

SETTING
THE STAGE

CHILDREN'S MEDICAL SERVICES

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Children's Medical Services: Setting the Stage for Tiers Development

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HOW TO CITE THE CHILDREN'S MEDICAL 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 Medical Services: Setting the Stage for Tiers Development

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

- Setting the Stage for Tiers Development: Summarizes the data and literature used to create the module (***this document***).
- Tiers in Brief to Support System Planning: Provides a high-level overview of key aspects of the module.
- 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 Medical Services

Children's medical services are provided by family physicians (FPs), nurse practitioners (NPs), pediatricians and pediatric medical subspecialists, in partnership with nurses, allied health and other members of the health care team.

FPs/NPs -

There are an estimated 6,372 family medicine physicians in BC, over 85% of which are urban-based.¹ There is also 418 NPs.² Of the NPs, approximately two-thirds work in primary care and one-third in specialized care.³ A small proportion (~10 - 15) are pediatric NPs and the rest are family or adult NPs. Most or all pediatric NPs are based at BCCH.

Pediatricians

BC has ~175 general pediatricians, which translates into an average of 2.2 pediatricians per 10,000 children.¹ Per population rates are highest in Vancouver Coastal and lowest in Fraser Health and Northern Health. Of the ~175 general pediatricians, ~30 have privileges at BCCH. See Table 1.

Table 1: BC General Pediatricians & Pediatricians/10,000 Population, Ages 0-16.9 Yrs (BC Stats, 2017)

HA	Population, Children Ages 0-16.9	General Pediatricians	General Pediatricians/ 10,000 Children
Interior Health	115,908	27	2.3
Fraser Health	330,865	52	1.6
Vancouver Coastal	166,518	61	3.7
Island Health	117,107	26	2.2
Northern Health	58,550	9	1.5
Total BC	788,948	175	2.2

ⁱ The number of general pediatricians was calculated by subtracting the pediatricians known to be practising in subspecialty areas from the total number of pediatricians practising in BC (2014 data).

Pediatric Medicine Subspecialists

Pediatric medicine subspecialists are trained as pediatricians and then undertake additional training in a specific field to become a pediatric subspecialist. See Table 2 for information about the numbers, types and distribution of pediatric subspecialists practicing in BC.

Table 2: BC Pediatric Medicine Subspecialists

Pediatric Subspecialists	BC Children's (Active Members only)	Elsewhere in BC
Adolescent Medicine	4	2 (Burnaby & Langley);
Allergy & Immunology	5	4 (2 in Surrey/White Rock; 1 in Richmond; 1 in Victoria)
Biochemical Diseases	3	
Cardiology	9 (1 works in both Victoria & at BCCH)	2 (1 works in both Victoria & at BCCH; 1 in Fraser Health)
Critical Care	8	3 (Victoria)
Dermatology	4	
Developmental Pediatrics	14	2 (Victoria, Surrey)
Emergency Medicine	27	
Endocrinology & Metabolism	6	4 (3 in Fraser Health & 2 in North Shore/Fraser/Island Health)
Gastroenterology	9	2 (North Shore & Downtown Van)
Infectious Diseases	8	
Nephrology	7	1 (Kelowna)
Neurology	15	1 (Victoria)
Oncology / Hematology	14	2 (Surrey & Victoria)
Respirology	7	2 (Victoria & Langley)
Rheumatology	6	3 (Victoria, Fraser Health & Penticton)

Source: Information provided by BCCH credentialing office and Children's Medicine Tiers of Service Working Group.

Notes:

1. Numbers represent number of physicians, not number of full-time equivalents (FTEs).
2. BCCH includes active members only.

2.0 Utilization of Medical Services by Children

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 - 3.

Section 2.1 provides high-level data on health services utilization by BC children while section 2.2 focuses specifically on inpatient and day care utilization. Unfortunately no comparable provincial-level data exists for hospital outpatient or community-based services.

