

MANITOBA CENTRE FOR HEALTH POLICY

Seeing the big picture of northern health and healthcare of Metis and First Nations people in Manitoba: do healthcare patterns reflect underlying need?

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Arctic Health Workshop: April 17-18, 2013
Aarhus University, Denmark





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Informing Health & Social Policy

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News

Curling champs...

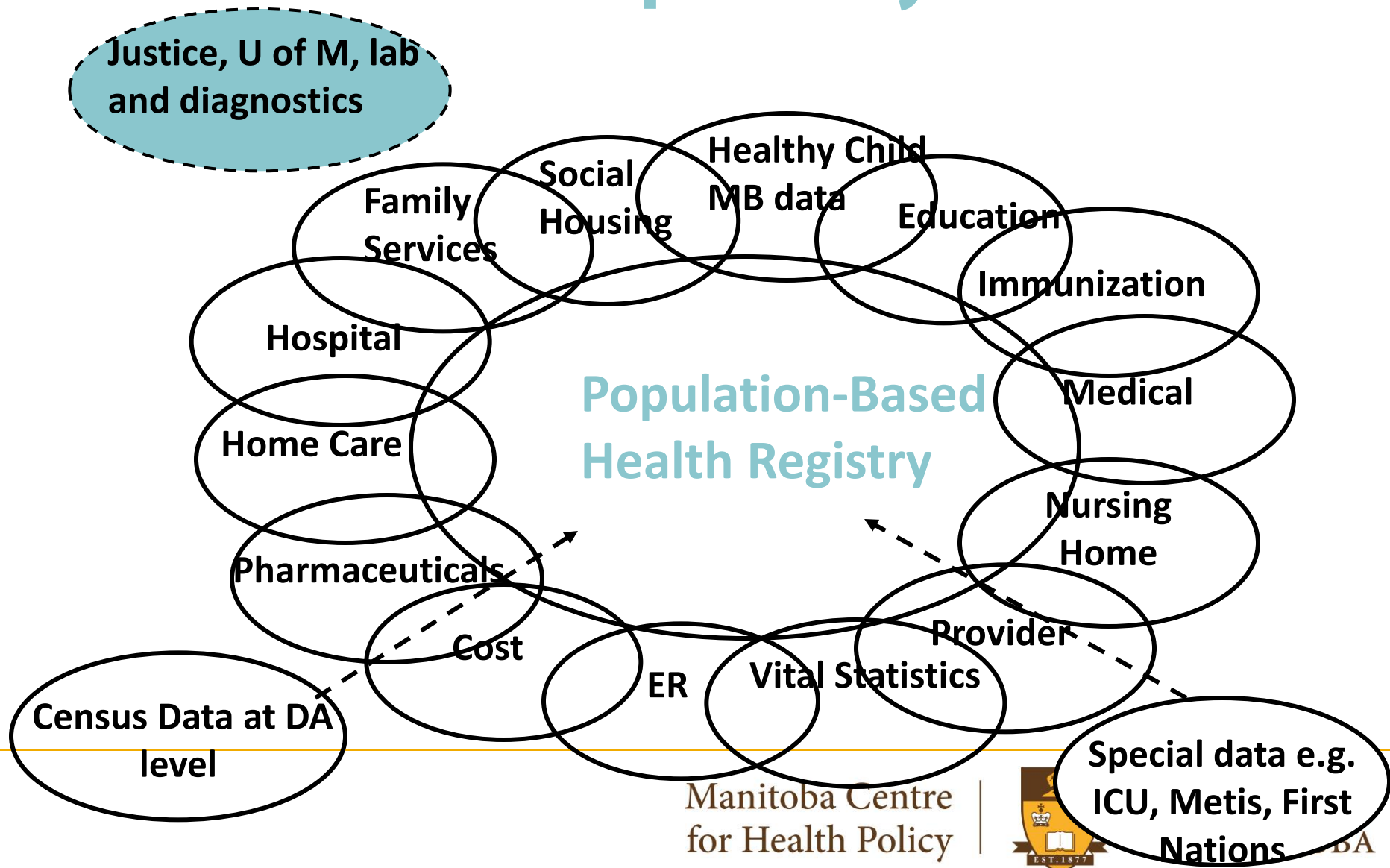
Events

St. John's College Art ...

New Report Available
Understanding the Path
of Ambulatory Care in
Manitoba

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So what works? ... researchers, decision-makers

- **USER INVOLVEMENT FROM START TO FINISH**
 - **integrated KT**
- **INTERACTIVE FORUMS**
- **RELEVANT RESEARCH FOR REGIONS**
- **EVIDENCE-BASED STORY TELLING** potentially leads to **EVIDENCE-INFORMED DECISION MAKING**

So what does it take?

To develop collaborative relationships around data stewardship and use, it takes:

- TIME and \$ commitment
- SHARED LANGUAGE
- TRUST
- RELATIONSHIP BUILDING
- “LETTING GO” of traditional roles
- PATIENCE
- UNDERSTANDING

Bowen S, Erickson T, Martens P. More than “using research”: the real challenges in promoting evidence-informed decision- making. *Healthcare Policy* 2009;4(3):69-84.

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Bowen S, Martens PJ, *The Need To Know* Team. Demystifying “Knowledge Translation”: Learning from the community. *Journal of Health Services Research & Policy* 2005;10(4):203-211.

Martens PJ, Roos NP. When health services researchers and policy-makers interact: Tales from the tectonic plates. *Healthcare Policy* 2005;1(1):72-84.

Profile of Metis Health Status and Healthcare Utilization in Manitoba (2010)

Research Team

PIs: Dr. Patricia J. Martens (MCHP)
Dr. Judith Bartlett (MMF)

MCHP: Elaine Burland, Heather Prior, Charles Burchill, Shamima Huq, Dan Chateau, Angela Bailly, Linda Romphf

