

Circumpolar Health Systems Innovation Team [CircHSIT]


*Provide research evidence to
enable transformation of primary
health care in northern remote
regions of Canada*



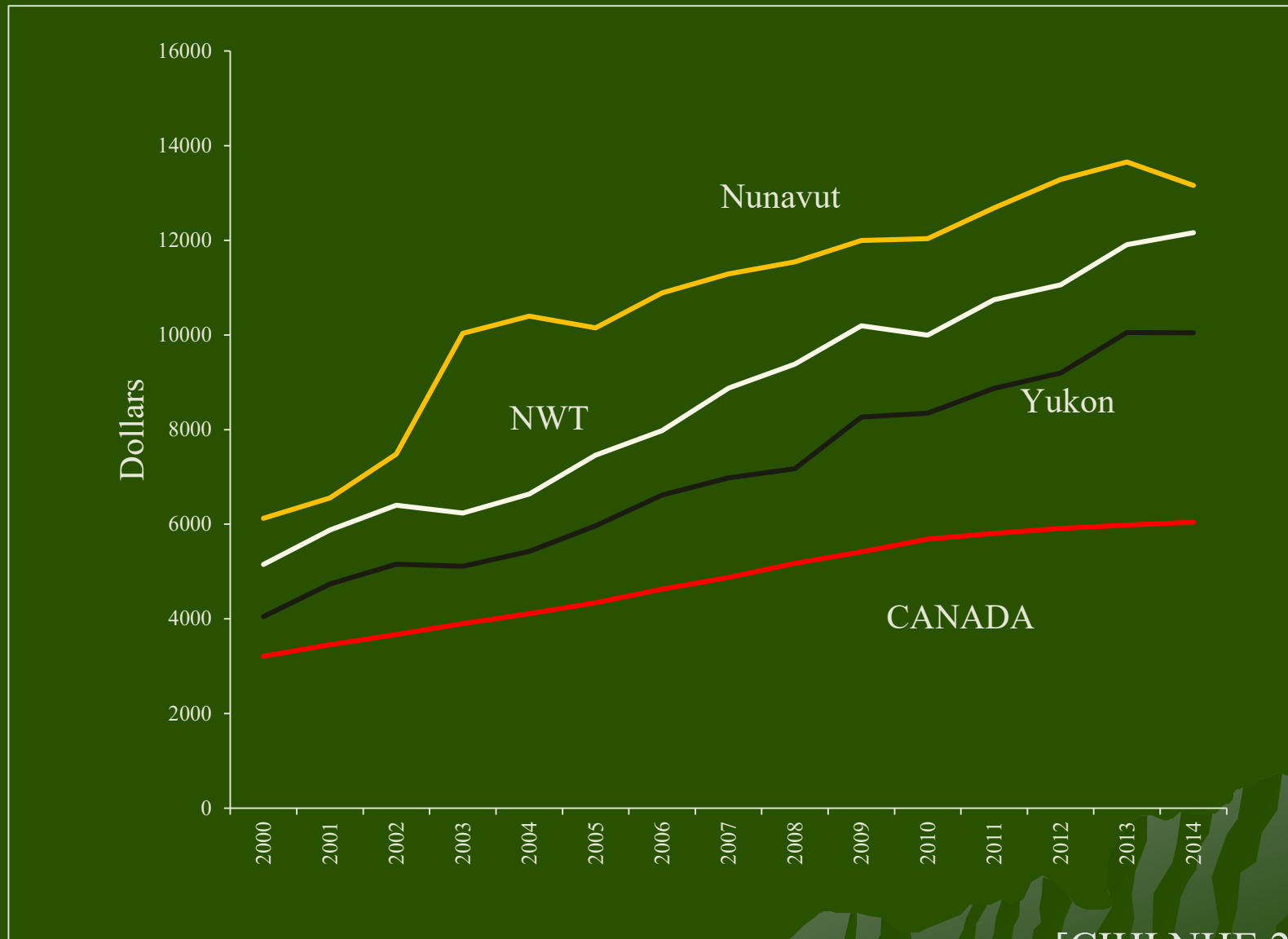
Community-Based Primary Care Team Grants

