

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 5,852 family medicine physicians in BC, almost 90% of which are urban-based.¹ There are also 315 NPs.² Of these, 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,³ 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

HA	Population, Children Ages 0-16.9	General Pediatricians	General Pediatricians/ 10,000 Children
Interior Health	115,792	27	2.3
Fraser Health	329,166	52	1.6
Vancouver Coastal	168,236	61	3.6
Island Health	116,317	26	2.2
Northern Health	58,442	9	1.5
Total BC	784,953	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.

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	6	4 (2 in Surrey/White Rock; 1 in Richmond; 1 in Victoria)
Biochemical Diseases	6	
Cardiology	7 (1 works in both Victoria & at BCCH)	2 (1 works in both Victoria & at BCCH; 1 in Fraser Health)
Critical Care	6	3 (Victoria)
Dermatology	3	
Developmental Pediatrics	15	2 (Victoria, Surrey)
Endocrinology & Metabolism	7	4 (3 in Fraser Health & 2 in North Shore/Fraser/Island Health)
Gastroenterology	7	2 (North Shore & Downtown Van)
Infectious Diseases	7	
Nephrology	7	1 (Kelowna)
Neurology	12	1 (Victoria)
Oncology / Hematology	14	2 (Surrey & Victoria)
Respirology	4	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 database¹⁵ 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 2015/16 and children ages 0 - 16.9 years. Figures exclude NICU babies unless specified (PICU babies are included).

In 2015/16, 35,102 visits (96 per day, excluding NICU visits) were made by children to a BC hospital for medical/surgical reasons (40% or 14,012 medical visits and 60% or 21,090 surgical visits). Of these, 18,119 (50 per day or 52% of total visits) were inpatient visits (70% medical and 30% 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 14,012 medical visits, the primary reason for the visits was for:

- Diseases of the respiratory system (20%): Respiratory infections were the most common reason, followed by 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 (10%): 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, 2015/16

Major Clinical Category	Visits		Major Clinical Category	Visits	
	#	%		#	%
Diseases & Disorders of the Respiratory System	2,815	20%	Diseases & Disorders of the Musculoskeletal System & Connective Tissue	283	2%
Newborns & Neonates with Conditions Originating in Perinatal Period	1,664	12%	Other Reasons for Hospitalization	268	2%
Diseases & Disorders of the Digestive System	1,366	10%	Diseases & Disorders of the Circulatory System	265	2%
Diseases & Disorders of the Nervous System	1,119	8%	Diseases & Disorders of the Skin, Subcutaneous Tissue & Breast	261	2%
Diseases & Disorders of Ear, Nose, Mouth & Throat	1,023	7%	Diseases & Disorders of the Hepatobiliary System & Pancreas	102	1%
Diseases & Disorders of the Blood & Lymphatic System	866	6%	Diseases & Disorders of the Eye	84	1%
Significant Trauma, Injury, Poisoning & Toxic Effects of Drugs	843	6%	Other	68	0%
Diseases & Disorders of the Endocrine System, Nutrition & Metabolism	693	5%	Blank (not identified)	1,251	9%
Multisystemic or Unspecified Site Infections	570	4%	Total Medical Visits	14,012	100%
Diseases & Disorders of the Kidney, Urinary Tract & Male Reproductive System	471	3%			

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 1,850 visits to PICU/ICU in 2015/16 (1,206 medicine and 644 surgical visits). This is significantly higher than the 280 critical care medicine visits that are identified when the visits are grouped by the MRP.
2. Many children are admitted under a family physician/pediatrician but their care is directed or guided by a subspecialist(s). These visits would be attributed to family physicians/pediatricians and not the subspecialist(s).