MMF: Dr. Julianne Sanguins, Sheila Carter

Dept' Health contacts: Deborah Malazdrewicz, Rose Neufeld, Marie O'Neil



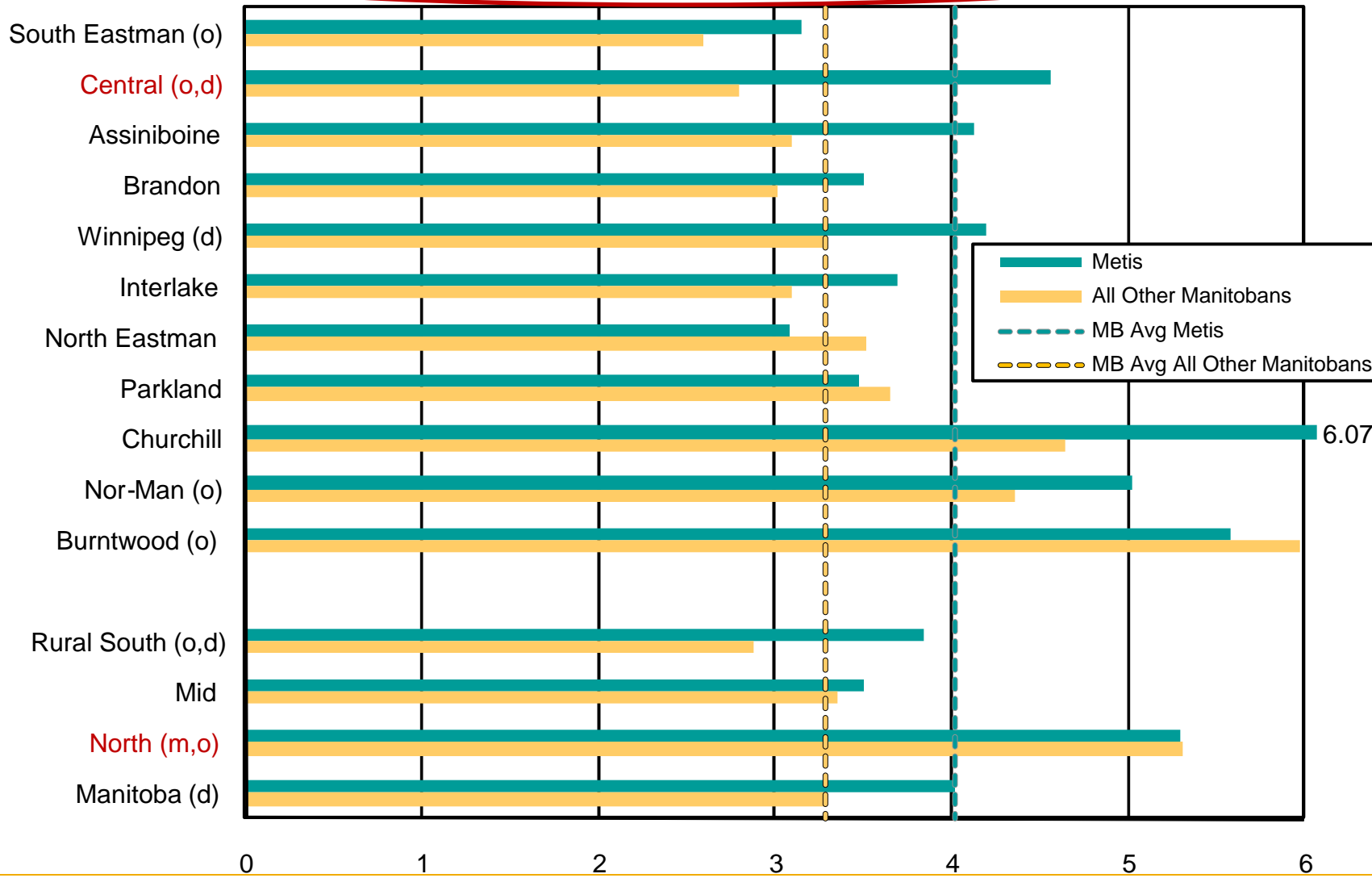
The seven MMF Regions of Manitoba and their overlay with the 11 RHAs

Note: report based upon linkage with 90,915 Metis over time (73,016 in 2006). MB total population is ~1.2 million.



Premature Mortality Rate by RHA, 2002-2006

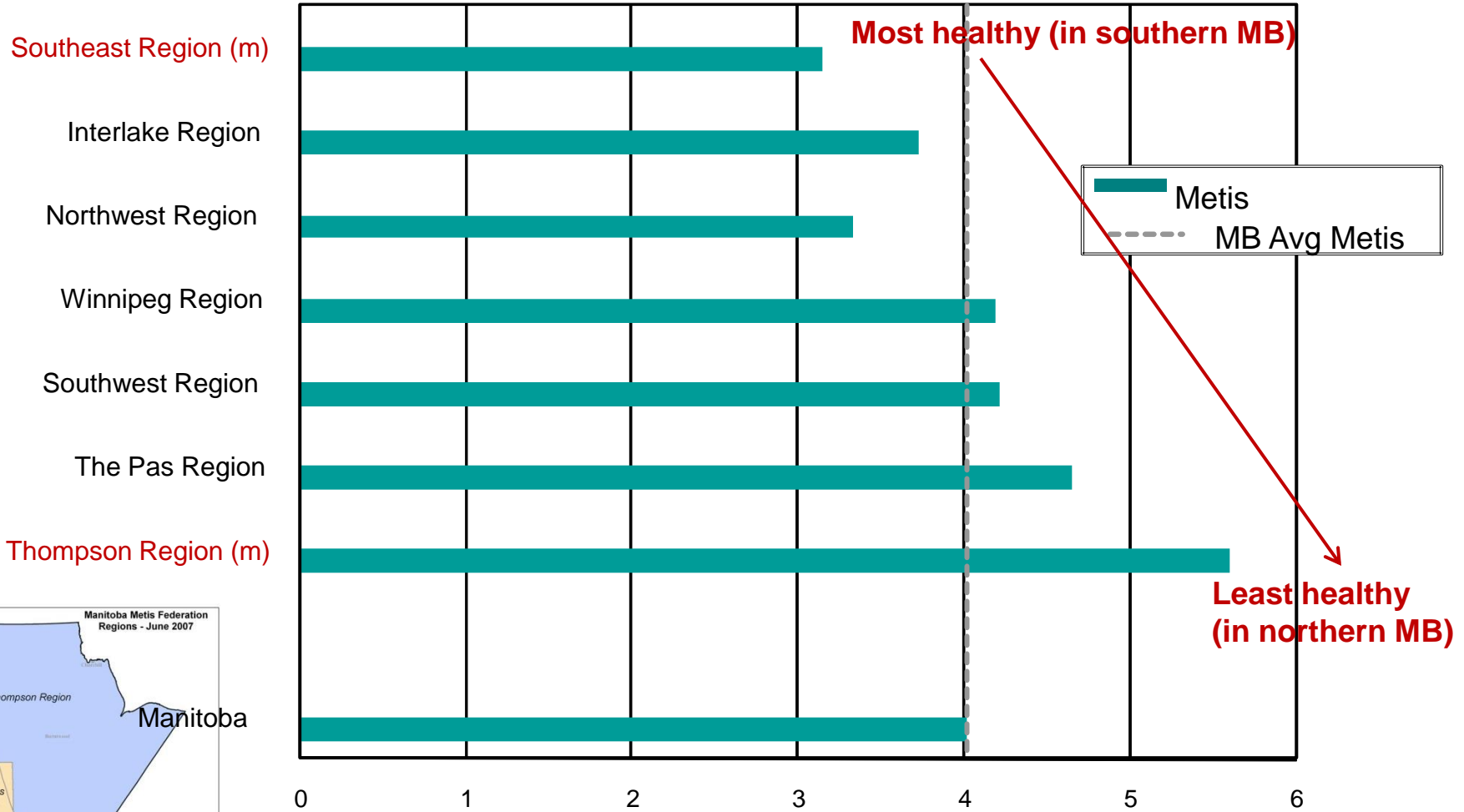
Age- & sex -adjusted annual rate per 1,000 residents aged 0-74 years



Premature mortality rates 21% higher for Metis (4.0 vs 3.3 per 1000 aged 0-74 years, p<.05).