2.1 Health System Matrix Data

Unfortunately, there is limited child-specific data available on the utilization of health care services. The Ministry of Health's (MOH) Health System Matrix database⁴ is the most comprehensive source. This database was primarily established to track the utilization of *adult* health care services, although the data is reportable by age groups which *include children*. Costs included in the Health System Matrix costs represent \$9/\$14 billion (65%) of the MOH's total health care expenditures. The \$5 billion (35%) costs that are not represented include: physicians on alternative payments; emergency department and outpatient clinic services; community mental health services; and population health services. *Anecdotal reports suggest the latter group of expenditures is a significant and growing proportion of expenditures for children as services shift from inpatient to outpatient and community-based.*

The Health System Matrix data suggests that most children in BC are healthy and require little or no health care services. In 2009/10, 82% of children had little or no contact with the health care system.ⁱⁱ Health care expenditures for children totaled \$493 millionⁱⁱⁱ (\$570 per child) of which 54% was for hospital services (see details in next paragraph), 42% for physician services and 4% for Pharmacare. This excludes the services noted in the paragraph above and \$500,000 in annual health care costs funded by the Ministry of Children and Family Development (MCFD).

2.2 Inpatient and Day Care Visits

Data is for 2017/18 and children ages 0 - 16.9 years. Figures exclude NICU babies unless specified (PICU babies are included).

In 2017/18, 34,623 visits (95 per day, excluding NICU visits) were made by children to a BC hospital for medical/surgical reasons (41% or 14,329 medical visits and 59% or 20,294 surgical visits). Of these, 18,411 (50 per day or 53% of total visits) were inpatient visits (72% medical and 28% surgical visits).

Highlights of the data are provided in the next section. Detailed data and a visual representation (map) are available in Appendices 1 and 2.

2.2.1 Major Clinical Category (MCC) Groupings

Of the 14,329 medical visits, the primary reason for the visits was for:

- Diseases of the respiratory system (21%): Respiratory infections were the most common reason, followed by viral/unspecified pneumonia and asthma.

ⁱⁱ The Health System Matrix defines this as using the health care system at a value of less than \$1,500 worth of MD visits or \$1,000 worth of prescription medications per child per year.

ⁱⁱⁱ This figure would increase to \$760 million or \$880 per child if the 35% of expenditures not included in the Health System Matrix were included.

- Conditions originating in the perinatal period (12%): Jaundice was the most common reason.
- Diseases of the digestive system (9%): Non-severe enteritis was the most common reason, followed by other signs/symptoms of digestive disorders.
- See Table 3.

Table 3: Visits by Major Clinical Category (MCC), Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Major Clinical Category	Visits	
	#	%
Diseases & Disorders of the Respiratory System	3,031	21%
Newborns & Neonates with Conditions Originating in Perinatal Period	1,718	12%
Diseases & Disorders of the Digestive System	1,255	9%
Diseases & Disorders of the Nervous System	1,132	8%
Diseases & Disorders of Ear, Nose, Mouth & Throat	1,116	8%
Diseases & Disorders of the Blood & Lymphatic System	874	6%
Significant Trauma, Injury, Poisoning & Toxic Effects of Drugs	839	6%
Diseases & Disorders of the Endocrine System, Nutrition & Metabolism	662	5%
Multisystemic or Unspecified Site Infections	640	4%
Diseases & Disorders of the Kidney, Urinary Tract & Male Reproductive System	543	4%
Other Reasons for Hospitalization	348	2%
Diseases & Disorders of the Musculoskeletal System & Connective Tissue	282	2%
Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	281	2%
Diseases & Disorders of the Circulatory System	232	2%
Diseases & Disorders of the Eye	96	1%
Diseases & Disorders of the Hepatobiliary System & Pancreas	82	1%
Other	80	1%
Blank (not identified)	1,118	8%
Total Medical Visits	14,329	100%

2.2.2 Most Responsible Physician (MRP) Groupings

Visits in this section are grouped by Most Responsible Physician (MRP). Please exercise caution in reviewing the visits for an individual service because they may be under or overstated for 2 reasons:

1. MRP reflects the service of the physician that provided the "majority of care" during a child's stay. The MRP is identified through a post-discharge review of the health record (e.g., physician that wrote the most orders, made the most progress notes, wrote the discharge order, etc). Depending on the proportion of care provided by a given physician service and the child's length of stay, visits may be over or understated for a particular service. This is particularly significant for a service such as critical care medicine when the majority of children are transferred to other physician services after they transfer out of PICU (thus the visit is attributed to the other physician service). In reality, there were 1,634 visits to PICU/ICU in 2017/18 (1,132 medicine and 502 surgical visits). This is significantly higher than the 292 critical care medicine visits identified when the visits are grouped by the MRP (see Table 4).
2. Many children are admitted under a family physician/pediatrician but their care is directed or guided by subspecialists. These visits would be attributed to family physicians/pediatricians and not the subspecialist(s).

