



2006 CAPHC Conference

Meeting the Needs of Our Children & Youth:

“Using our Canadian Data To Determine Capacity”

An Alberta Perspective

Dawn Wrightson

Senior Operating Officer

Stollery Children’s Hospital & Regional Child Health Program
Edmonton, Alberta



CAPHC-CPDSN

Alberta Perspectives:

Alberta Children's vs. Stollery Children's

- **Comparison of data elements**
- **Discussion of Interpretation**



2005 Canadian Population by Province

Province	All Ages	0 - 17 Yrs	% 0 - 17 Yrs
NL	515,961	101,458	19.7%
PEI	138,113	30,529	22.1%
NS	937,889	189,490	20.2%
NB	752,006	150,784	20.1%
QC	7,598,146	1,538,081	20.2%
ON	12,541,410	2,777,653	22.1%
MB	1,177,556	282,600	24.0%
SK	994,126	240,950	24.2%
AB	3,256,816	763,440	23.4%
BC	4,254,522	860,899	20.2%
YT	30,988	7,067	22.8%
NT	42,982	12,612	29.3%
NU	29,992	12,290	41.0%
National Total	32,270,507	6,967,853	21.6%

Data Source: Statistics Canada (Annual Demographic Statistics 2005 Report)

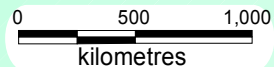
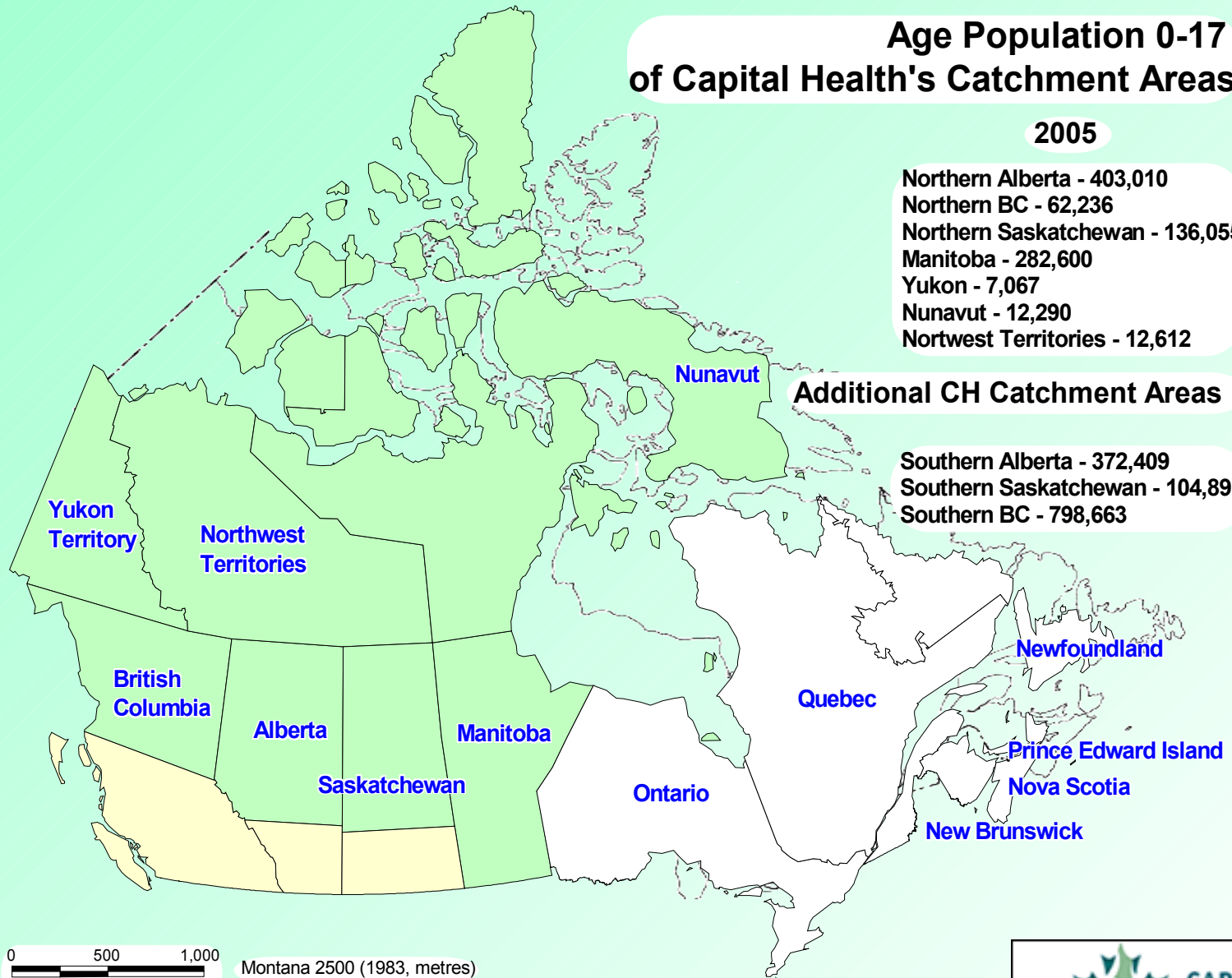
Age Population 0-17 of Capital Health's Catchment Areas