Premature Mortality Rate by Metis Region, 2002 - 2006

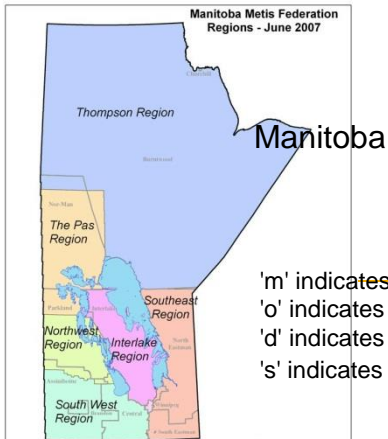
Age- & sex-adjusted annual rate per 1,000 Metis residents aged 0-74 years



Thompson Region (m)

Most healthy (in southern MB)

Least healthy (in northern MB)

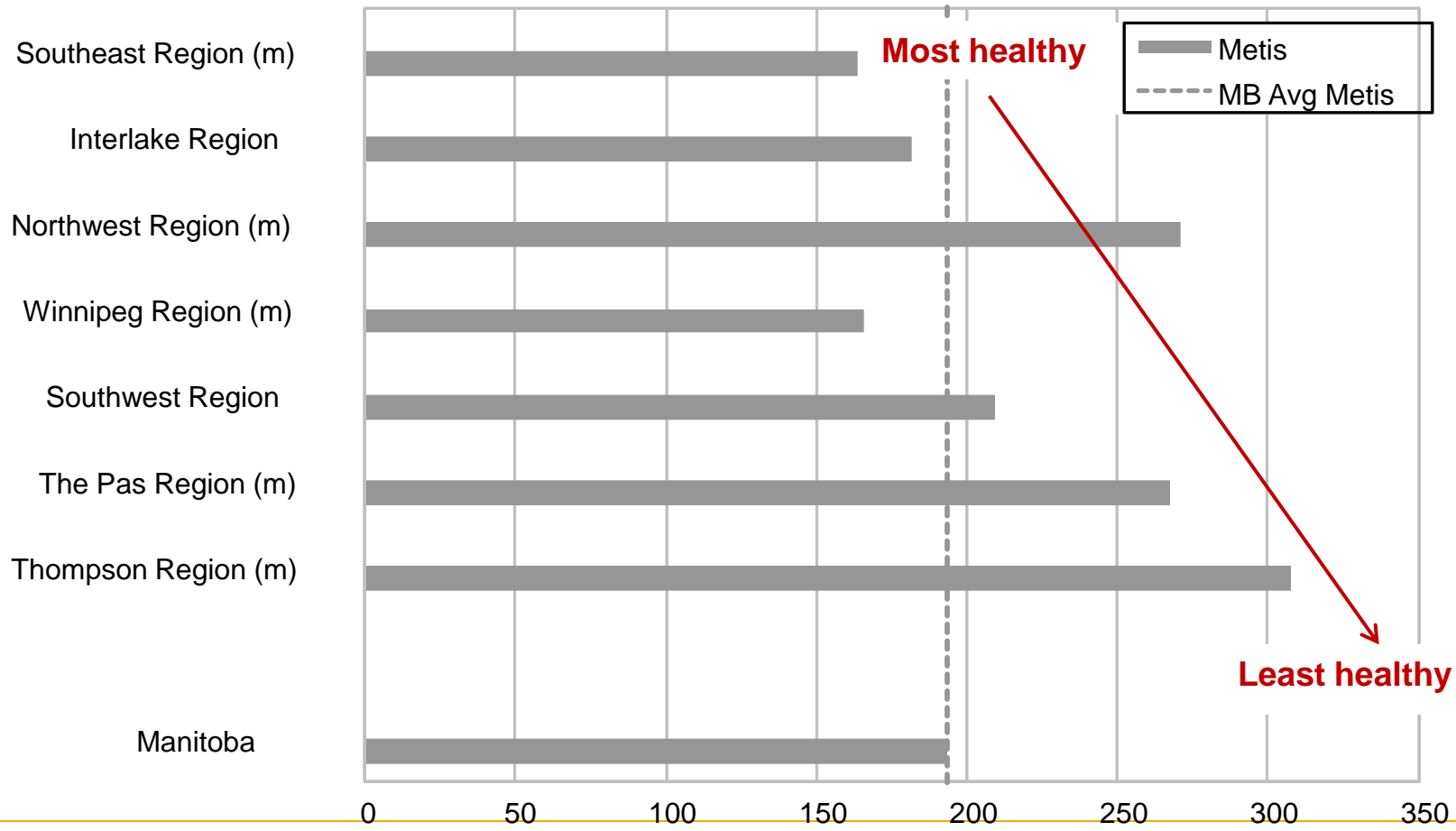


'm' indicates the area's rate for Metis was statistically different from Manitoba average for Metis
 'o' indicates the area's rate for all other Manitobans was statistically different from Manitoba average for all other Manitobans
 'd' indicates the difference between the two groups' rates was statistically significant for this area
 's' indicates data suppressed due to small numbers

So does health care use reflect underlying “need”?

