

Progress in closing the gap in British Columbia

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Using evidence to identify the need for investments in primary healthcare services on BC First Nations reserves

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How we got here...



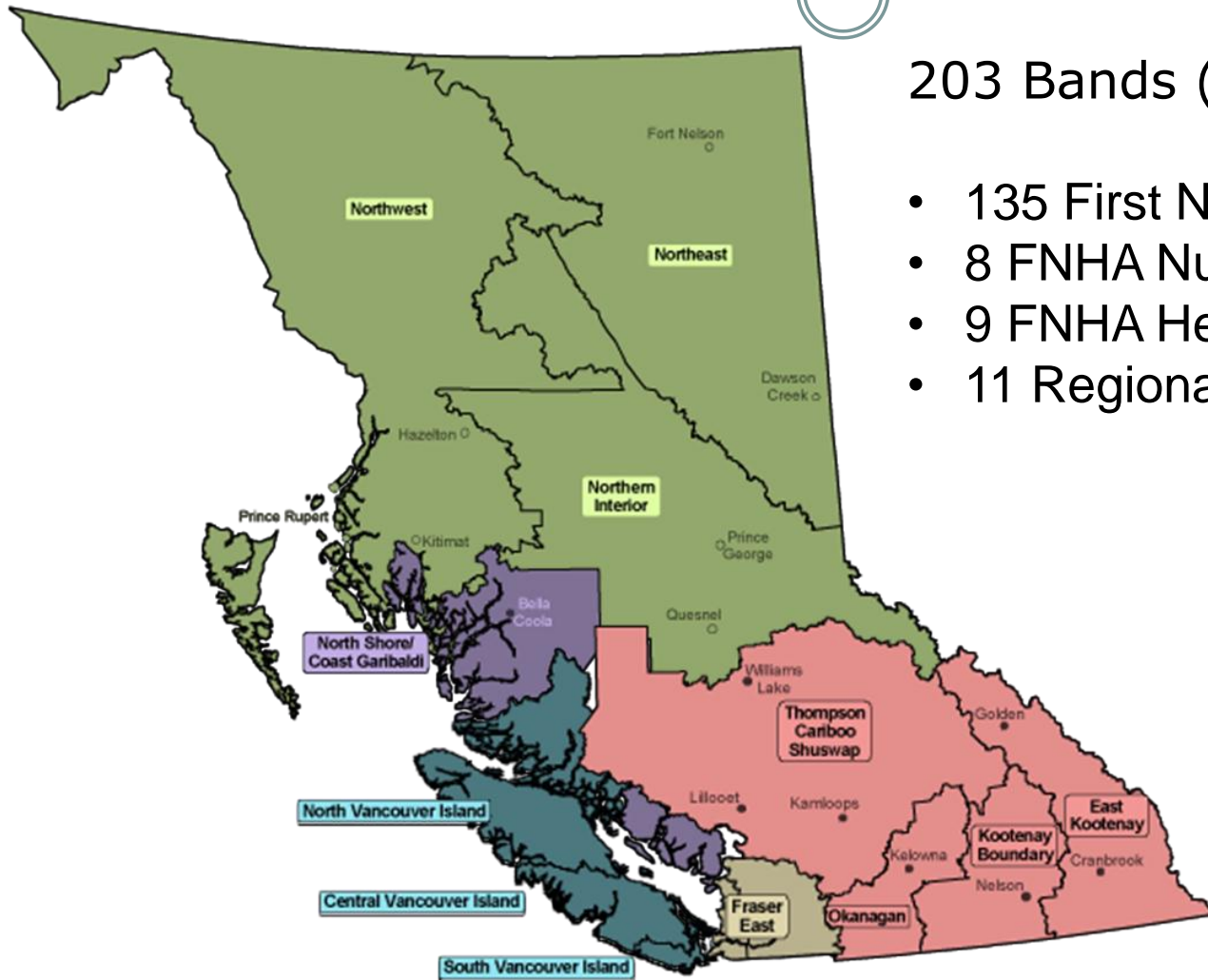
First Nations Population (2011)



- Aboriginal Population in BC is 232,290 (5.4% overall)
- Registered status First Nations population is 132,687
- 61,374 (46%) registered status First Nations people live on reserve
- 45% under the age of 25
- Median age 29 vs, 42 years for non-Aboriginal



First Nations Health Infrastructure



203 Bands (or First Nations)

- 135 First Nations Health Centres
- 8 FNHA Nursing stations
- 9 FNHA Health Centres
- 11 Regional/Corporate Offices

Why this study?