Progress Report to Nov 2015

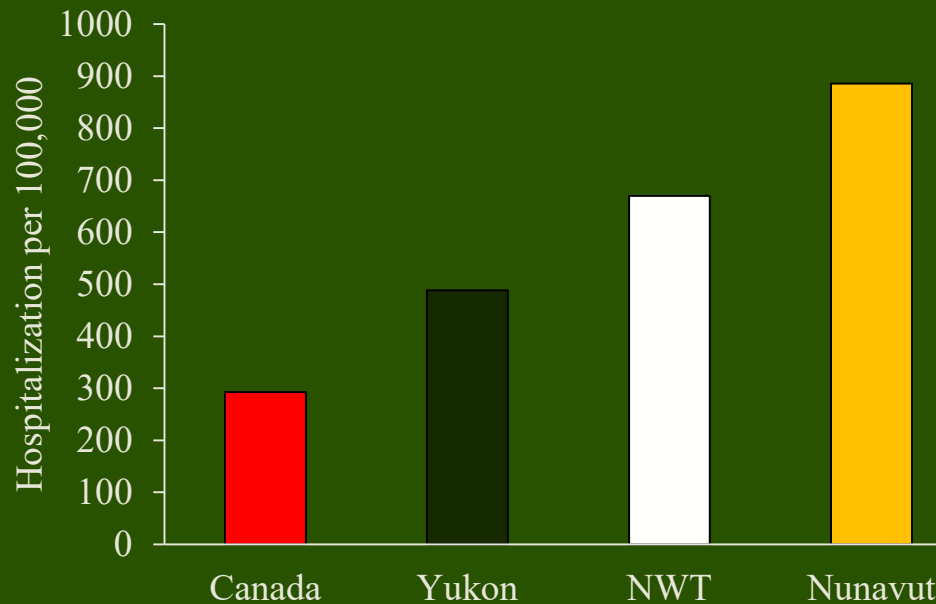
The context

- ◆ Disparities in health outcome
 - between Canadian North and rest of country;
 - within North, between non-Aboriginal and Aboriginal people
 - ◆ Per capita health expenditures in the North is substantially higher than rest of Canada
 - ◆ Are we getting “value for money” in northern health care?
 - ◆ Is northern health care sustainable?
- 

Growth in Per Capita Total Health Expenditures

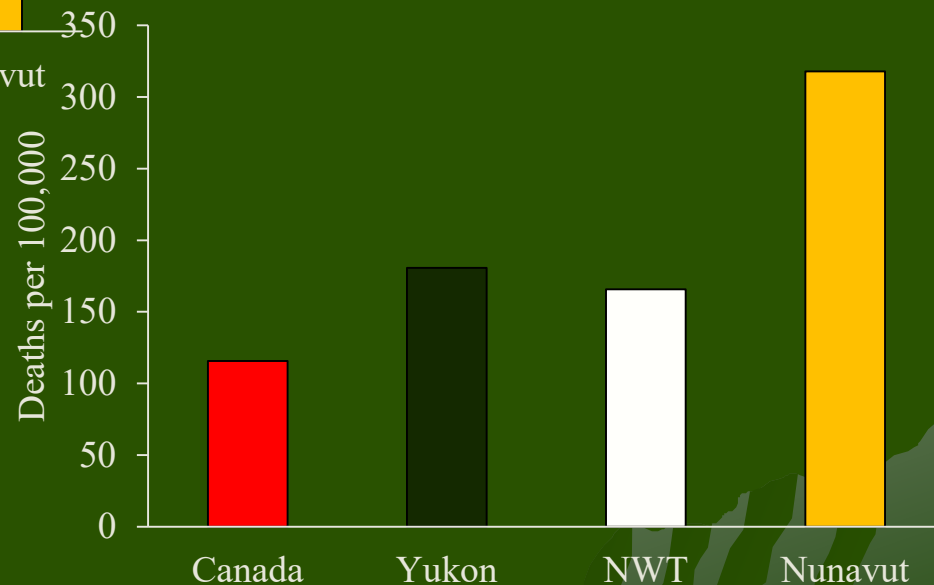


How well is the health system performing?