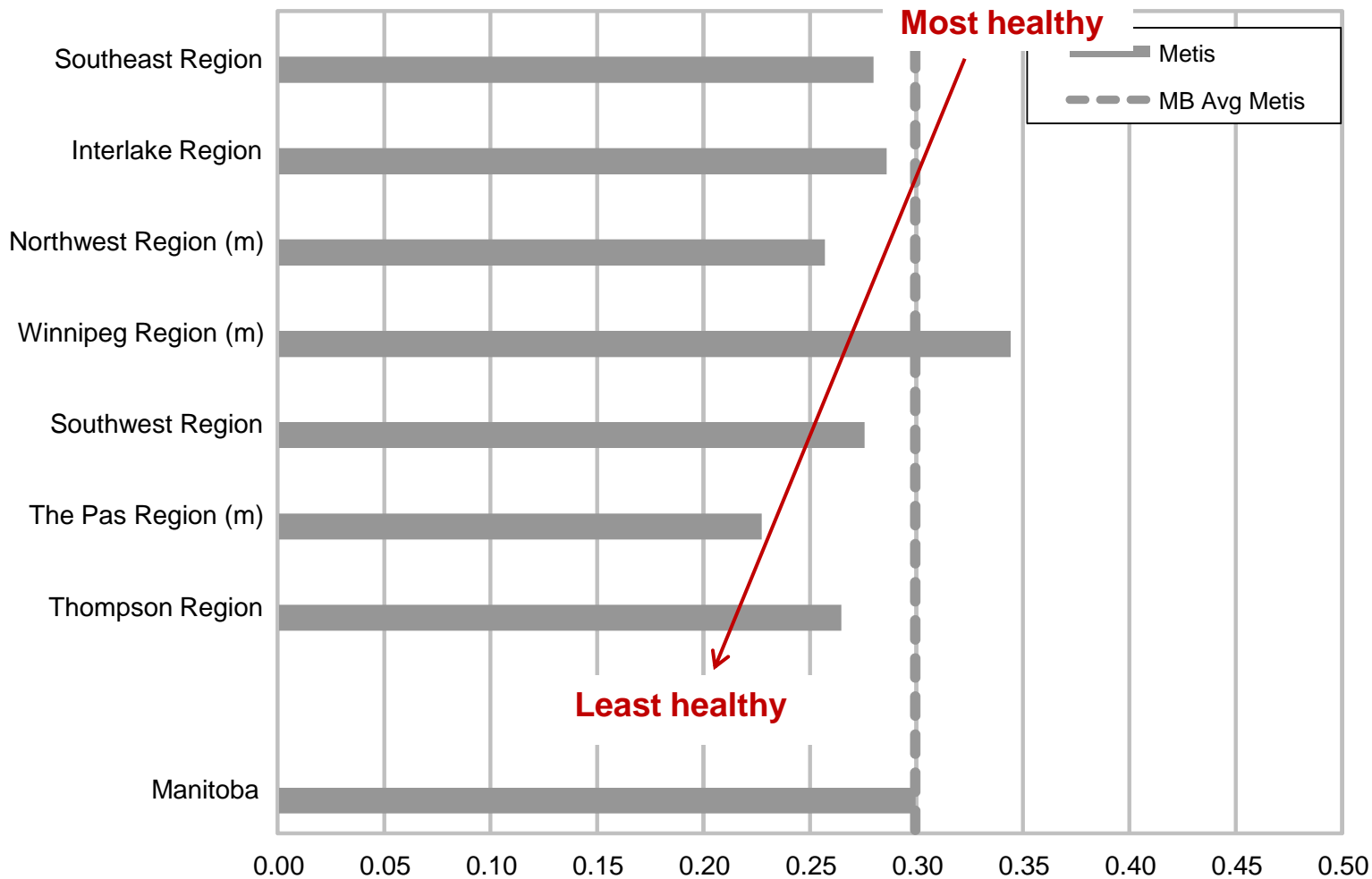
Figure 10.1.2: Total Hospital Separation Rate by Metis Region, 2006/07

Age & sex adjusted rate of hospital separations per 1,000 Metis residents



Note: Hospital rates 26% higher for Metis (194 vs. 154 per 1000, p<.05).

Figure 9.2.2: Ambulatory Consultation Rate by Metis Region, 2006/07
 Age- & sex-adjusted rate per Metis resident



'm' indicates the area's rate for Metis was statistically different from Manitoba average for Metis

Note: Consultation rates to specialists 7% higher for Metis (0.30 vs. 0.28 per person per year, $p < .05$). Low in the north for Metis.

Key Results Metis Report

MMF (Health & Wellness Department) is doing community dialogues through 7 Regional Knowledge Networks, to give context to the data

Burden of disease:

- Poorer health status for Metis compared to all other Manitobans mostly higher (13%-49%) rates of illness
- Youth health: high risk

Healthcare use:

- Health care use is higher for Metis reflecting greater need
- North has lower physician and consult visits than expected (different north “model” for Metis compared to First Nations?)

Prevention and screening:

- Metis rates mostly similar or better than all others;
- Continuity of care consistently associated with **higher uptake of prevention and screening**

Geography:

- Geographical variation provides context of “promising practices”

**MANITOBA CENTRE FOR HEALTH POLICY
ASSEMBLY OF MANITOBA CHIEFS**

The health and health care use of Registered First Nations people living in Manitoba: a population-based study (2002)

Research Team

MCHP: Patricia J. Martens, Ruth Bond, Laurel Jebamani, Charles Burchill, Noralou Roos, Shelley Derksen, Marcella Beaulieu, Carmen Steinbach, Leonard MacWilliam, Randy Walld, Natalia Dik

AMC: Doreen Sanderson and the Health Information and Research Committee of AMC, Marilyn Tanner-Spence, Audrey Leader