Of the 14,329 medical visits, 77% had a pediatrician or GP as their MRP (67% and 10% respectively) and 5% had a gastroenterologist, and 5% had a hematologist/oncologist. Of the total visits, 12,761 (91%) visits were inpatients and 1,251 (9%) were day care patients.

Table 4: Visits (Inpatient + Day Care) by MRP, Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Most Responsible MD	Visits	
	#	%
Pediatrics	9,660	67%
Family Practice /General Practice Medicine	1,467	10%
Gastroenterology	770	5%
Hematology/Oncology	715	5%
Neurology	431	3%
Critical Care Medicine	292	2%
Cardiology	272	2%
Family Practice/General Practice	229	2%

Most Responsible MD	Visits	
	#	%
Respirology	106	1%
Nephrology	105	1%
Dermatology	98	1%
Neonatal-Perinatal Medicine	98	1%
Pediatric Endocrinology and Metabolism	41	0%
Internal Medicine	37	0%
Other	8	0%
Total Medical Visits	14,329	100%

Note:

1. The MRP may be a pediatric or an adult specialist (e.g., for "neurology visits," a pediatric or an adult neurologist may be the MRP).

33% of total admissions were to C&W while 67% were to hospitals in regional HAs. See Table 5.

Table 5: Visits (Inpatient + Day Care) by MRP & HA of Treating Hospital, Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Most Responsible MD	HA of Treating Hospital								% Visits
	IHA	FHA	VCHA	VIHA	NHA	Total, excl C&W	C&W	Total, Incl C&W	
Pediatrics	1455	3162	742	1884	525	7768	1892	9660	67%
Family Practice/General Practice	395	249	193	217	593	1647	49	1696	12%
Gastroenterology	9	11	4	7		31	739	770	5%
Hematology/Oncology		1	1	1		3	712	715	5%
Neurology		1				1	430	431	3%
Critical Care Medicine	3	3	4	2		12	280	292	2%
Cardiology	1		4			5	267	272	2%
Respirology		1	2	1		4	102	106	1%
Nephrology	1			1		2	103	105	1%
Dermatology						0	98	98	1%
Neonatal-Perinatal Medicine		97				97	1	98	1%
Pediatric Endocrinology and Metabolism						0	41	41	0%
Internal Medicine	6	5	11	4	11	37		37	0%
Rheumatology							5	5	0%
Other			1			1	2	3	0%
Total visits	1,870	3,530	962	2,117	1,129	9,608	4,721	14,329	100%
% Total Visits	13%	25%	7%	15%	8%	67%	33%	100%	

Note:

1. The MRP may be a pediatric or an adult specialist (e.g., for "neurology visits," a pediatric or an adult neurologist may be the MRP).

2.2.3 Ages of Children

Of the 14,329 medical visits, the highest percentage relative to the population was in children less than two years old. See Table 6.

Table 6: Visits (Inpatient + Day Care) by MRP & Age of Child, Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Most Responsible MD	Age				Grand Total
	<6 months	6 months - 2 years	2.0 - 13.99 years	14.0 - 16.99 years	
Pediatrics	2,616	2,085	4,205	754	9,660
Family Practice/General Practice	369	240	746	341	1,696
Gastroenterology	12	27	513	218	770
Hematology/Oncology	14	73	490	138	715
Neurology	35	48	287	61	431
Critical Care Medicine	51	61	145	35	292
Cardiology	83	35	112	42	272
Respirology	7	8	56	35	106
Nephrology	3	6	76	20	105
Dermatology		43	54	1	98
Neonatal-Perinatal Medicine	29	19	46	4	98
Endocrinology and Metabolism	1	4	32	4	41
Internal Medicine		1	10	26	37
Rheumatology			4	1	5
Medical Genetics			2		2
Podiatry				1	1
Total visits	3,220	2,650	6,778	1,681	14,329
% total visits	22%	18%	47%	12%	100%
Pop'n, 0 – 16.9 Yrs	91,388		555,643	141,917	788,948
% Pop'n, 0 - 16.9 Yrs	12%		70%	18%	100%

Note:

1. The MRP may be a pediatric or an adult specialist (e.g., for "neurology visits," a pediatric or an adult neurologist may be the MRP).

