treated in home HA 52% 41% 96% 95% 81% 71%  Per 1,000 pop'n children 0.2 0.6 0.5 1.5 1.1 0.7  Orthopaedic Surgery Fraser 4 531 12 1 548 5 553  Vancouver Coastal 3 36 131 5 1 176 13 189  Vancouver Island 1 5 8 461 475 6 481  Northern 5 1 289 295 2 297  PHSA 88 515 352 80 56 1091 36 1127  Total 530 1,098 504 549 350 3,031 85 3,116		Vancouver Coastal	2	11	5	2		20	0	20
PHSA 9 112 72 8 7 208 1 209  Total 23 211 80 182 68 564 1 565  % treated in home HA 52% 41% 96% 95% 81% 71%  Per 1,000 pop'n children 0.2 0.6 0.5 1.5 1.1 0.7  Orthopaedic Surgery Fraser 4 531 12 1 548 5 553  Vancouver Coastal 3 36 131 5 1 176 13 189  Vancouver Island 1 5 8 461 475 6 481  Northern 5 1 289 295 2 297  PHSA 88 515 352 80 56 1091 36 1127  Total 530 1,098 504 549 350 3,031 85 3,116  % treated in home HA 81% 48% 97% 84% 83% 73%		Vancouver Island				172	2	174	0	174
Total 23 211 80 182 68 564 1 565 % treated in home HA 52% 41% 96% 95% 81% 71% Per 1,000 pop'n children 0.2 0.6 0.5 1.5 1.1 0.7  Orthopaedic Surgery Fraser 4 531 12 1 548 5 553 Vancouver Coastal 3 36 131 5 1 176 13 189 Vancouver Island 1 5 8 461 475 6 481 Northern 5 1 289 295 2 297 PHSA 88 515 352 80 56 1091 36 1127 Total 530 1,098 504 549 350 3,031 85 3,116 % treated in home HA 81% 48% 97% 84% 83% 73%		Northern					55	55	0	55
% treated in home HA         52%         41%         96%         95%         81%         71%           Per 1,000 pop'n children         0.2         0.6         0.5         1.5         1.1         0.7           Orthopaedic Surgery         Interior         429         10         1         2         4         446         23         469           Fraser         4         531         12         1         548         5         553           Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		PHSA	9	112	72	8	7	208	1	209
Per 1,000 pop'n children         0.2         0.6         0.5         1.5         1.1         0.7           Orthopaedic Surgery         Interior         429         10         1         2         4         446         23         469           Fraser         4         531         12         1         548         5         553           Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		Total	23	211	80	182	68	564	1	565
Orthopaedic Surgery         Interior         429         10         1         2         4         446         23         469           Surgery         Fraser         4         531         12         1         548         5         553           Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		% treated in home HA	52%	41%	96%	95%	81%	71%		
Fraser         4         531         12         1         548         5         553           Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		Per 1,000 pop'n children	0.2	0.6	0.5	1.5	1.1	0.7		
Vancouver Coastal         3         36         131         5         1         176         13         189           Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%	Orthopaedic	Interior	429	10	1	2	4	446	23	469
Vancouver Island         1         5         8         461         475         6         481           Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%	Surgery	Fraser	4	531	12	1		548	5	553
Northern         5         1         289         295         2         297           PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		Vancouver Coastal	3	36	131	5	1	176	13	189
PHSA         88         515         352         80         56         1091         36         1127           Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		Vancouver Island	1	5	8	461		475	6	481
Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		Northern	5	1			289	295	2	297
Total         530         1,098         504         549         350         3,031         85         3,116           % treated in home HA         81%         48%         97%         84%         83%         73%		PHSA	88	515	352	80	56	1091	36	1127
% treated in home HA 81% 48% 97% 84% 83% 73%		Total	530	1,098	504	549	350	3,031		3,116
Per 1,000 pop'n children 4.3 3.2 3.0 4.4 5.9 3.7		% treated in home HA	81%		97%	84%	83%			
		Per 1,000 pop'n children	4.3	3.2	3.0	4.4	5.9	3.7		