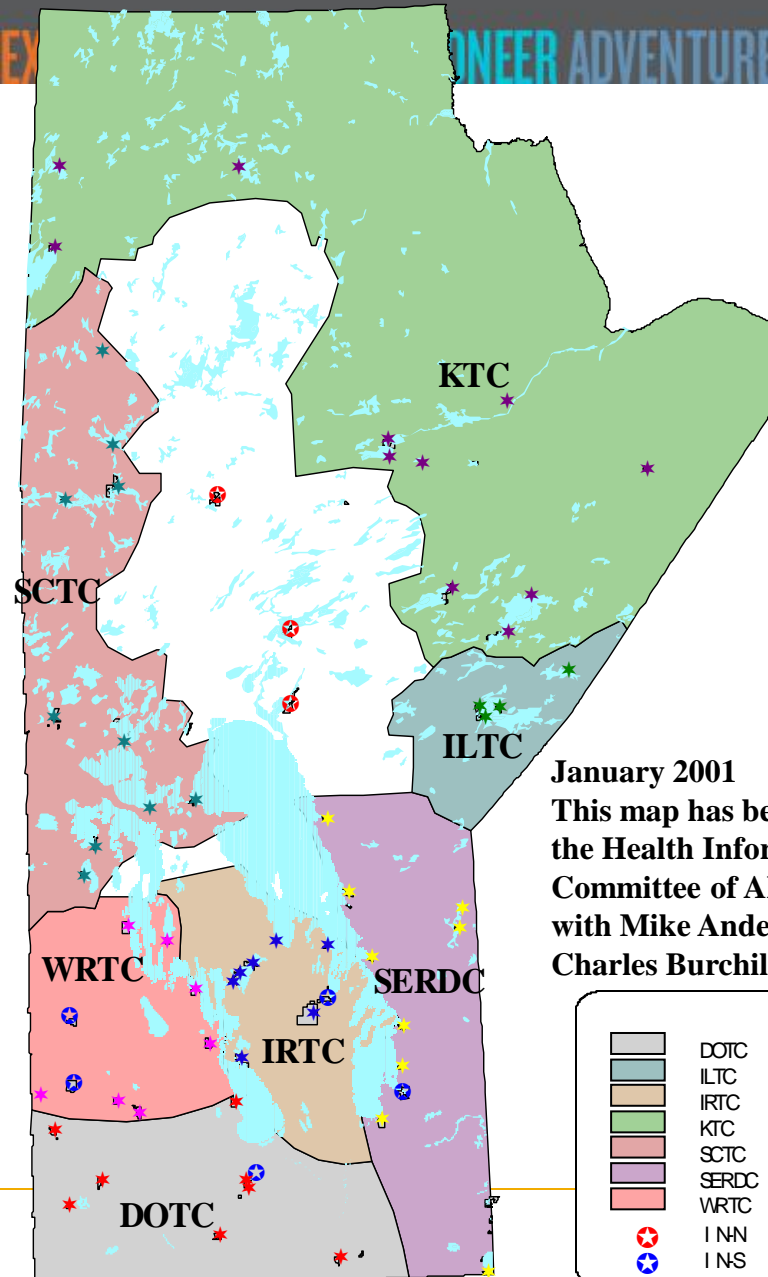
MB FN-CAHR: Brenda Elias, John O'Neil

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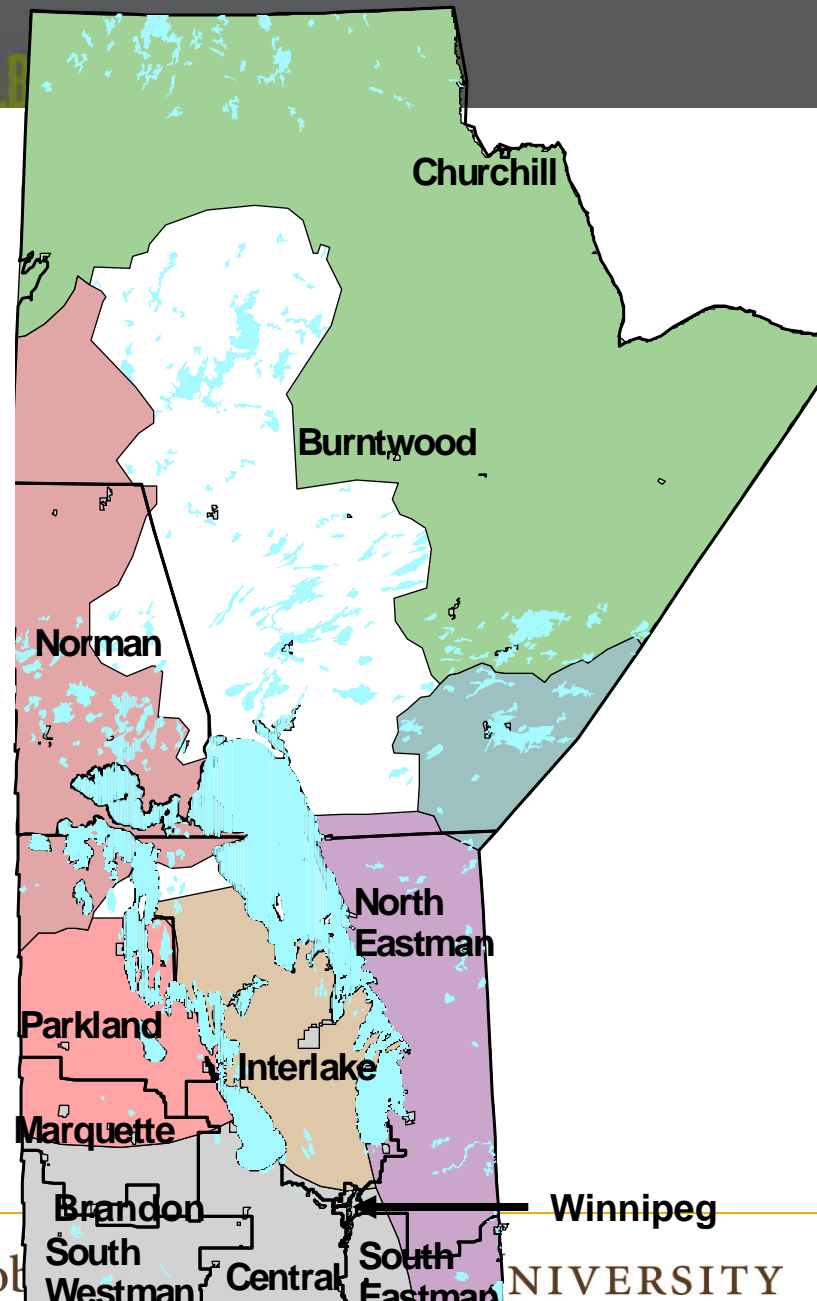
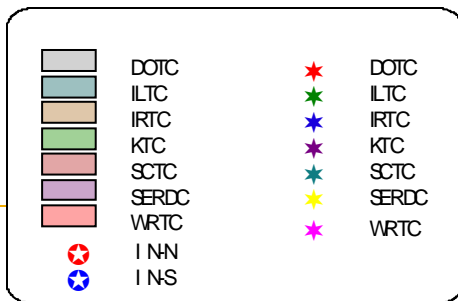
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OF MANITOBA

Note: report based upon linkage with 97,635 Registered First Nations over time (87,328 in 1999)