2.2.4 Involvement of Specialists/Subspecialists

Specialists/Subspecialists as Most Responsible Physician (MRP) - Inpatients

This section provides data on inpatient visits in which a specialist/subspecialist was the MRP. For the reasons cited in the previous section, visits for pediatrics and family practice will be overstated and visits for subspecialists will be understated.

Of the 14,329 medical visits, 13,211 were inpatient visits (excludes babies in NICU). Of those inpatients, 84% had a pediatrician or family physician as the MRP. See Table 7.

Table 7: Inpatient Visits by MRP & Age of Child, Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Most Responsible MD	<6 months	6 months - 2 Yrs	2.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total	C&W (incl in total)
Inpatients						
Pediatrics	2,615	2,083	4,189	738	9,625	1,888
Family Practice/General Practice	369	240	549	320	1478	49
Hematology/Oncology	12	73	486	138	709	706
Neurology	35	48	285	61	429	428
Critical Care Medicine	51	61	141	34	287	279
Gastroenterology	11	18	85	52	166	162
Cardiology	76	15	48	16	155	152
Nephrology	3	6	76	20	105	103
Neonatal-Perinatal Medicine	29	19	46	4	98	1
Respirology	7	7	52	30	96	93
Pediatric Endocrinology and Metabolism	1	4	32	4	41	41
Internal Medicine			1	14	15	0
Rheumatology			4	1	5	5
Dermatology		1	1		2	2
Inpatients, total	3,209	2,575	5,995	1,432	13,211	3,909
Day care, total	11	75	783	249	1,118	812
Grand Total	3,220	2,650	6,778	1,681	14,329	4,721

Medical Specialist/Subspecialist as a Consultant, not MRP - Inpatients

This section provides data about the involvement of specialists/subspecialists as the consulting physician (but not the MRP). Because a significant proportion of the consulting workload for subspecialists involves the NICU, consultations on babies in NICU were included in this data.

- Of the 41,485 medical and surgical visits (includes NICU visits), 25,273 were inpatients (includes NICU visits).
- Of the 25,273 inpatients, children received a total of 6,775 consultations: 4,080 consultations from medical program physicians, 2,417 from surgical program physicians and 278 from psychiatrists.
- Of the consultations by medical program physicians (n=4,080):
 - 43% (1,741) were consultations by pediatricians, family physicians, critical care medicine and neonatology/perinatology specialists.
 - 63% (2,573) were on children at C&W.
 - 57% (2,339) were consultations by a range of other medical specialists/subspecialists.
 - Most were on children at C&W (2,163/2,339) or 92%.
 - Of the 176 (8%) completed on children outside C&W:
 - 69% (121/176) were at Surrey Memorial (n=89) or Victoria General (n=32) Hospitals.
 - 27% 47/176) were consultations on children ages 14.0 - 16.9 years.
- See Table 8.

Table 8: Inpatient Consultations by Specialist/Subspecialist, Children Ages 0 - 16.9 Yrs, CIHI, 2017/18