Of the 14,012 medical visits in 2015/16, 75% had a pediatrician or GP as their MRP (65% and 10% respectively) and 6% had a gastroenterologist or hematologist/oncologist (6% each). See Table 4. 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, 2015/16

Most Responsible MD	Visits		Most Responsible MD	Visits	
	#	%		#	%
General Pediatrics	9,118	65%	Nephrology	102	1%
Family Practice/General Practice	1,571	10%	Dermatology	99	1%
Gastroenterology	838	6%	Respirology	90	1%
Hematology/Oncology	785	6%	Neonatal-Perinatal Medicine	85	1%
Neurology	386	3%	Internal Medicine	59	0%
Cardiology	361	3%	Endocrinology & Metabolism	51	0%
Critical Care Medicine	279	2%	Other	6	0%
Emergency Medicine	182	1%	Total Medical Visits	14,012	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).

34% of total admissions were to C&W while 66% 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, 2015/16

Most Responsible MD	HA of Treating Hospital							Total, Incl C&W	% Visits
	IHA	FHA	VCHA	VIHA	NHA	Total, excl C&W	C&W		
General Pediatrics	1,413	2,909	706	1,723	581	7,332	1,786	9,118	65%
Family Practice/General Practice	442	120	137	155	682	1,536	35	1,571	11%
Gastroenterology	30	22	8	8		68	770	838	6%
Hematology/Oncology						0	785	785	6%
Neurology						0	386	386	3%
Cardiology			6		1	7	354	361	3%
Critical Care Medicine	5	1	2			8	271	279	2%
Emergency Medicine		139	26	17		182		182	1%
Nephrology						0	102	102	1%
Dermatology						0	99	99	1%
Respirology						0	90	90	1%
Neonatal-Perinatal Medicine		73				73	12	85	1%
Internal Medicine	15	2	14	5	23	59		59	0%
Endocrinology & Metabolism						0	51	51	0%
Other						0	6	6	0%
Total visits	1,905	3,266	899	1,908	1,287	9,265	4,747	14,012	100%
% Total Visits	14%	23%	6%	14%	9%	66%	34%	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 14,007 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, 2015/16

Most Responsible MD	Visits			
	<2 years	2.0 - 13.99 years	14.0 - 16.99 years	Grand Total
General Pediatrics	4,347	4,018	753	9,118
Family Practice/General Practice	553	704	314	1,571
Hematology/Oncology	63	516	206	785
Gastroenterology	62	496	280	838
Neurology	100	212	74	386
Cardiology	161	142	59	362
Critical Care Medicine	105	147	27	279
Emergency Medicine	35	79	68	182
Nephrology	20	57	25	102
Dermatology	25	72	2	99
Respirology	5	54	31	90
Neonatal-Perinatal Medicine	45	33	7	85
Internal Medicine	4	11	44	59
Endocrinology & Metabolism	8	35	8	51
Rheumatology	0	2	2	4
Adolescent Medicine	0	0	1	1
Total visits	5,533	6,578	1,901	14,012
% total visits	39%	47%	14%	100%
Pop'n, 0 – 16.9 Yrs	88,316	546,769	148,785	783,870
% Pop'n, 0 - 16.9 Yrs	11%	70%	19%	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 14,007 medical visits, 12,755 were inpatient visits (excludes babies in NICU). Of the 12,755 inpatients, 83% 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, 2015/16

Most Responsible MD	<2 Yrs	2.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total	C&W (incl in total)
Inpatients					
General Pediatrics	4,345	4,002	733	9,080	1,784
Family Practice/General Practice	552	533	281	1,366	35
Hematology/Oncology	62	513	204	779	779
Neurology	98	209	74	381	381
Critical Care Medicine	105	147	26	278	271
Cardiology	119	69	19	207	205
Gastroenterology	39	78	51	168	160
Emergency Medicine	35	75	49	159	
Nephrology	20	57	25	102	102
Neonatal-Perinatal Medicine	45	33	7	85	12
Respirology	5	49	26	80	80
Endocrinology & Metabolism	8	35	8	51	51
Internal Medicine	1	4	14	19	
Rheumatology		2	2	4	4
Adolescent Medicine			1	1	1
Dermatology		1		1	1
Inpatients, total	5,434	5,807	1,520	12,761	3,866
Day care, total	99	381	771	1,251	878
Grand Total	5,533	6,188	2,291	14,012	4,744