Age-standardized
hospitalization for
ambulatory care
sensitive conditions
(mean 2009-2013)

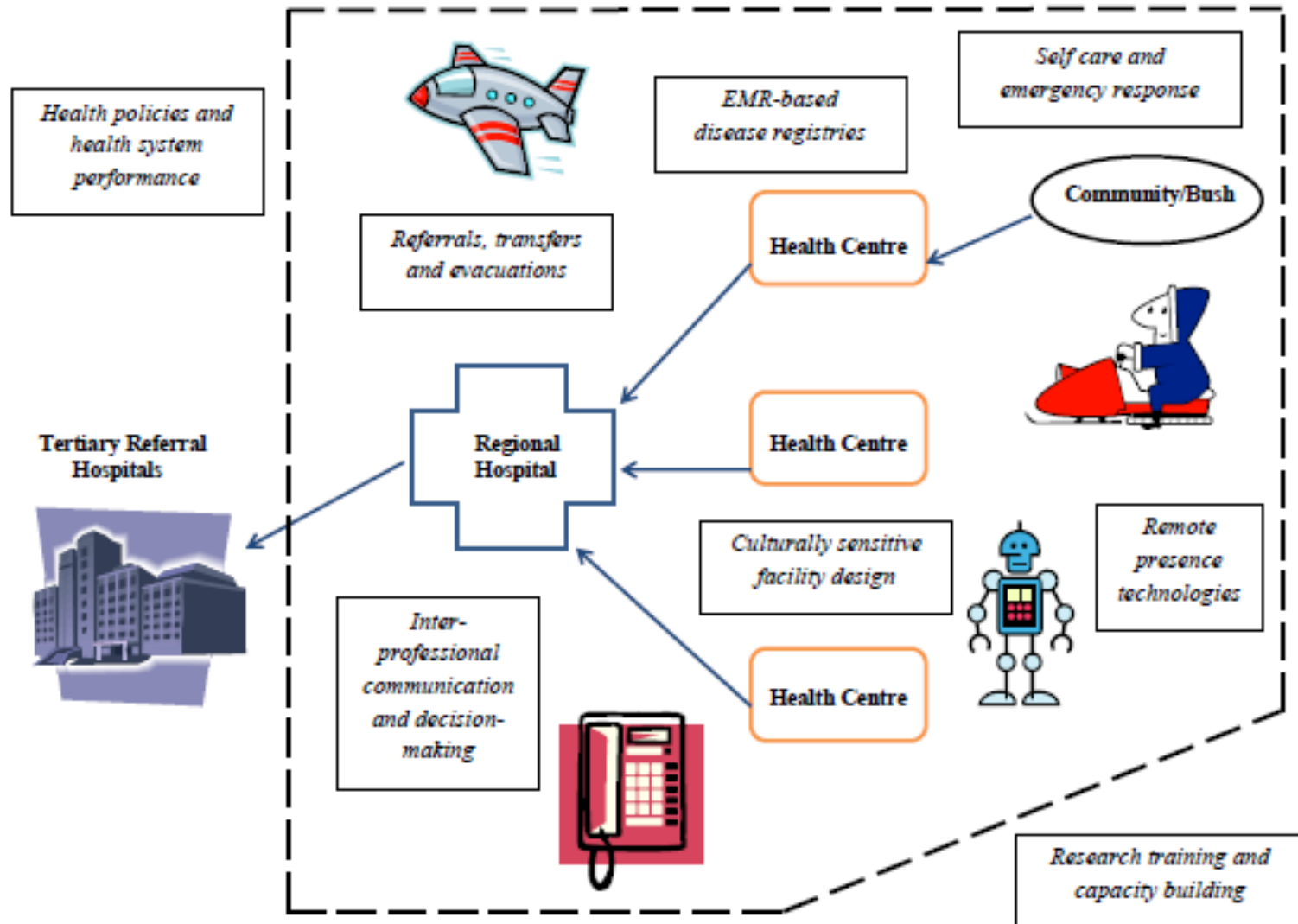
Age-standardized
avoidable mortality
rate from
preventable causes
(mean 2007-2011)