January 2001

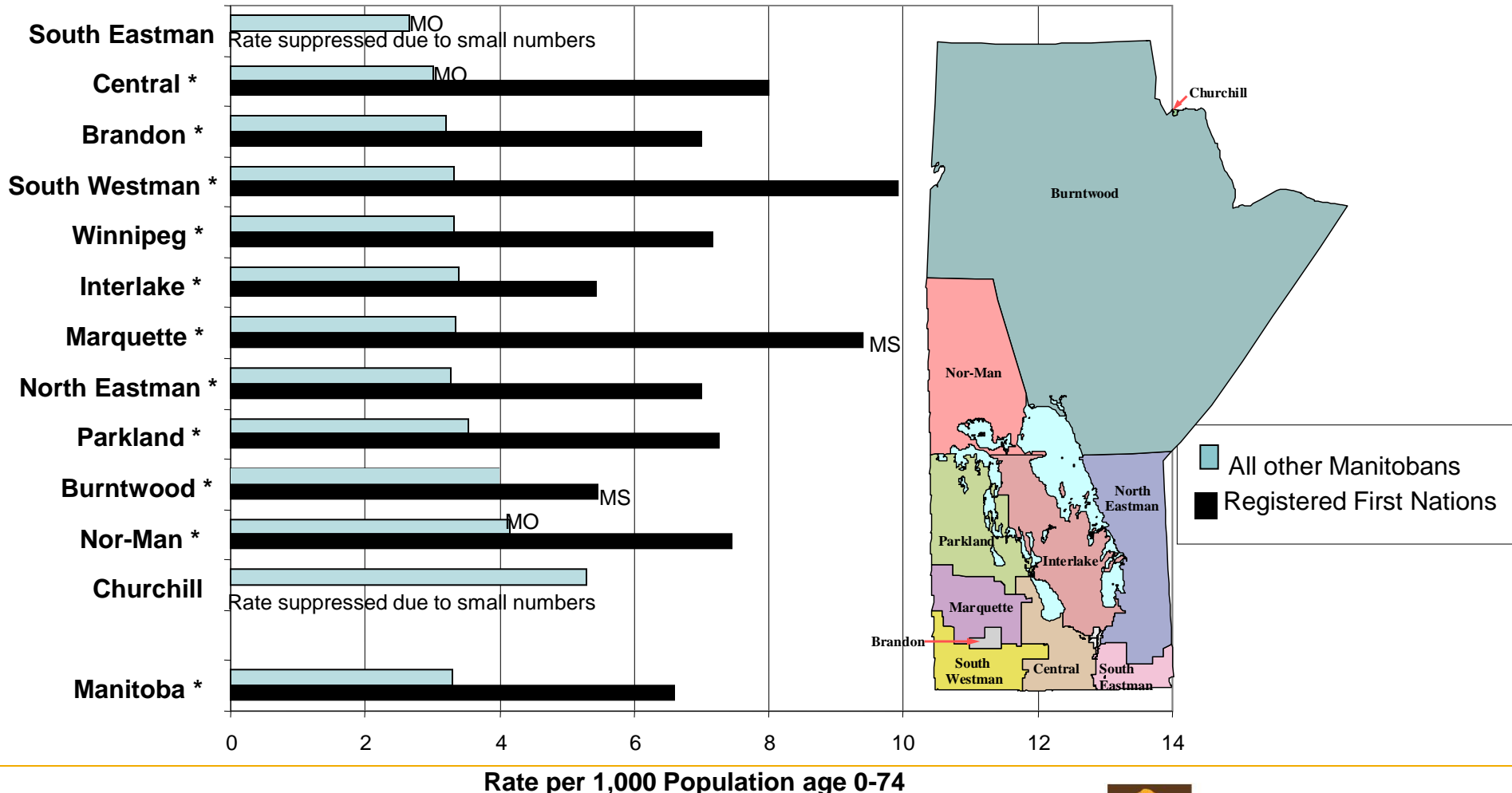
This map has been developed by the Health Information and Research Committee of AMC, in conjunction with Mike Anderson (MKO) and Charles Burchill (MCHP)



Direct Adjusted Premature Mortality Rate per 1,000 Population 0-74 years

Registered First Nations vs. All Other Manitobans by RHA

1995 - 1999

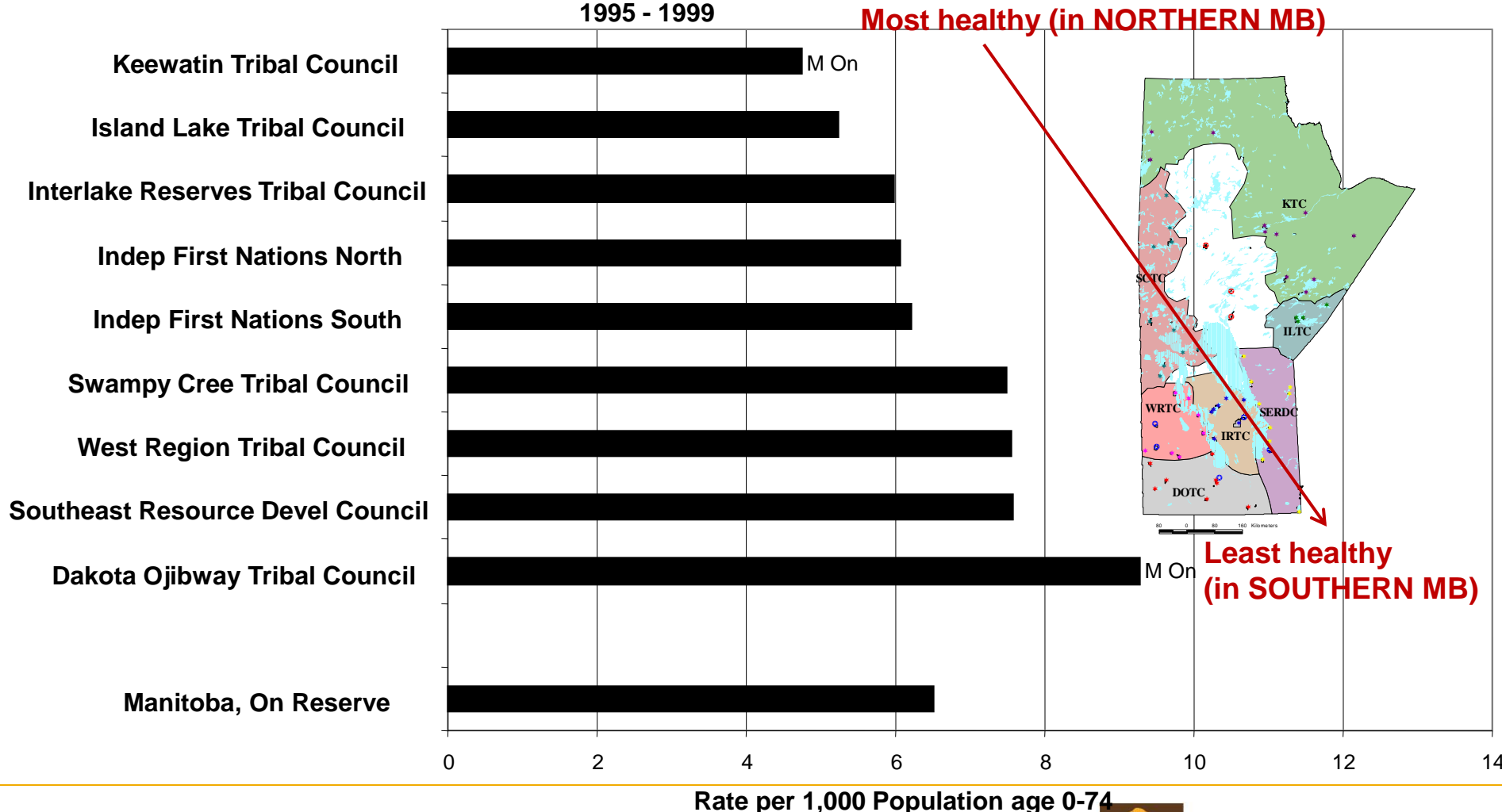


Premature mortality rates 200% higher for First Nations (6.6 vs. 3.3 per 1000 ages 0-74 years, p<.05).

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Direct Adjusted Premature Mortality Rate per 1,000 Population 0-74 years

by Tribal Council
1995 - 1999



Huge variation in PMR by Tribal Council: overall 6.1 per 1000
KTC (in north) 4.8 per 1000; DOTC (in south) 9.3 per 1000, both $p < .05$

So does health care use reflect underlying "need"?