- First Nations health disparities are no longer acceptable.
- The First Nations Health Authority aims to reform the way health care is delivered to BC First Nations by closing gaps in health disparities and improving health and wellbeing for First Nations people.
- Work with the province and First Nations to address service gaps through new partnerships, closer collaboration, and health systems innovation.

Objectives

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1. Are the hospitalization rates for **Ambulatory Care Sensitive Conditions** higher in communities with access to a broader complement of primary healthcare services.
2. **Baseline data** for the FNHA to help inform future planning and service delivery.


Method: Ambulatory Care Sensitive Conditions

Chronic Conditions	•Asthma	•Hypertension
	•Angina	•Chronic Obstructive Pulmonary Disease (COPD)
	•Heart Failure and pulmonary edema	•Pneumonia (only when a secondary diagnosis of COPD is present)
	•Grand mal status and other epileptic convulsions	•Acute Bronchitis (only when a secondary diagnosis of COPD is present)
	•Diabetes with complications	•Iron deficiency anemia; Other deficiency anemia
Vaccine Preventable Conditions	•Diphtheria	•Mumps
	•Hemophilus Influenza type B	•Pertussis
	•Hepatitis A	•Pneumococcal
	•Hepatitis B	•Poliomyelitis
	•Influenza	•Tuberculosis
	•Measles	•Rubella
	•Meningococcal disease (meningitis)	•Tetanus
Acute Conditions	•Dental Conditions	•Gastroenteritis
	•Cellulitis	•Severe ENT Infections
	•Pelvic Inflammatory Disease	
Mental health	•Mood disorders	•Schizophrenia

On-reserve health care services

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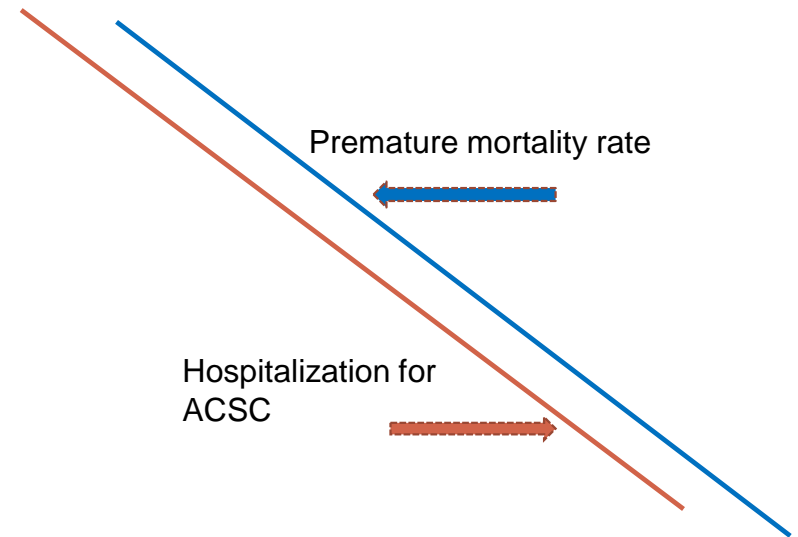
Facility designation criteria and number of BC communities



Type of Facility	N ind (2010) No of comm	Community characteristics (the community should meet a majority of the following criteria)
Nursing Station	N=3,425 10 comm	On-reserve health services funded: Treatment and prevention, accessible 24/7
Health Centre	N=8,509 20 comm	On-reserve health services funded: Emergency, screening and prevention available 5 days per week, with limited or no after hour care locally
Health Station	N=17,742 64 comm	On-reserve health services funded: Part-time, often non-resident screening and prevention services only
Health Office	N=367 3 comm	On-reserve health services funded: Part-time, often non-resident screening and prevention services only
No facility	N=13,742 103 comm	No on-reserve facility