Consulting MD	Age					C&W (incl in total)
	<6 months	6 months - 2 Yrs	2.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total	
General Paediatrics	1,068	63	259	53	1,443	311
Family Practice/General Practice	18	14	45	22	99	2
Neonatal-Perinatal Medicine	96	4	6	1	107	10
Critical Care Medicine	22	15	43	12	92	87
Sub-total	1,204	96	353	88	1,741	410
Adolescent Medicine			2	9	11	11
Cardiology	400	29	148	34	611	535
Clinical Immunology & Allergy	8	5	17	4	34	34
Dermatology	32	10	38	17	97	94
Endocrinology & Metabolism	73	11	70	30	184	178
Haematology/Oncology	42	23	56	23	144	143
Infectious Diseases	71	38	177	53	339	327
Internal Medicine			3	16	19	0
Medical Genetics	133	13	10	1	157	135
Nephrology	42	13	71	20	146	144
Neurology	164	47	113	32	356	331
Physical Medicine & Rehabilitation				3	3	0
Respirology	38	21	83	19	161	154
Rheumatology	4	3	54	16	77	77
Sub-total	1,007	213	842	277	2,339	2,163
Grand Total	2,211	309	1,195	365	4,080	2,573

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

Of the 14,329 medical visits:

- 33% (4,721) were to C&W and 25% to hospitals in FH (3,530).
- 76% of children accessed services in a hospital in their home HA. This ranged from 60% of children living in FH to 98% living in VCH.
- See Table 9.

Table 9: HA of Treating Hospital versus Location of Child's Home Residence (CIHI, 2017/18)

HA of Treating Hospital	Medical Visits (Inpatient & Day Care)								
	Child's Home Residence					Total Visits, excl Other	Other	Total Visits, incl Other	% Prov Visits
	IHA	FHA	VCH	VIHA	NHA				
IHA	1,787	20	11	5	9	1,832	38	1,870	13%
FHA	15	3,451	32	7	2	3,507	23	3,530	25%
VCH	7	121	807	6	2	943	19	962	7%
C&W	384	2,143	1,530	329	260	4,646	75	4,721	33%
VIHA	6	8	8	2,058	3	2,083	34	2,117	15%
NHA	7	1	2	2	1,100	1,112	17	1,129	8%
Total medical visits	2,206	5,744	2,390	2,407	1,376	14,123	206	14,329	100%
% treated in home HA	81%	60%	98%	86%	80%	76%			
% medical visits	15%	40%	17%	17%	10%	99%			
Pop'n, 0 – 16.9 Yrs	115,908	330,865	166,518	117,107	58,550	788,948			
% Pop'n, 0 - 16.9 Yrs	15%	42%	21%	15%	7%	100%			

Note:

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

3.0 References

1. Canadian Institute for Health Information. Supply, distribution & migration of physicians in Canada, 2017. <https://Secure.cihi.ca/estore/productFamily.htm?pf=PFC3912&lang=en&media=0>. 2019.
2. Canadian Institute for Health Information. Regulated nurses, 2017. <https://Www.cihi.ca/en/nursing-in-canada-2018>. 2019.
3. BC Nurse Practitioner Association. Specialized services: NPs collaborating to improve the continuum of care. <https://Bcnpa.org/wp-content/uploads/BCNPA-specialized-services-final-december-22-2017.pdf>. Dec 2017:1-52.
4. BC Ministry of Health. Innovation and change in the BC health system (includes blue matrix information). <https://Bcfhps.wildapricot.org/resources/documents/Graham%20Whitmarsh%20BCF HPS%20presentation.pdf>. 2013.