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 41,807 medical and surgical visits (includes NICU visits), 24,824 were inpatients (includes NICU visits).
- Of the 24,824 inpatients, children received a total of 6,474 consultations: 4,139 consultations from medical program physicians, 2,139 from surgical program physicians and 204 from psychiatrists.
- Of the consultations by medical program physicians (n=4,139):
 - 43% (1,794) were consultations by pediatricians, family physicians, critical care medicine and neonatology/perinatology specialists.
 - 62% (2,552) were on children at C&W.
 - 57% (2,345) were consultations by a range of other medical specialists/subspecialists.
 - Most were on children at C&W (2,171/2,345 or 93%).
 - Of the 174 (7%) completed on children outside C&W:
 - 60% (105/174) were at Surrey Memorial (n=85) or Victoria General (n=20) Hospitals.
 - 33% (58/174) 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, 2015/16

Consulting MD	Age				C&W (incl in total)
	< 2 Yrs	2.0 - 13.9 Yrs	14.0 - 16.9 Yrs	Total	
General Pediatrics	1,157	243	69	1,469	279
Family Practice/General Practice	19	29	12	60	0
Neonatal-Perinatal Medicine	170	12	4	186	29
Critical Care Medicine	37	34	8	79	73
Sub-total	1,383	318	93	1,794	381
Adolescent Medicine	1	7	15	23	23
Cardiology	445	124	29	598	544
Clinical Immunology and Allergy	14	21	2	37	34
Dermatology	31	52	11	94	91
Endocrinology and Metabolism	70	47	39	156	155
Gastroenterology	57	58	34	149	137
Hematology/Oncology	66	47	27	140	137
Infectious Diseases	109	175	52	336	323
Internal Medicine	2	6	17	25	1
Medical Genetics	116	1	2	119	104
Nephrology	44	35	21	100	98
Neurology	224	111	43	378	347
Physical Medicine and Rehabilitation	0	2	6	8	1
Respirology	49	54	14	117	112
Rheumatology	4	45	16	65	64
Sub-total	1,232	785	328	2,345	2,171
Grand total	2,615	1,103	421	4,139	2,552

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

Of the 14,007 medical visits:

- 34% (4,747) were to C&W and 23% to hospitals in FH (3,262).
- 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, 2015/16)

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	1,791	17	11	4	13	1,836	69	1,905	14%
FHA	10	3,178	23	4	7	3,222	44	3,266	23%
VCH	6	84	781	10	1	882	18	900	6%
C&W	399	2,040	1,610	310	268	4,627	119	4,746	34%
VIHA	3	6	10	1,859	8	1,886	22	1,908	14%
NHA	0	5	1	1	1,254	1,261	26	1,287	9%
Total medical visits	2,209	5,330	2,436	2,188	1,551	13,714	298	14,012	100%
% treated in home HA	81%	60%	98%	85%	81%	76%			
% medical visits	16%	39%	18%	16%	11%	100%			
Pop'n, 0 – 16.9 Yrs	116,083	328,497	164,924	115,755	58,611	783,870			
% 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.