Research Objectives

- ◆ Review and compare innovative PHC models in northern regions of circumpolar countries;
 - ◆ Create northern health system performance metrics
 - ◆ Design, implement and evaluate PHC interventions and technology innovations;
 - ◆ Investigate and adapt health facility design, work flow and performance
 - ◆ Develop capacity in planning and evaluation;
 - ◆ Collaborate with decision makers in health care
 - ◆ Train the next generation of northern-based researchers and practitioners in PHC-relevant research
- 

NORTHERN PRIMARY HEALTH CARE SYSTEM



REGIONs, HEALTH SYSTEMs and POPULATIONs

Partners



NAALAKKERSUISUT
GOVERNMENT OF GREENLAND



Labrador - Grenfell
Health



YELLOWKNIFE

Health and Social Services Authority
Serving Dettah, Fort Resolution, Lutsel k'e, Ndilo and Yellowknife



NUNATSIAVUT
kavamanga Government



UNIVERSITY OF ALBERTA
SCHOOL OF PUBLIC HEALTH




McGill



UNIVERSITY
OF MANITOBA



Why Circumpolar?

- ◆ Understanding commonalities and differences
 - ◆ Cross-border populations offer “natural” experiments
 - ◆ Why are some populations healthier than others?
 - ◆ What is achievable in population health status?
 - ◆ Health care system embedded in society, culture and political economy
- 



CMAJ

ANALYSIS

Health care in the North: what Canada can learn from its circumpolar neighbours

CMAJ, February 8, 2011, 183(2)

T. Kue Young MD PhD, Susan Chatwood BScN MSc

American Journal of Public Health | July 2012, Vol 102, No.

Global Health—A Circumpolar Perspective

Global health should encompass circumpolar health

Susan Chatwood, BScN, MSc, Peter Bjerregaard, MD, PhD, and T. Kue Young, MD, PhD

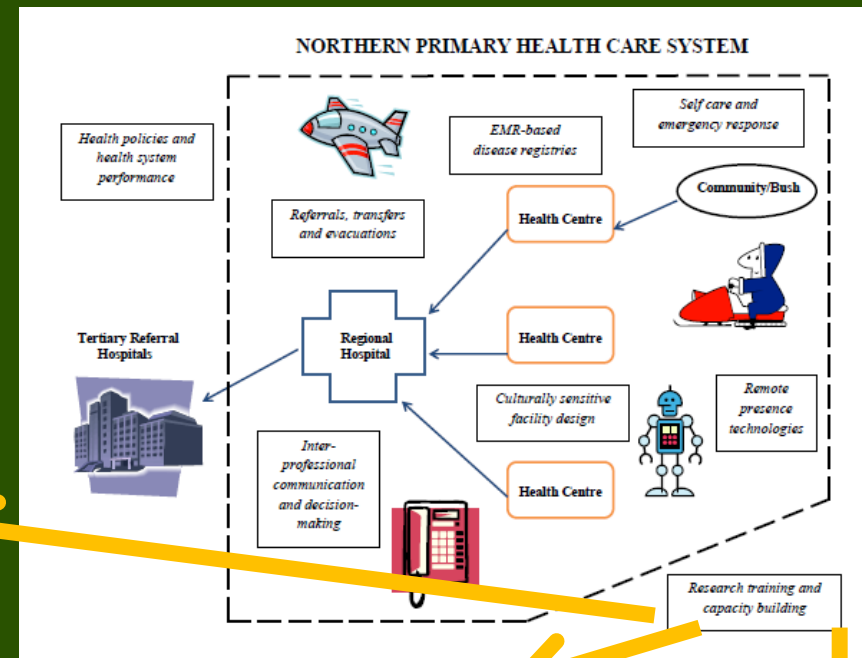
Graduate students supported

[salary/research expenses]:

- 1 post-doc – U Alberta (Public Health)
- 2 PhD – U Toronto (HPME; Anthropology)
- 1 PhD – U Alberta (Public Health)
- 1 MSc – VU Amsterdam (Global H)
- 1 MSc – U Toronto (HPME)
- 1 MA – McGill (Geography)
- 2 MPH – U Toronto (Public Health)
- 1 MEDES – U Calgary (Environmental Design)
- 5 undergraduate summer students

Career development awards:

- J.Ford – Applied PH Chair
- S.Chatwood – Fulbright Arctic Initiative Scholar



Affiliation agreements

signed between ICHR and schools of public health at U Alberta and U Toronto

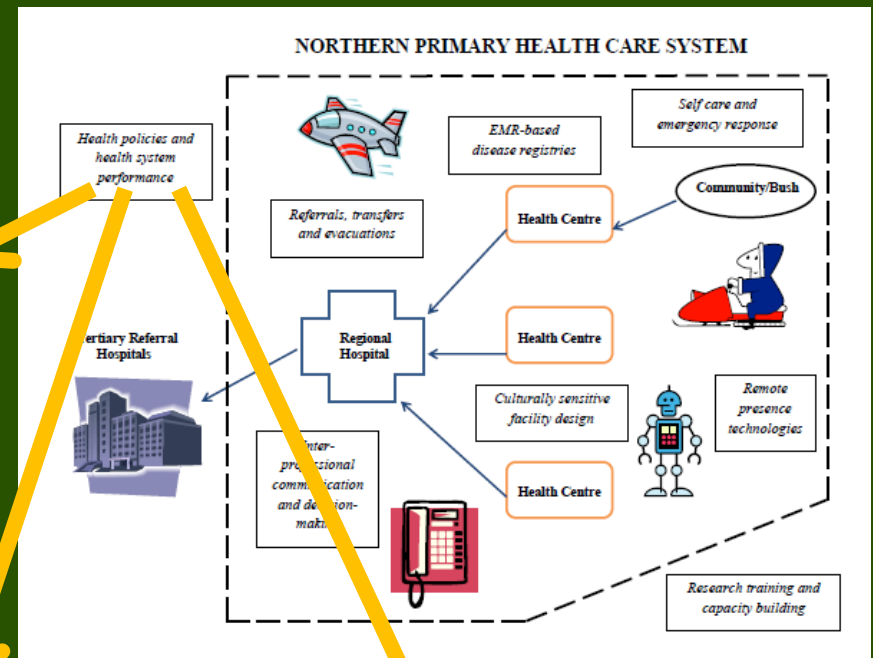
NWT SPOR Network in Primary and Integrated Health Care Innovations funded

Circumpolar comparisons of health system stewardship

- *Methods* – multiple case study: interviews, workshops, document and policy review
- *Sites* – Canada, Alaska, Norway, Finland
- *Status* – data collection complete; 1 paper published

Circumpolar health system performance indicators

- *Methods* – statistical databases; national/regional surveys
- *Status* – web-based Circumpolar Health Observatory established; workshop in Jan 2016
- Sub-projects focus on maternity care and mental health services



Pharmaceutical policy and practice in Nunavut

- *Methods* – interviews, ethnography, document review
- *Sites* – Arviat, Rankin, Iqaluit
- *Status* – data collection complete; 2 papers published

PHC accessibility in remote NWT communities

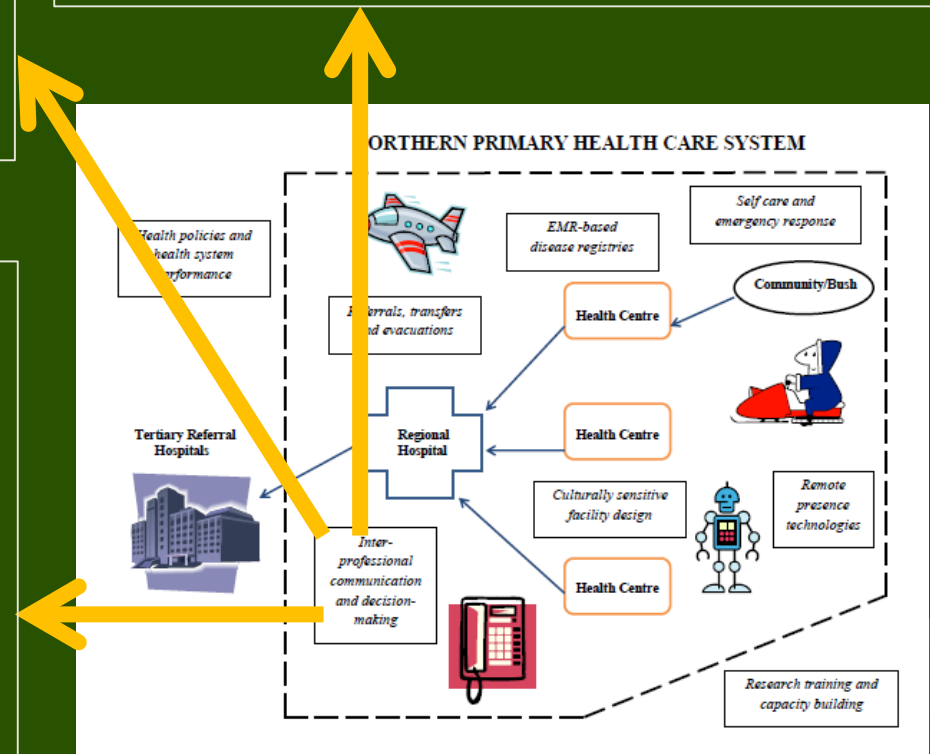
- *Methods* – interviews of providers and patients by visiting Dutch student
- *Sites* – 2 Dene and 1 Inuit communities + 2 regional centres
- *Status* – completed; 1 paper published