Direct Adjusted Hospital Separation Rate per 1,000 Population

by Tribal Council
1998/1999

Most healthy (in NORTHERN MB)

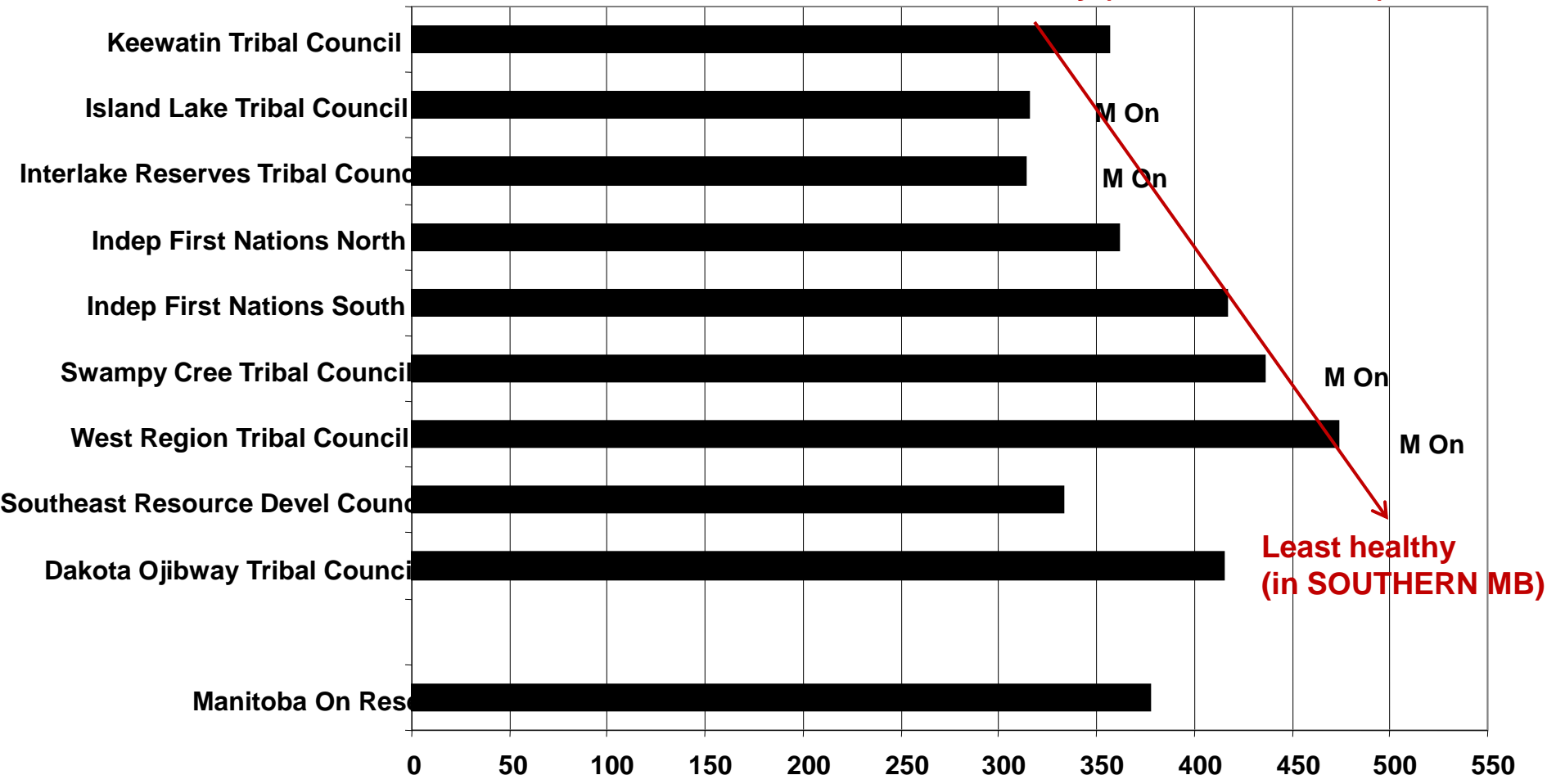
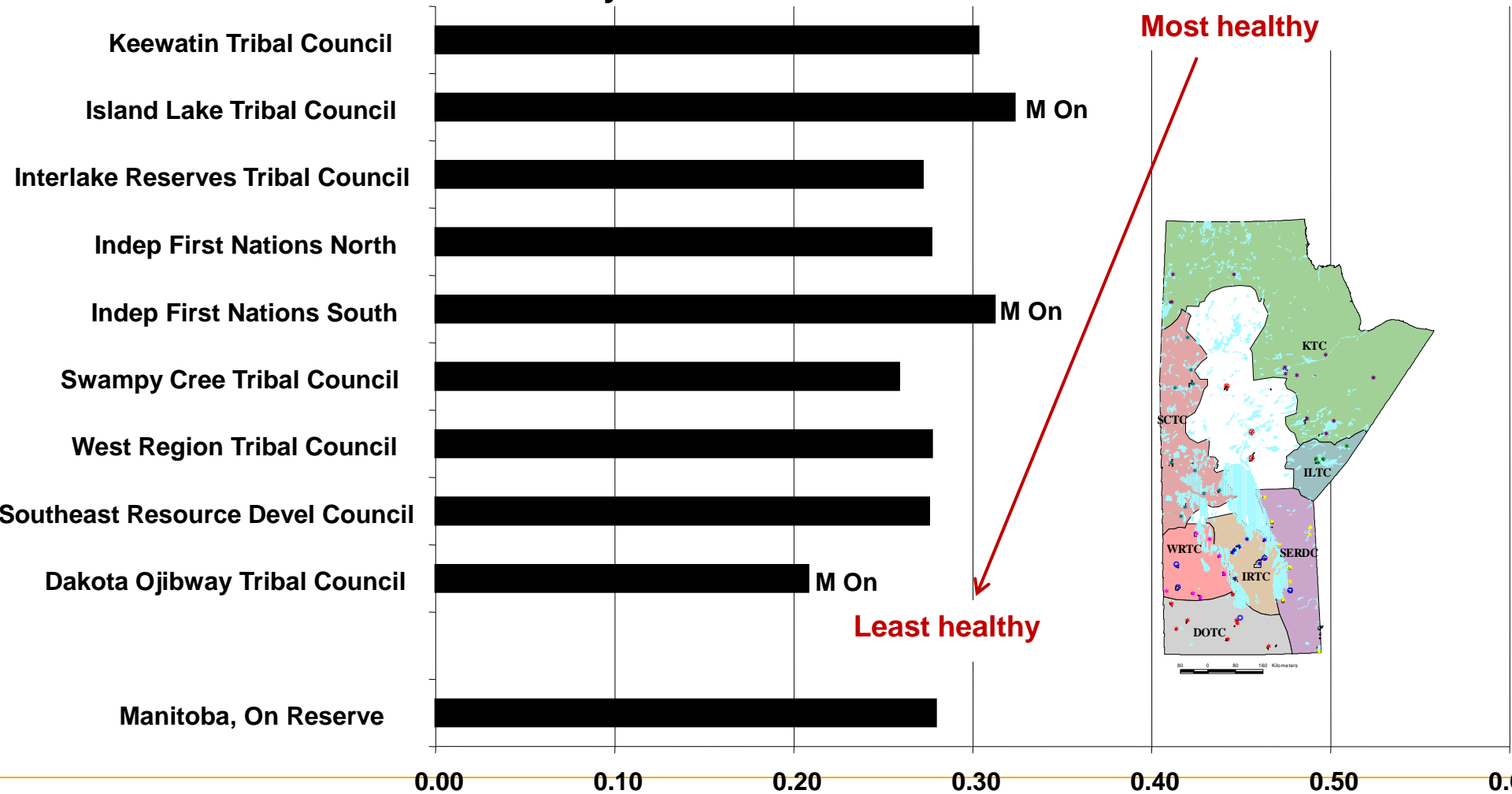