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

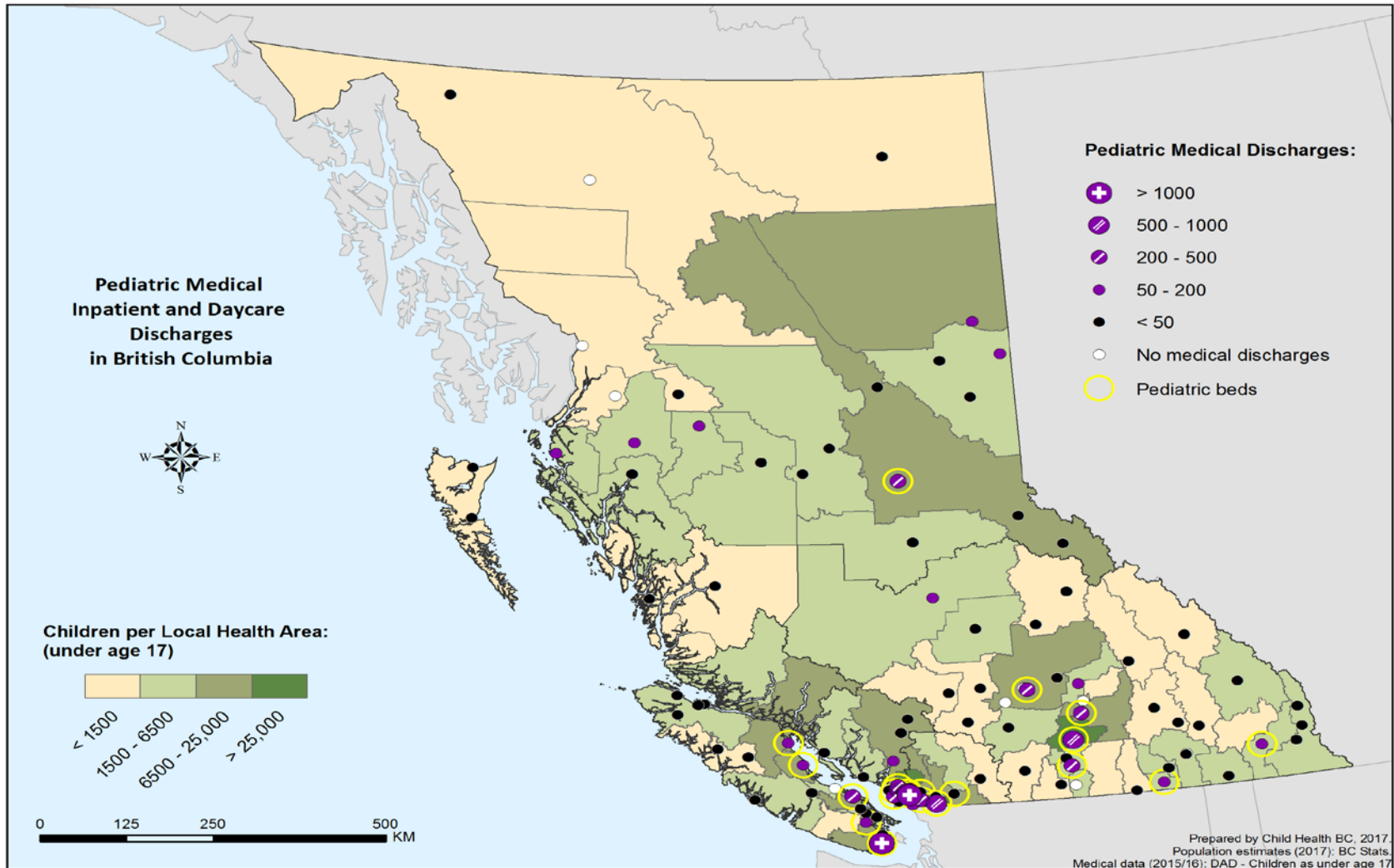
- Includes children ages 0 - 16.9 years.
- Surgical procedures: Procedures performed on children by a surgeon regardless of most responsible physician (MRP). Includes children in NICUs, PICUs, med/surg units and in day care settings.
- Med/surg visits and days: Visits and days sorted by MRP. Includes 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 2015/2016. Source is the BC MoH Discharge Abstract Database.
- Emergency Department (ED) visits: Based on 2015/16 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 15.48% x total ED visits. 2015/16 MIS data was used for total ED visits.