What we would have liked to see and saw

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Correlation between directly adjusted ACSC rates and premature mortality rates, 1993-2010, rates of episodes of care, all conditions

	Health Centre	Nursing Station	FN in FN Comm.	Other Rural BC	Other Urban BC	All Other BC	All BC
Measure	0.638	0.895	0.655	0.651	0.888	0.985	0.986
p-value	0.019*	0.000*	0.015*	0.080	0.003*	0.000*	0.000*

*Statistically significant result

Directly adjusted (age, sex, SES) rates (per 1000) of hospitalization for ACSC, First Nations compared to other BC residents

Figure 1, Adjusted Episodes of Hospital Care

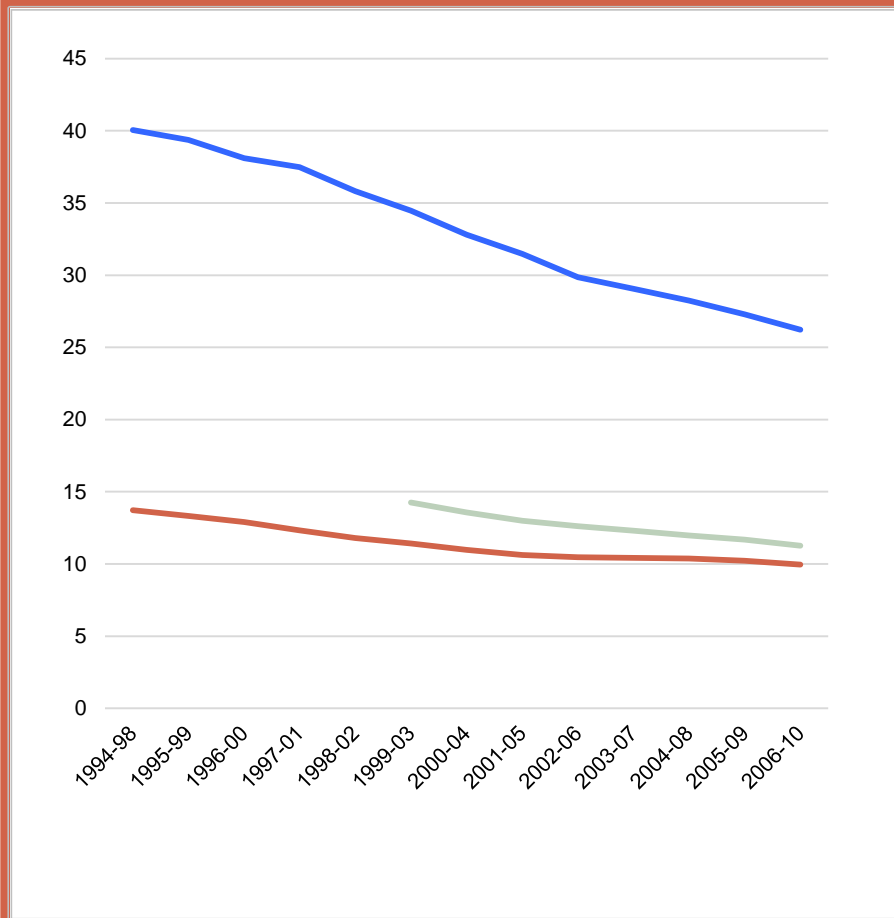
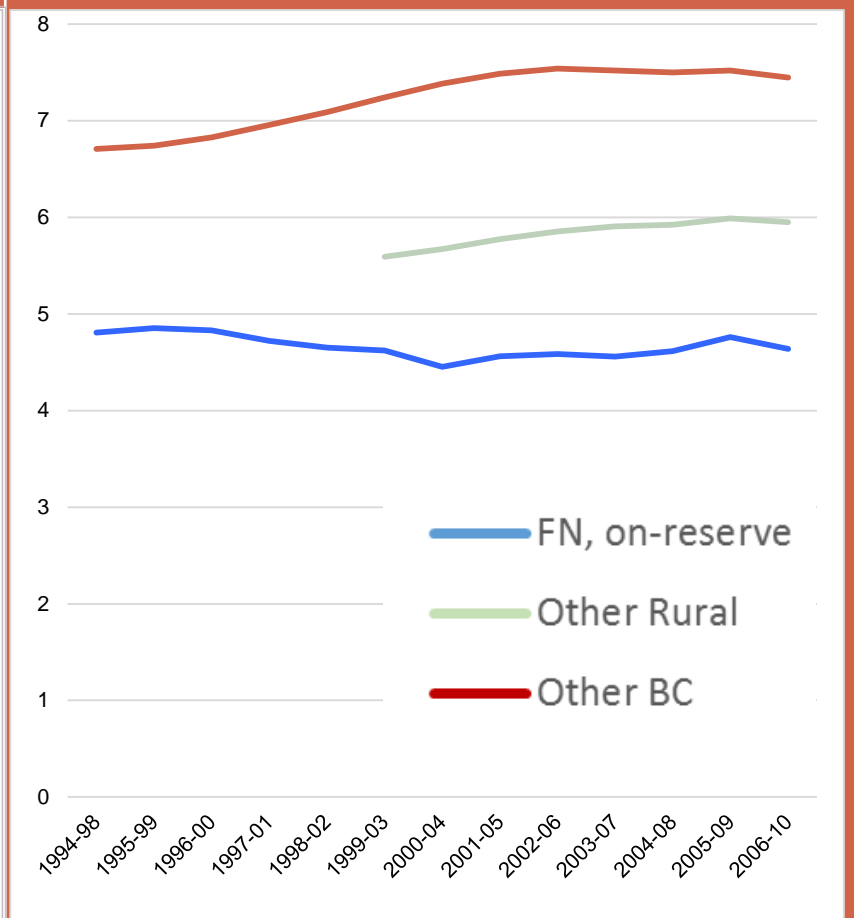