Nurses' views on PHC system

- *Methods* – secondary analyses of interview transcripts collected by S.Wong in 2009
- *Sites* – 9 communities in NU
- *Status* – analysis underway

Clinical support for frontline workers and medivac response

- *Methods* – self-administered online survey of nurses and physicians
- *Sites* – NT and NU
- *Status* – Round 1 in NT completed; start in NU 2016 and repeat in NT

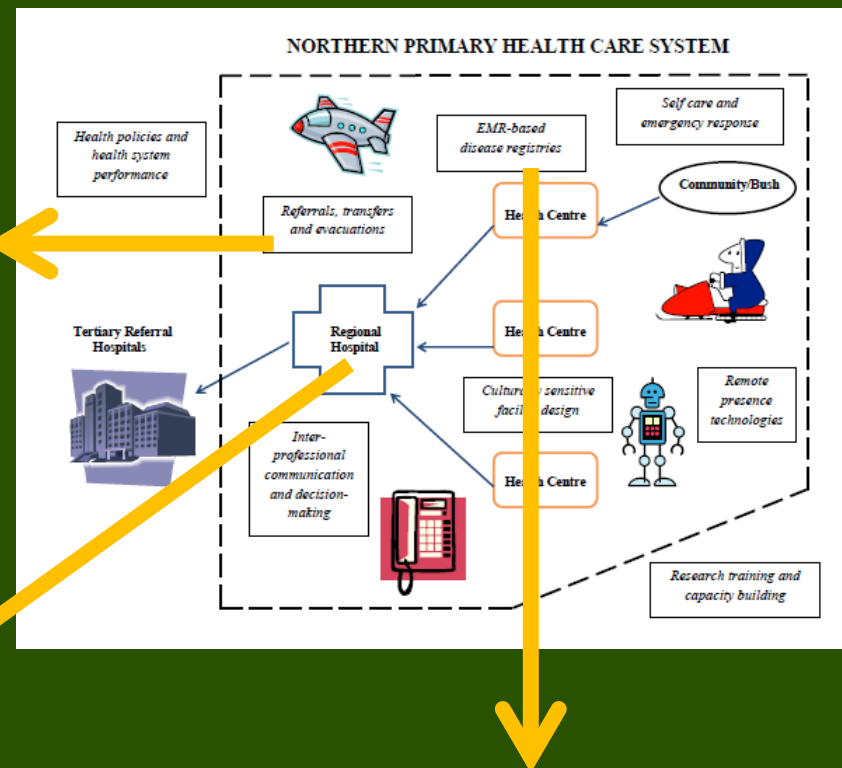


Patterns and economics of aeromedical transportation

- *Methods* – analyses of travel database, estimates of costs, mapping
- *Sites* – all communities in NT and NU
- *Status* – custom dataset created and released by GN and GNWT; analyses underway

Needs assessment of Aboriginal wellness centre in Yellowknife

- Contracted by GNWT in support of Elders Council of Stanton Territorial Health Authority