	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Proc's	Inpt Proc's	Total Proc's	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Interior HA																
East Kootenay	Creston Valley Hosp	2,391	23		23	23		23	0	5	25	30	38	53	38	
	East Kootenay Reg Hosp (Cranbrook)	3,678	351	61	412	351	69	420	145		81	81	144	501	289	2
	Elk Valley Hosp	2,000	16	1	17	16	1	17	1	2	26	28	37	45	38	
	Elkford H Ctre	199														
	Golden & District Hosp	1,225	9		9	9		9	0	5	12	17	18	26	18	
	Invermere & District Hosp	1,850									16	16	36	16	36	
	Sparwood H Ctre	706														
Kootenay Boundary	Arrow Lakes Hosp	677									3	3	6	3	6	
	Boundary Hosp	2,413									6	6	11	6	11	
	Castlegar H Ctre	1,637														
	Edgewood H Ctre	226														
	Kootenay Bound Hosp	2,475	157	40	197	157	39	196	86		176	176	427	372	513	4
	Kootenay Lake Hosp	2,114	115		115	115	1	116	1		37	37	73	153	74	
	Slocan Comm H Ctre	312														
Okanagan	Victorian Comm H Ctre of Kaslo	156														
	Kelowna Gen Hosp	9,446	449	197	646	464	179	643	355	15	531	546	1,341	1,189	1,696	10
	Penticton Reg Hosp	5,679	106	66	172	104	74	178	128	9	211	220	397	398	525	11
	Princeton Gen Hosp	1,085														
	South Ok Gen Hosp	2,810														
	S Similkameen H Ctre	422														
	Summerland H Ctre		395		395	396		396	0					396	0	
Thompson Shuswap	Vernon Jubilee Hosp	6,834	228	72	300	228	80	308	120	7	209	216	512	524	632	5
	100 Mile District Hosp	1,925	6		6	5		5	0	13	12	25	20	30	20	
	Alexis Creek H Ctre	276														
	Ashcroft Gen Hosp	395														
	Barriere H Ctre	229														
	Blue River H Ctre	105														
	Cariboo Memorial Hosp	3,277	80	10	90	80	11	91	28	2	75	77	127	168	155	
	Chase & District H Ctre	653														
	Dr. Helmcken Hosp	570									6	6	6	6	6	
	Lillooet Hosp & H Ctre	833	17		17	17		17	0	1	18	19	27	36	27	
	Logan Lake H Ctre															
	Nicola Valley Hosp	2,077									2	2	2	2	2	
	Queen Victoria Hosp	1,422	3		3	3		3	0	1	9	10	17	13	17	
	Royal Inland Hosp	10,516	449	191	640	447	205	652	323	4	333	337	787	989	1,110	9
Shuswap Lake Gen Hosp	3,130	25	10	35	25	14	39	21		53	53	69	92	90		
St. Barth H Ctre	317															
Interior HA Total		74,061	2,429	648	3,077	2,440	673	3,113	1,208	64	1,841	1,905	4,095	5,018	5,303	41