2005

Northern Alberta - 403,010
Northern BC - 62,236
Northern Saskatchewan - 136,055
Manitoba - 282,600
Yukon - 7,067
Nunavut - 12,290
Northwest Territories - 12,612

Additional CH Catchment Areas

Southern Alberta - 372,409
Southern Saskatchewan - 104,895
Southern BC - 798,663



Montana 2500 (1983, metres)

Overall Paediatric Separations (0 - 17 yrs)

Fiscal 2004 - Alberta

*Hospital / Health Centre	Total Cases	% Provincial Cases	% National Cases	Acute Pt Days	% Provincial Pt Days	% National Pt Days	Acute ALOS	Total RIW	ARIW
Alberta Children's	12,121	31.1%	4.8%	67,274	34.9%	5.6%	5.6	15,281.5472	1.2607
Stollery Children's	9,246	23.7%	3.7%	68,474	35.6%	5.7%	7.4	17,261.8888	1.8670
*Subtotal of ALBERTA CAPHC - CPDSN centres	21,367	54.9%	8.5%	135,748	70.5%	11.2%	6.4	32,543.4360	1.5231
Unknown hospital type	—	—	—	—	—	—	—	—	—
1-49 bed hospitals	5,416	13.9%	2.2%	11,816	6.1%	1.0%	2.2	2,732.2273	0.5045
50-99 bed hospitals	2,129	5.5%	0.8%	4,704	2.4%	0.4%	2.2	1,053.9979	0.4951
100-199 bed hospitals	2,368	6.1%	0.9%	7,781	4.0%	0.6%	3.3	1,520.1075	0.6419
200-399 bed hospitals	5,024	12.9%	2.0%	19,537	10.1%	1.6%	3.9	3,796.5526	0.7557
400+ bed hospitals	—	—	—	—	—	—	—	—	—
Teaching hospitals	2,631	6.8%	1.1%	12,984	6.7%	1.1%	4.9	2,515.5353	0.9561
Subtotal of Other Hospitals / Centres	17,568	45.1%	7.0%	56,822	29.5%	4.7%	3.2	11,618.4206	0.6613
All Centres Total	38,935	100.0%	15.5%	192,570	100.0%	15.9%	4.9	44,161.8566	1.1342

Overall Paediatric Separations (0 - 17 yrs)

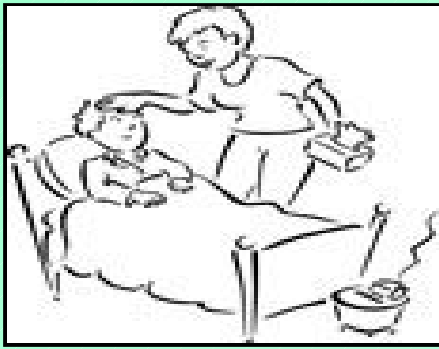
Fiscal 2004 - Alberta

*Hospital / Health Centre	Total Cases	% Provincial Cases	% National Cases	Acute Pt Days	% Provincial Pt Days	% National Pt Days	Acute ALOS	Total RIW	ARIW
Alberta Children's	12,121	31.1%	4.8%	67,274	34.9%	5.6%	5.6	15,281.5472	1.2607
Stollery Children's	9,246	23.7%	3.7%	68,474	35.6%	5.7%	7.4	17,261.8888	1.8670
*Subtotal of ALBERTA CAPHC - CPDSN centres	21,367	54.9%	8.5%	135,748	70.5%	11.2%	6.4	32,543.4360	1.5231
Unknown hospital type	—	—	—	—	—	—	—	—	—
1-49 bed hospitals	5,416	13.9%	2.2%	11,816	6.1%	1.0%	2.2	2,732.2273	0.5045
50-99 bed hospitals	2,129	5.5%	0.8%	4,704	2.4%	0.4%	2.2	1,053.9979	0.4951
100-199 bed hospitals	2,368	6.1%	0.9%	7,781	4.0%	0.6%	3.3	1,520.1075	0.6419
200-399 bed hospitals	5,024	12.9%	2.0%	19,537	10.1%	1.6%	3.9	3,796.5526	0.7557
400+ bed hospitals	—	—	—	—	—	—	—	—	—
Teaching hospitals	2,631	6.8%	1.1%	12,984	6.7%	1.1%	4.9	2,515.5353	0.9561
Subtotal of Other Hospitals / Centres	17,568	45.1%	7.0%	56,822	29.5%	4.7%	3.2	11,618.4206	0.6613
All Centres Total	38,935	100.0%	15.5%	192,570	100.0%	15.9%	4.9	44,161.8566	1.1342

Overall Paediatric Separations (0 - 17 yrs)