EMR-based monitoring of chronic disease management

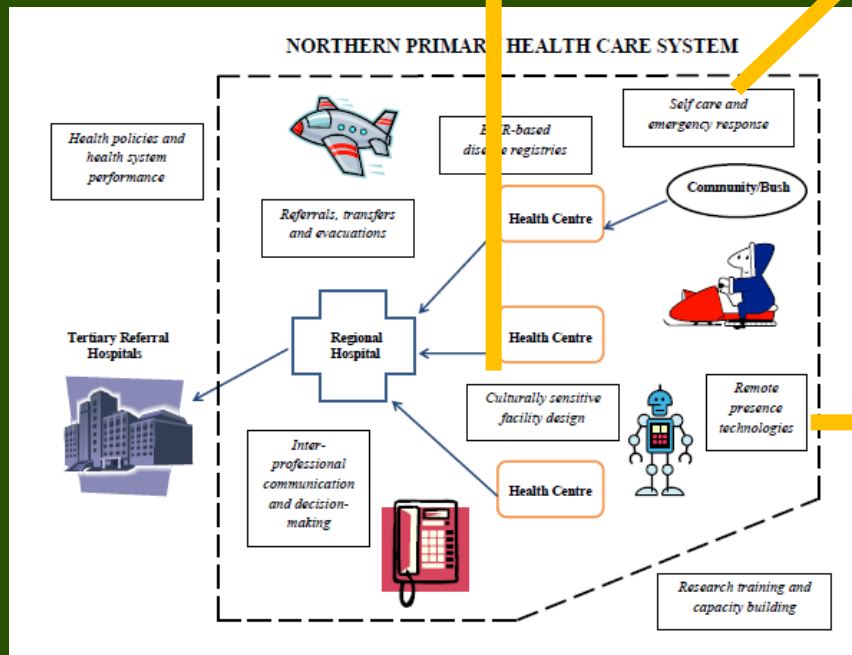
- Upload anonymized NWT EMR to CPCSSN
- Develop criteria of quality of care for indicator conditions
- Analyse NWT data in CPCSSN

Cultural and environmental aspects of health care places

- Building plans of Nunavut health centres collected and reviewed
- Health care designs among exhibits of “Arctic Adaptation: Nunavut at 15” representing Canada at Venice Biennale of Architecture 2014

Land-based emergencies and health outcomes

- *Methods* – media reports, search-and-rescue and RCMP databases, community informants; correlate occurrence with environmental conditions
- *Sites* –NT and NU
- *Status* – data collection ongoing



Evaluation of robot-facilitated chronic disease management

- *Methods* – review of clinical records, provider and patient survey
- *Sites* –Nain and Goose Bay, Labrador
- *Status* – project initiated, clinical database created

Lessons Learned

- ◆ Partnerships with decision-makers – necessary but not sufficient - easy to establish, difficult to sustain/nurture; high turn-over of key players in North
- ◆ Engagement of front-line providers essential – cannot assume senior management has done “consultation”
- ◆ Industry partner unreliable – failed to come through with technical support – firm commitment needed – cash-in-hand better than in-kind promise
- ◆ Team could not have been launched without 5-year funding – slow ramp-up due to complexity and scope of research program; hiccups in financial management

Impacts: *Anticipated vs Achieved*

- ◆ Rapid translation and application of research outputs C+
- ◆ Cross-jurisdictional and international collaboration in seeking solutions B+
- ◆ Improved community capacity to contribute to planning, evaluation and delivery of services B+
- ◆ A sustainable, research-intensive environment in northern institutions A-
- ◆ Reduction in disparities in access and outcomes between northern and southern Canada I



INTERNATIONAL JOURNAL OF
CIRCUMPOLAR HEALTH

Outputs to date

THEORY AND METHODS

Assessing health care in Canada's North: what can we learn from national and regional surveys?