Figure 2, Length of stay per admission



Directly adjusted (age, sex, SES) rates (per 1000) of hospitalization for ACSC, First Nations compared to other BC residents

Figure 3, Readmission to Acute Hospitalization

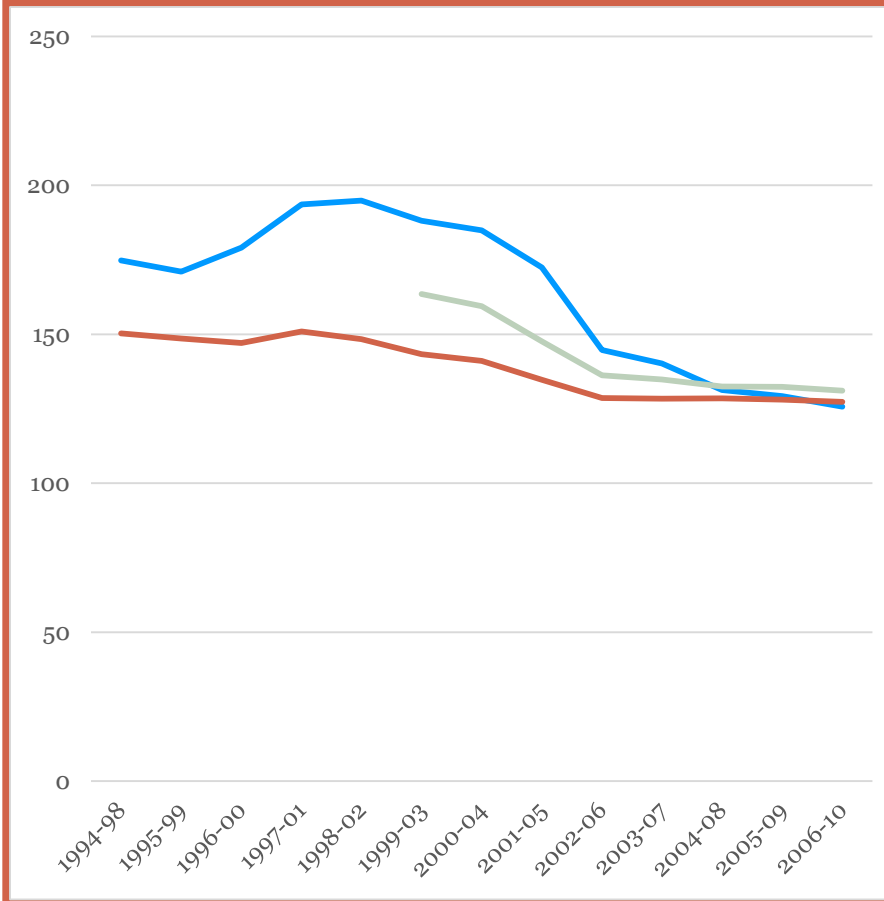
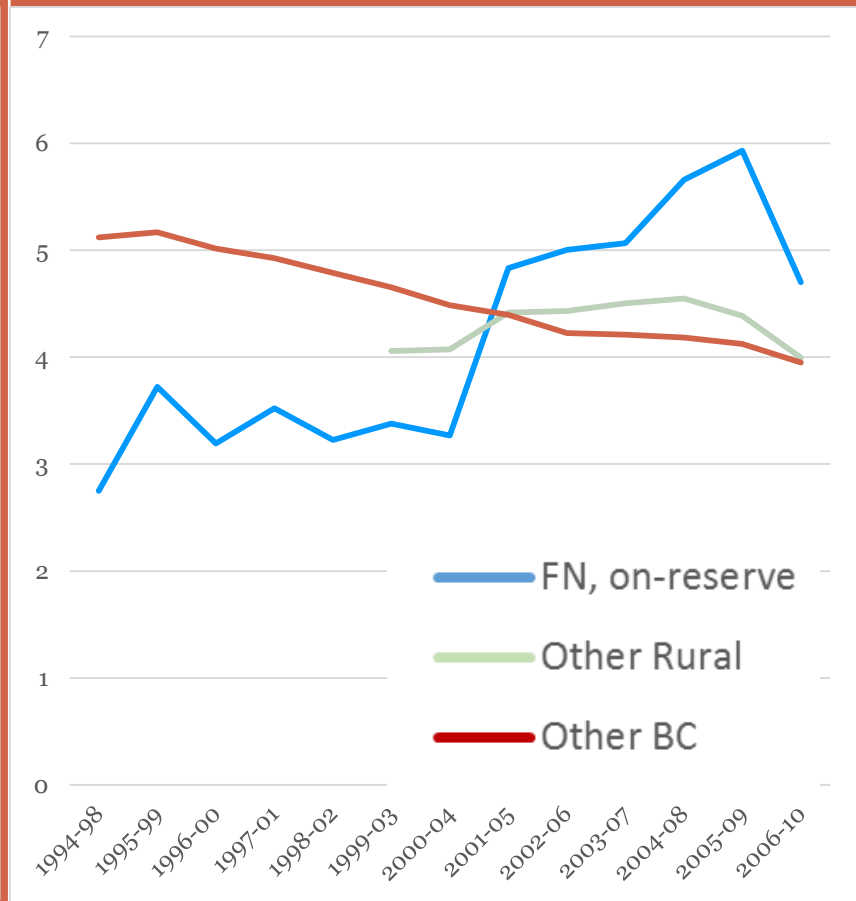
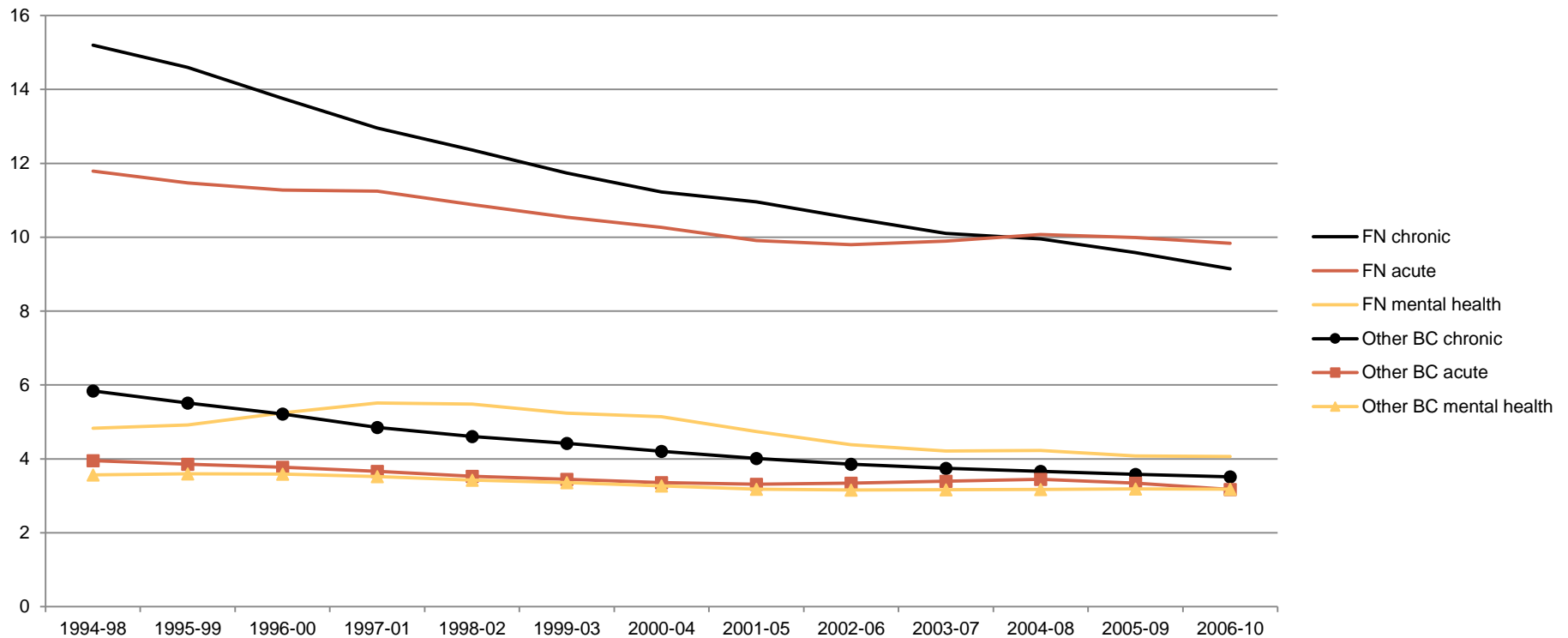