	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Proc's	Inpt Proc's	Total Proc's	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Fraser HA																
Fraser East	Abbotsford Reg Hosp	13,572	288	185	473	285	189	474	321	6	834	840	1,983	1,314	2,304	12
	Chilliwack Gen Hosp	9,541	176	9	185	175	11	186	22		29	29	47	215	69	4
	Fraser Canyon Hosp	1,481														
	Mission Memorial Hosp	2,683														
Fraser North	Burnaby Hosp	9,120	2	3	5	2	8	10	8		89	89	127	99	135	
	Eagle Ridge Hosp	8,495	198		198	198		198	0		101	101	101	299	101	
	Ridge Meadows Hosp	6,269	186	41	227	186	54	240	83	2	5	7	6	247	89	4
	Royal Columbian Hosp	10,213	110	176	286	110	186	296	526	5	505	510	1,246	806	1,772	12
Fraser South	Delta Hosp	3,383	35	1	36	35	4	39	4		47	47	48	86	52	
	Jim Pattison Outpt Ctre		1		1	1		1	0	10		10	0	11	0	
	Langley Memorial Hosp	6,587	196	81	277	196	90	286	152		378	378	961	664	1,113	9
	Peace Arch District Hosp	6,300	7	9	16	7	13	20	15		71	71	71	91	86	
	Surrey Memorial Hosp	36,649	762	419	1,181	758	422	1,180	687		1,184	1,184	3,069	2,364	3,756	16
Fraser HA Total		114,293	1,961	924	2,885	1,953	977	2,930	1,818	23	3,243	3,266	7,659	6,196	9,477	57
Vancouver Coastal HA																
North Shore/Coast Garibaldi	Bella Coola Gen Hosp	456									27	27	64	27	64	
	Lions Gate Hosp	8,240	188	139	327	180	144	324	236	22	408	430	832	754	1,068	10
	Pemberton H Ctre	813														
	Powell River Gen Hosp	2,852	24	3	27	24	3	27	9		13	13	30	40	39	
	R.W. Large Mem Hosp	431									5	5	9	5	9	
	Squamish Gen Hosp	2,237	64	5	69	23	2	25	2	41	17	58	34	83	36	
	Sechelt Hosp	2,445	25	8	33	25	5	30	8		22	22	35	52	43	
	Whistler H Ctre	3,330														
Richmond	Richmond Hosp	6,949	128	44	172	128	48	176	75	3	222	225	422	401	497	4
Vancouver	Mount Saint Jo (Providence)	1,104	13	2	15		13	2	15	3		0		15	3	
	St. Paul's Hosp (Providence)	1,646	39	4	43		38	4	42	8	5	74	79	127	121	135
	U.B.C. H Sciences Ctre	1,838	76	15	91	74	15	89	18	1		1		90	18	
	Vancouver Gen Hosp	136	49	34	83	48	29	77	161	35	5	40	8	117	169	
Vancouver Coastal HA Total		32,478	606	254	860	553	252	805	520	107	793	900	1,561	1,705	2,081	14
Vancouver Island HA																
Central Van Island	Bamfield H Ctre	213														
	Chemamus Health Ctre	934														
	Cowichan District Hosp	5,118	258	36	294	258	33	291	42	3	173	176	377	467	419	4
	Ladysmith Comm H Ctre	2,476														
	Nanaimo Reg Gen Hosp	8,376	652	175	827	652	184	836	294	1	341	342	705	1,178	999	8
	Oceanside H Ctre	3,889														
	Tofino Gen Hosp	946									9	9	34	9	34	
	West Coast Gen Hosp	4,070	16	6	22	16	7	23	17		43	43	68	66	85	
Northern Van Island	Campbell River Hosp	2,916	180	25	205	180	25	205	39		67	67	119	272	158	1
	Cormorant Island H Ctre	252														
	Gold River H Ctre	467														
	Kyuquot H Ctre	137														
	Port Alice Hosp	113														
	Tahsis H Ctre	396														
	Port Hardy Hosp	1,221									14	14	31	14	31	
	Port McNeill Hosp	723									4	4	20	4	20	
Comox Hosp	3,236	194	25	219	193	34	227	44		89	89	159	316	203	4	
Southern Van Island	Lady Minto/Gulf Islands Hosp	1,552									4	4	5	4	5	
	Royal Jubilee Hosp	2,434	45	4	49	45	3	48	12	1		1	0	49	12	
	Saanich Peninsula Hosp	2,431	186		186	186		186	0					186	0	
	Victoria Gen Hosp	12,546	1,174	589	1,763	1,176	487	1,663	999	4	1,155	1,159	3,621	2,822	4,620	16
Vancouver Island HA Total		54,444	2,705	860	3,565	2,706	773	3,479	1,447	9	1,899	1,908	5,139	5,387	6,586	33