T. Kue Young^{1*}, Carmina Ng² and Susan Chatwood^{3,4}

THEORY AND METHODS

Approaching *Etuaptmumk* – introducing a consensus- based mixed method for health services research

Susan Chatwood^{1,2,9*}, Francois Paulette³, Ross Baker⁴, Astrid Eriksen⁵,
Ketil Lenert Hansen⁵, Heidi Eriksen⁶, Vanessa Hiratsuka⁷, Josée Lavoie⁸,
Wendy Lewis⁹, Jan Møller¹⁰, James O'Brien¹¹, Nathalie Pabrum¹²,

CONFERENCE AND WORKSHOP REPORT

Approaching a collaborative research agenda for health systems performance in circumpolar regions

Susan Chatwood^{1,2}, Jessica Bytautas³, Anthea Darychuk²,
Peter Bjerregaard^{4,5}, Adalsteinn Brown³, Donald Cole¹,
Howard Hu¹, Micheal Jong^{6,7}, Malcolm King⁸, Siv Kvernmo⁹ and
Jeremy Veillard¹⁰

Method papers

Early results

Pharmaceutical health care and Inuit language communications in Nunavut, Canada

Sandra J. Romain^{1,2*}



JOURNAL OF PHARMACEUTICAL
POLICY AND PRACTICE

RESEARCH

Open Access

Policy versus practice: a community-based qualitative study of the realities of pharmacy services in Nunavut, Canada



Sandra J. Romain^{1,2*}, Jillian C. Kohler³ and Kue Young⁴



INTERNATIONAL JOURNAL OF
CIRCUMPOLAR HEALTH

ORIGINAL RESEARCH ARTICLE

Primary health care accessibility challenges in remote indigenous communities in Canada's North

Tim Michiel Oosterveer¹ and T. Kue Young^{2*}

Mass Media



Episode 1

Sunday, Oct. 4 at 9 p.m. / 9:30 NT

.... In a Labrador clinic with no on-site doctor, a dedicated nurse gives a checkup with help from an unconventional high-tech assistant, Rosie the Robot. ...[starring Michael Jong]

THE GLOBE AND MAIL

January 8, 2015

The Dawn of Something New

As Arctic communities undergo profound growth and change, artists and architects are responding in radical ways. They are creating enduring structures that actually reflect the ever-changing environmental and cultural context of the North

Matthew Hague

Preserving culture, protecting health

Part 3 of an in-depth look at northern research at the University of Alberta.
By Bev Betkowski on February 19, 2015



School of Public Health

The challenge of health in the far North - What's next?

According to an expert on northern and Aboriginal health, for any health indicator you choose, circumpolar people face unique challenges.
By Andrea Lauder on January 7, 2014



UNIVERSITY OF TORONTO DALLA LANA SCHOOL OF PUBLIC HEALTH

Renewing partnerships to strengthen circumpolar health systems

On a recent trip to Yellowknife, Institute of Health Policy, Management and Evaluation Director Adalsteinn Brown took his capacity building role very seriously.



Transforming Health Care in **REMOTE COMMUNITIES**



MARK YOUR CALENDAR

April 28-30, 2016
Edmonton, Alberta Canada
publichealth.ualberta.ca



Conference themes

- ◆ **Policies:** Governance and organizational models; services for indigenous peoples; integrating public health and primary care; intersectoral action; upstream strategies
- ◆ **People:** Health human resources; evolving professional roles; inter-professional communication; changing clinician behaviour, community health workers
- ◆ **Places:** Culturally and environmentally sensitive facilities; infrastructure renewal; land-based emergency response



- ◆ **Tools:** eHealth; EMR; robots; diagnostics; technology transfer
- ◆ **Links:** Aeromedical evacuations; logistics; transportation
- ◆ **Costs:** funding models; financial incentives; cost-sharing
- ◆ **Data:** Admin databases; data linkage; sentinel surveillance; data repositories; internationally comparable metrics



We invite you to mark your calendar for this

INTERNATIONAL CONFERENCE.



UNIVERSITY OF ALBERTA
SCHOOL OF PUBLIC HEALTH

For more information
go to bit.ly/THCIRC

Health care in Canada's North, other circumpolar regions such as Alaska, Greenland, the Nordic countries, and Arctic Russia—and indeed globally wherever there are scattered small remote communities—faces many challenges.

- What are the key challenges and emerging issues?
- What can we learn from other jurisdictions?
- What can we do differently to improve health and health care?

COME EXPLORE SOLUTIONS WITH US.

April 28-30, 2016

Chateau Lacombe Hotel
Edmonton, Alberta, Canada