Figure 4, Readmissions that end in death



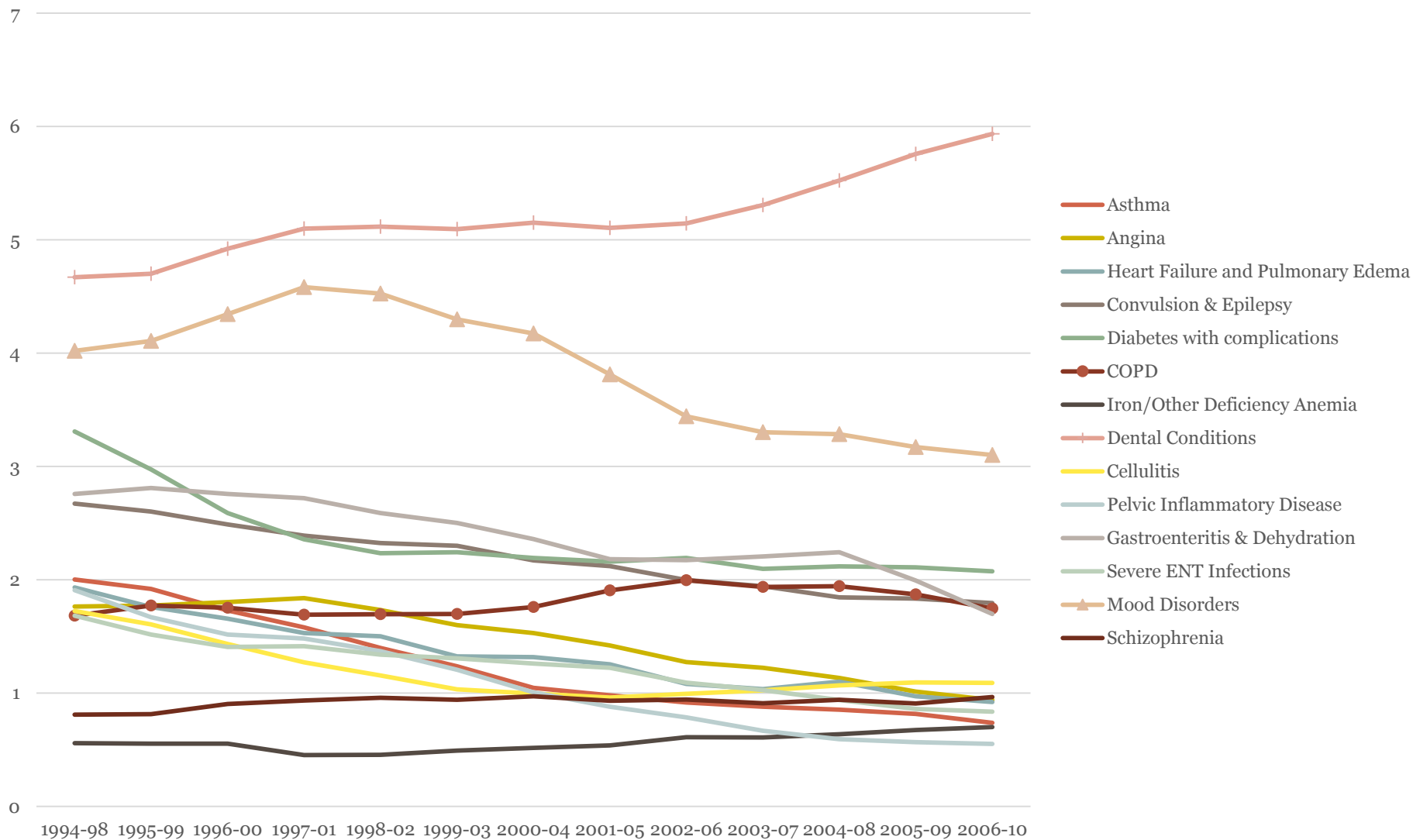
Unpacking ACSC: Comparing the rates of episodes of hospital care of First Nations and other BC residents

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Top condition: dental!

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Conditions to watch

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	FN Rates going up	Rates with a widening gap
Chronic conditions	<ul style="list-style-type: none">• COPD• Iron/Other deficiency anemia	<ul style="list-style-type: none">• Asthma• Angina• Pneumonia (secondary to COPD)
Acute conditions	<ul style="list-style-type: none">• Dental conditions	<ul style="list-style-type: none">• Dental conditions• Cellulitis
Mental health conditions	<ul style="list-style-type: none">• Schizophrenia	

Conclusions

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- Local access to primary healthcare remains a priority: communities with better access to primary healthcare have better outcomes
- Increased chronicity places, and will continue to place, pressures on local health services
- Cost cutting measures (early discharges) will continue to place pressures on local health services
- Rural and remote centric evidence can be generate to inform health services planning
- Use findings to inform FNHA planning and service delivery

Acknowledgements

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First Nations Health Authority
Health through wellness

UNBC UNIVERSITY OF
NORTHERN BRITISH COLUMBIA



CENTRE for
Aboriginal Health
RESEARCH