	Treating Hosp	ED Visits	Surgery							Medical				Med/Surg		Gen Ped Beds
			Day Care Proc's	Inpt Proc's	Total Proc's	Day Care Visits	Inpt Visits	Total Visits	Total Days	Day Care Visits	Inpt Visits	Total Visits	Total Days	Total Visits	Total Days	
Northern HA																
North-east	Chetwynd Gen Hosp	1,428									14	14	21	14	21	
	Dawson Creek Hosp	3,842	112	8	120	112	9	121	22	40	60	100	116	221	138	
	Fort Nelson Gen Hosp	1,023	4		4	4		4	0	1	20	21	34	25	34	
	Fort St. John Gen Hosp	4,276	84	7	91	84	8	92	19	23	98	121	220	213	239	
	Hudson's Hope H Ctre	50														
	Tumbler Ridge H Ctre	362														
Northern Interior	Burns Lake Hosp (Lakes District)										12	12	24	12	24	
	Fraser Lake H Ctre	867														
	GR Baker Mem Hosp	2,827	250	11	261	251	18	269	24	9	11	20	30	289	54	
	Lakes District Hosp	2,063														
	Mackenzie Hosp	928									5	5	6	5	6	
	McBride & District Hosp	325														
	St. John Hosp	1,689	72	3	75					46	63	109	116	109	116	
	Stuart Lake Hosp	916				72		72	0		14	14	33	86	33	
	The Univ Hosp of N BC	7,271	347	106	453	347	100	447	227	10	491	501	1,549	948	1,776	12
	Valemount H Ctre	474														
North-west	Atlin H Ctre	393														
	Bulkley Valley Hosp	2,342	19	3	22	19	2	21	3	35	67	102	123	123	126	
	Houston H Ctre	687														
	Kitimat Gen Hosp	1,817	126	5	131	126	5	131	16	2	44	46	102	177	118	
	Mills Memorial Hosp	4,085	291	40	331	290	42	332	54	2	116	118	382	450	436	
	N Haida Gwaii Hosp	427									9	9	22	9	22	
	Prince Rupert Reg Hosp	3,487	158	14	172	158	15	173	33		62	62	119	235	152	
	Queen Charlotte Is Hosp	589									8	8	19	8	19	
		Stewart Gen Hosp	226													
	Stikine H Ctre	214														
	Wrinch Memorial Hosp	1,282	85		85	86		86	0	1	24	25	40	111	40	
Northern HA Total		43,891	1,548	197	1,745	1,549	199	1,748	398	169	1,118	1,287	2,956	3,035	3,354	12
PHSA HA																
PHSA	BC Children's Hosp	47,673	6,401	3,409	9,810	6,528	2,484	9,012	10,165	879	3,700	4,579	21,981	13,591	32,147	97
	BC Women's Hosp		3	294	297	3		3	0		167	167	234	170	234	
PHSA HA Total		47,673	6,404	3,703	10,107	6,531	2,484	9,015	10,165	879	3,867	4,746	22,215	13,761	32,380	97
Grand Total		366,841	15,653	6,586	22,239	15,732	5,358	21,090	15,556	1,251	12,761	14,012	43,625	35,102	59,181	254

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	
	Penticton Regional	11					11	
	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	
VCH	Last Door Recovery Centre					10 ⁸	10	
	Lions Gate & Carlile Centre	10			10		20	9
	Richmond		4				4	6
	St Paul's							9
	Peak House					8	8	
Island H	Young Bears Lodge					5	5	
	Nanaimo Regional	8					8	9
	St Joseph's General	4					4	
	Victoria General	16		5			21	22
	Cowichan District (Duncan)	4					4	
	Campbell River	1					1	
NHA	Ledger House				14 ⁹		14	
	University Hospital of Northern B.C.	12 ¹⁰			6		18	9
	Nechako Centre					8 ¹¹		
PHSA	B.C. Children's Hospital	97		22	54 ¹²		173	
	BC Women's							60
TOTAL		242	12	27	114	59	446	214

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

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

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.