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

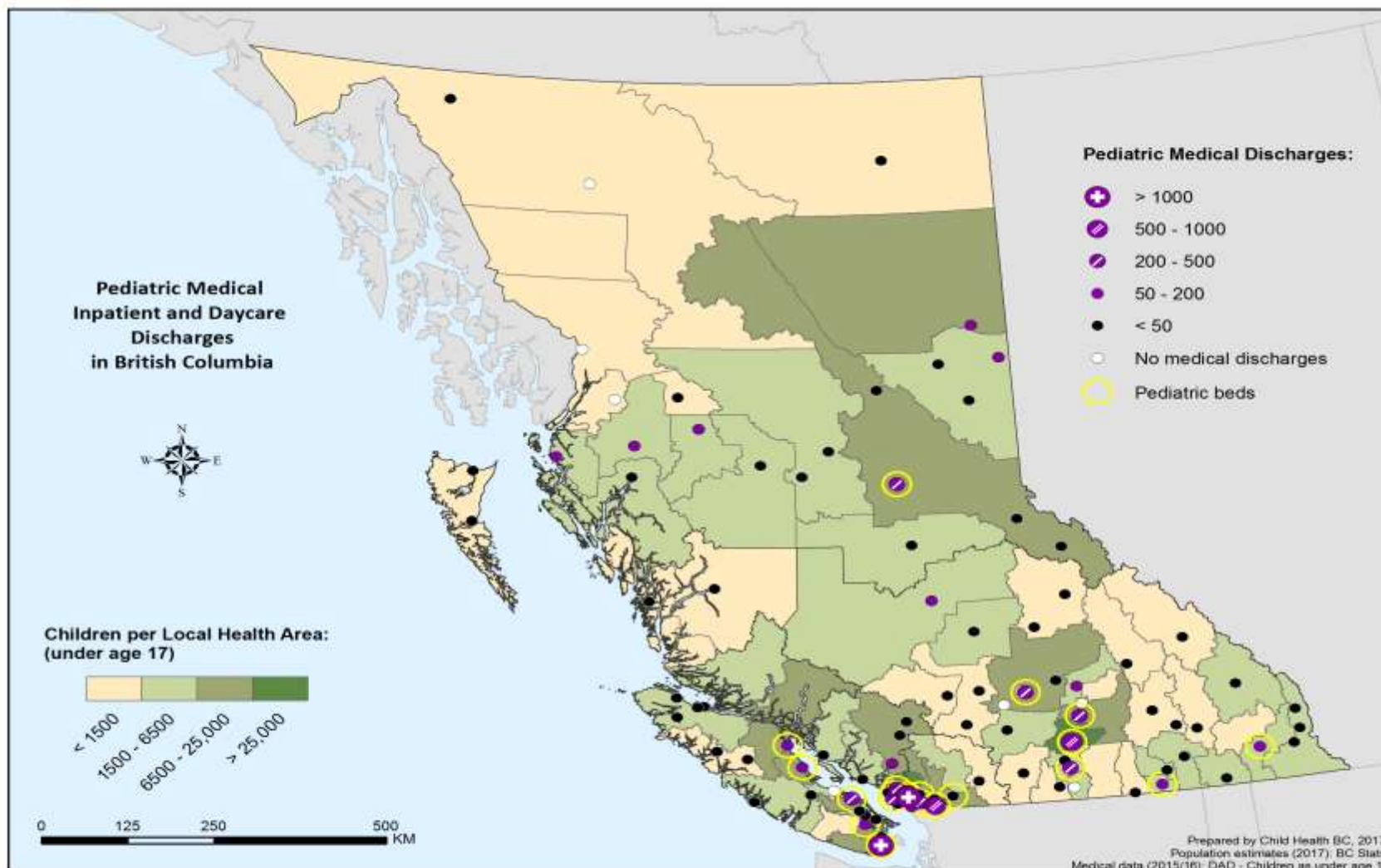
- Includes children ages 0 - 16.9 years.
- Surgical procedures: Procedures performed on children by a surgeon regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and in day care settings.
- Med/surg visits and days: Visits and days sorted by MRP. Includes 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	
Interior	74,688	2,450	670	3,120	2,446	669	3,115	1,161	30	1,840	1,870	4,247	4,985	5,408	30
East Kootenay	11,642	385	48	433	385	57	442	124	5	167	172	287	614	411	2
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														
Kootenay Boundary	9,668	245	33	278	245	30	275	67	0	221	221	511	496	578	4
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														
Okanagan	27,877	1,236	359	1,595	1,235	357	1,592	557	10	953	963	2,330	2,555	2,887	15
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
Thompson Cariboo Shuswap	25,501	584	230	814	581	225	806	413	15	499	514	1,119	1,320	1,532	9
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														
Queen Victoria Hospital	1,346	4	4	8	4	4	8	4		15	15	19	23	23	