	Child's Home Residence									
Procedure MD	HA of Treating Hospital	Interior	Fraser	Van Coastal	Van Island	Northern	Total, excl Other	Other	Total, incl Other	
	Interior	827	2			2	831	3	834	
Otolaryngology	Fraser	5	945	80	4	4	1038	2	1040	
	Vancouver Coastal	2	39	177	2	1	221	1	222	
	Vancouver Island	1	2	12	883	1	899	1	900	
	Northern	36	3	2	1	349	391	0	391	
	PHSA	82	385	302	62	56	887	5	892	
	Total	953	1,376	573	952	413	4,267	12	4,279	
	% treated in home HA	87%	69%	86%	93%	85%	82%		•	
	Per 1,000 pop'n children	7.8	4.0	3.5	7.7	6.9	5.3			
	Interior	128	3	1	1	1	134	1	135	
Plastic Surgery	Fraser	2	118	2			122	0	122	
	Vancouver Coastal	1	11	27	1		40	1	41	
	Vancouver Island			3	201	1	205	3	208	
	Northern				1	51	52	0	52	
	PHSA	42	263	156	33	50	544	4	548	
	Total	173	395	189	237	103	1,097	9	1,106	
	% treated in home HA	74%	30%	98%	85%	50%	62%			
	Per 1,000 pop'n children	1.4	1.2	1.1	1.9	1.7	1.4			
	Interior	28				1	29	0	29	
Radiology	Fraser		12				12	0	12	
	Vancouver Coastal	2	6	5	1		14	1	15	
	Vancouver Island			1	79		80	0	80	
	Northern					10	10	0	10	
	PHSA	150	502	280	107	83	1122	25	1147	
	Total	180	520	286	187	94	1,267	26	1,293	
	% treated in home HA	16%	2%	100%	42%	11%	33%			
	Per 1,000 pop'n children	1.5	1.5	1.7	1.5	1.6	1.6			
	Interior	127				1	128	0	128	
Urology	Fraser		160	2			162	0	162	
	Vancouver Coastal	4	38	26	2	1	71	3	74	
	Vancouver Island			3	181	1	185	0	185	
	Northern		1	1		34	36	0	36	
	PHSA	87	502	288	43	60	980	5	985	
	Total	218	701	320	226	97	1,562	8	1,570	
	% treated in home HA	58%	23%	99%	80%	35%	52%		_,_,	
	Per 1,000 pop'n children	1.8	2.1	1.9	1.8	1.6	1.9			
	Interior	2,901	18	12	3	17	2,951	47	2,998	
All Procedures	Fraser	20	2,529	107	9	9	2,674	13	2,687	
	Vancouver Coastal	25	166	566	18	6	781	21	802	
	Vancouver Island	3	11	40	3,820	8	3,882	29	3,911	
	Northern	55	6	3	2	1,710	1,776	6	1,782	
	PHSA	775	4,808	2,637	543	525	9,288	563	9,851	
	Total	3,779	7,538	3,365	4,395	2,275	21,352	679	22,031	
	% treated in home HA	77%	34%	96%	87%	75%	67%	0,5	,001	
	Per 1,000 pop'n children	31.0	22.1	20.3	35.3	38.1	26.3			





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

НА	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds <sup>i</sup>	Child & Youth MH Beds	Youth SU Beds <sup>ii</sup>	Total Ped Beds	NICU Beds
IHA	Kelowna General	10			8		18	12
	Kootenay Boundary (Trail)	4					4	
	East Kootenay	2					2	
	(Cranbrook)							
	Vernon	5					5	
	Royal Inland	9			2		11	8
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>iii</sup>
	Burnaby							8
	Creekside Withdrawal					6	6	
	Management Centre							
	Last Door Recovery Centre					10 <sup>iv</sup>	10	
VCHA	Lions Gate & Carlile	10			10		20	9
	Centre							
	Richmond		4				4	6
	St Paul's							9
	Peak House					8	8	
	Young Bears Lodge					5	5	
Island HA	Nanaimo Regional	8					8	9
	St Joseph's General	4					4	
	Victoria General/Ledger House	16		5	14 <sup>v</sup>		35	22
	Cowichan District (Duncan)	4					4	
	Campbell River	1					1	
NHA	University Hospital of	12 <sup>vi</sup>			6 <sup>vii</sup>		18	9
	Northern B.C.							
	Nechako Centre					8 <sup>viii</sup>	8	
PHSA	B.C. Children's Hospital	97		22	54 <sup>ix</sup>		173	
	BC Women's							60
	Ashnola (Keremeos)					22 <sup>x</sup>	22	
TOTAL		231	12	27	114	59	443	214

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

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>&</sup>lt;sup>1</sup> Beds have the capacity for invasive monitoring, inotropic drugs and mechanical ventilation.

<sup>&</sup>quot; Excludes beds in home-based settings.

iii Plan to increase to 48 beds in the future.

iv Contracted beds and number of beds fluctuates.

 $<sup>^{\</sup>rm v}$  14 beds: 5 child, 6 youth & 3 special care (assessment/stabilization) beds.

vi 4 beds have the capacity for more intensive monitoring, up to and including continuous cardiorespiratory monitoring.

 $<sup>^{\</sup>mbox{\tiny vii}}$  2 beds for planned admissions and 4 for crisis stabilization.

viii Includes 1 detox bed.

<sup>&</sup>lt;sup>ix</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.

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