Fiscal 2004 - Alberta

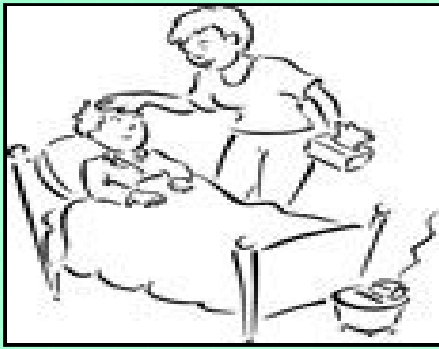
*Hospital / Health Centre	Total Cases	% Provincial Cases	% National Cases	Acute Pt Days	% Provincial Pt Days	% National Pt Days	Acute ALOS	Total RIW	ARIW
Alberta Children's	12,121	31.1%	4.8%	67,274	34.9%	5.6%	5.6	15,281.5472	1.2607
Stollery Children's	9,246	23.7%	3.7%	68,474	35.6%	5.7%	7.4	17,261.8888	1.8670
*Subtotal of ALBERTA CAPHC - CPDSN centres	21,367	54.9%	8.5%	135,748	70.5%	11.2%	6.4	32,543.4360	1.5231
Unknown hospital type	—	—	—	—	—	—	—	—	—
1-49 bed hospitals	5,416	13.9%	2.2%	11,816	6.1%	1.0%	2.2	2,732.2273	0.5045
50-99 bed hospitals	2,129	5.5%	0.8%	4,704	2.4%	0.4%	2.2	1,053.9979	0.4951
100-199 bed hospitals	2,368	6.1%	0.9%	7,781	4.0%	0.6%	3.3	1,520.1075	0.6419
200-399 bed hospitals	5,024	12.9%	2.0%	19,537	10.1%	1.6%	3.9	3,796.5526	0.7557
400+ bed hospitals	—	—	—	—	—	—	—	—	—
Teaching hospitals	2,631	6.8%	1.1%	12,984	6.7%	1.1%	4.9	2,515.5353	0.9561
Subtotal of Other Hospitals / Centres	17,568	45.1%	7.0%	56,822	29.5%	4.7%	3.2	11,618.4206	0.6613
All Centres Total	38,935	100.0%	15.5%	192,570	100.0%	15.9%	4.9	44,161.8566	1.1342



Alberta Perspectives: Points in Interpretation

**Average Resource Intensity Weights (ARIW)
measure intensity & resources consumed**

- **More complex patients require more resources ...**
 - ✓ **Higher length of stay days**
 - ✓ **Higher staffing costs**
 - ✓ **Higher drug costs**
 - ✓ **Higher supply costs**



Alberta Perspectives: Points in Interpretation

- **ACH ARIW = 1.2607**
- **SCH ARIW = 1.8670**
 - **Are we treating similar children?**
(i.e. similar clinically)
 - **Do they cost about the same to care for?**



Alberta Perspectives: Points in Interpretation

- **Variation shows importance of Institutional Profile in benchmarking**
- **Institutional Profile explains variables that impact patient outcome:**
 - ✓ **Bed base**
 - ✓ **Case mix**
 - ✓ **Service catchment areas**
 - ✓ **Programs offered**
 - ✓ **Network partners**
 - ✓ **Academic affiliations**



Alberta Perspectives: Points in Interpretation

- **Comparability**
 - **Programs offered can impact the picture**
 - **For example, Bone Marrow Transplant program at ACH may be more comparable to BMT program at Sick Kids or other institutions than to the SCH**

Alberta Perspectives: Conclusions



**Institutional Profiles
become VERY
important for
benchmarking &
quality improvement
initiatives.**

**Institutional Profiles
can separate us or
bind us.**

Alberta Perspectives: Conclusions

Institutional Profiles explain

- ✓ service delivery
- ✓ teaching affiliations
- ✓ programs offered
- ✓ case mix
- ✓ service catchments
- ✓ distance from home
- ✓ network partnerships
- ✓ other important factors

that may or may not
impact a patient's outcome.

This may better explain our
differences beyond volumes,
length of stay and/or
resources consumed.



Alberta Perspectives: Conclusions



The summary data **DOES NOT** tell the whole story.

The **REAL** comparisons begin within the **DETAILS**.

The **DETAILS** confirm if we are comparing '**APPLES to APPLES**'.

The **DETAILS** will be valuable at the local, regional, provincial and national levels.



CAPHC
CPDSN



CAPHC
CPDSN



CAPHC
CPDSN



Future Directions: Our Thoughts

- **Develop national paediatric data quality & data comparability guidelines**
 - ✓ Benchmarking activities
 - ✓ Consistency in coding
- **Expand membership** (include ALL CAPHC centres)
- **Gain access to ALL appropriate data sources** (i.e. ER, SDS, Clinic, MIS data)



Future Directions: Our Thoughts

Using our **CAPHC-CPDSN & PCC** data to improve the health of Canada's children & youth:

- ✓ **Advocacy**
- ✓ **Quality Improvement**
- ✓ **Health Human Resource Planning**
- ✓ **Clinical Program Planning**

Future Directions: YOUR Thoughts?



PHD-E001744 - © - Photodisc