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	
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														
Fraser	121,834	1,826	976	2,802	1,820	1,035	2,855	1,592	11	3,519	3,530	8,486	6,385	10,078	57
Fraser East	27,622	380	228	608	380	226	606	344	1	984	985	2,397	1,591	2,741	16
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														
Fraser North	34,711	505	217	722	504	245	749	451	1	750	751	1,509	1,500	1,960	16
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
Fraser South	59,501	941	531	1,472	936	564	1,500	797	9	1,785	1,794	4,580	3,294	5,377	25
Delta Hospital	3,382	43	1	44	41	1	42	1		52	52	52	94	53	
Jim Pattison Outpt Care & 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
Vancouver Coastal	32,891	587	226	813	531	250	781	506	141	821	962	1,624	1,743	2,130	14
North Shore/Coast Garibaldi	21,256	361	141	502	305	154	459	226	83	540	623	1,132	1,082	1,358	10
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														
Richmond	7,006	93	38	131	93	46	139	75	1	215	216	375	355	450	4
Richmond Hospital	7,006	93	38	131	93	46	139	75	1	215	216	375	355	450	4
Vancouver	4,629	133	47	180	133	50	183	205	57	66	123	117	306	322	0
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	
Vancouver Island	56,071	2,778	843	3,621	2,778	765	3,543	1,265	12	2,105	2,117	6,733	5,660	7,998	33
Central Vancouver Island	24,530	947	189	1,136	947	196	1,143	332	3	641	644	1,539	1,787	1,871	12
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	
North Vancouver Island	12,127	356	80	436	356	77	433	153	0	222	222	519	655	672	5
Cormorant Island Comm Hlth Ctre	224														
Gold River Health Centre	486														
Kyuquot Health Centre	195														
North Island Hosp Campbell River	2,980	172	34	206	172	32	204	55		93	93	203	297	258	1

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 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														
South Vancouver Island	19,414	1,475	574	2,049	1,475	492	1,967	780	9	1,242	1,251	4,675	3,218	5,455	16
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
Northern	41,167	1,512	184	1,696	1,511	188	1,699	417	112	1,017	1,129	2,628	2,828	3,045	12
Northeast	9,602	231	16	247	230	18	248	39	63	201	264	438	512	477	0
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														
Northern Interior	16,607	597	133	730	597	136	733	300	30	550	580	1,649	1,313	1,949	12
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														
Northwest	14,958	684	35	719	684	34	718	78	19	266	285	541	1,003	619	0
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 Ctr	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 Ctr	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	
Provincial Health Services Authority	47,872	5,971	3,655	9,626	6,008	2,293	8,301	9,600	812	3,909	4,721	22,030	13,022	31,630	97
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	
Grand Total	374,523	15,124	6,554	21,678	15,094	5,200	20,294	14,541	1,118	13,211	14,329	45,748	34,623	60,289	243

Appendix 2: Map of Pediatric Medical Discharges in BC



Appendix 3: HA Operated Pediatric Inpatient Beds in BC

HA	Hospital	General Pediatric Beds	Pediatric Observation Beds	Ped ICU Beds ⁴	Child & Youth MH Beds	Youth SU Beds ⁵	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 ⁶	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 ⁷
	Burnaby							8
	Creekside Withdrawal Management Centre					6	6	
	Last Door Recovery Centre					10 ⁸	10	
VCH	Lions Gate & Carile Centre	10			10		20	9
	Richmond		4				4	6
	St Paul's							9
	Peak House					8	8	
	Young Bears Lodge					5	5	
Island H	Nanaimo Regional	8					8	9
	St Joseph's General	4					4	
	Victoria General	16		5			21	22
	Cowichan District (Duncan)	4					4	
	Campbell River	1					1	
	Ledger House				14 ⁹		14	
NHA	University Hospital of Northern B.C.	12 ¹⁰			6		18	9
	Nechako Centre					8 ¹¹	8	
PHSA	B.C. Children's Hospital	97		22	54 ¹²		173	
	BC Women's							60
TOTAL		231	12	27	114	59	443	214

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

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

⁴ Beds have the capacity for invasive monitoring, inotropic drugs and mechanical ventilation.

⁵ Excludes beds in home-based settings.

⁶ Includes beds for ages 17 - 24.

⁷ Plan to increase to 48 beds in the future.

⁸ Contracted beds and number of beds fluctuates.

⁹ 14 beds: 5 child, 6 youth & 3 special care beds.

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

¹¹ Includes 1 detox bed.

¹² 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.