Figure 7.4: Direct Adjusted Ambulatory Consultation Rate, per person

by Tribal Council 1998/99



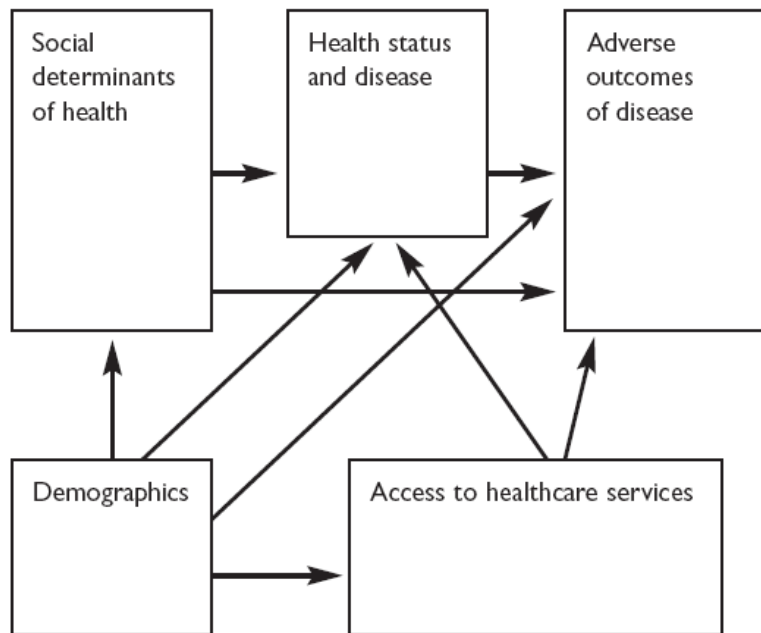
Note: Consult rates only 7% higher for First Nations (0.29 vs 0.27 per person per year , $p < .05$). But highest for selected north locations.

Key findings First Nations report:

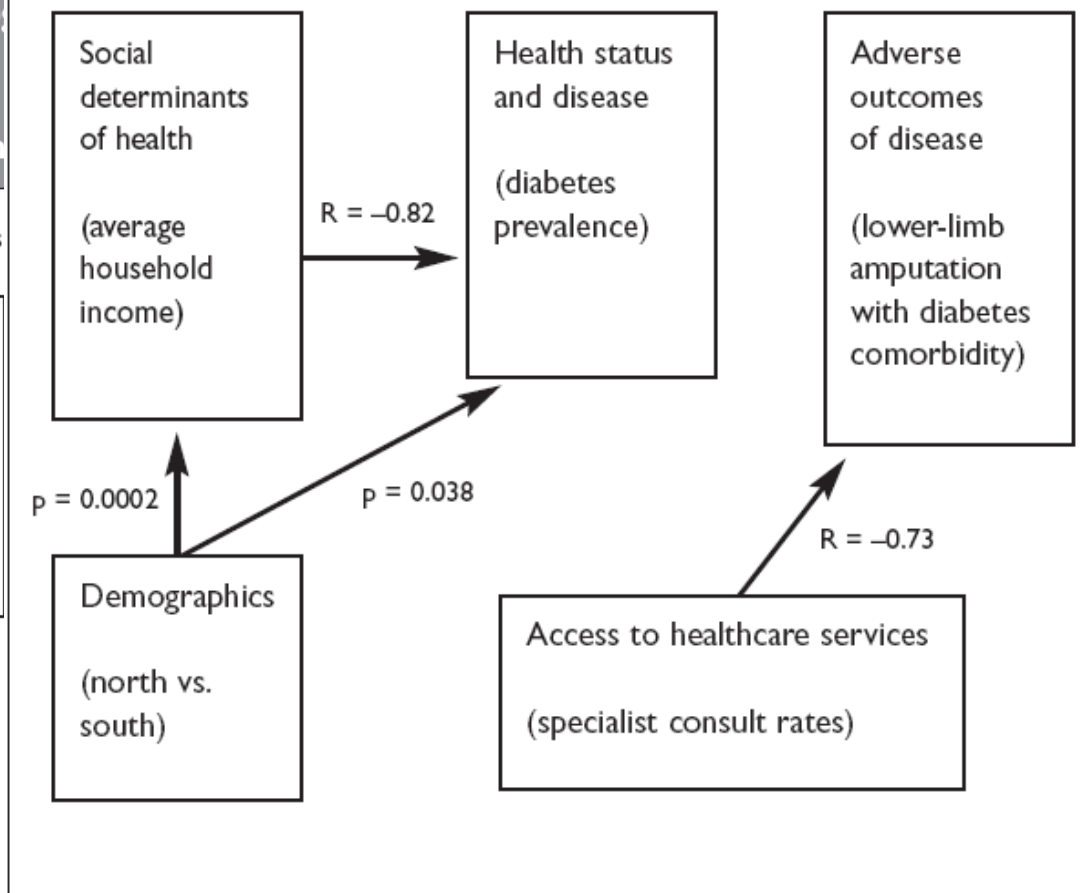
- Health status of Registered First Nations people is much poorer
- Higher overall use of physicians and hospitals reflect RFN poorer health status
- Consult rates do not reflect need; no relationship to proximity to urban centres
- Preventive care rates are lower
- Big differences in health status and health care use across Tribal Council areas (DOTC in south of concern)

Figure 2. Hypothesized and actual determinants of disease and adverse outcomes model, with observed ecologic correlations using Manitoba tribal council areas of on-reserve Registered First Nations population

Hypothesized model: Predictors of health outcomes



Actual predictors of health outcomes



*Solid lines in the "Actual Predictors" model indicate a statistically significant correlation coefficient "r" at $p < 0.05$ using ecologic associations with data from the 9 tribal council area levels. For measures of geography (north vs. south), p values are shown since these are derived from t-tests, not correlations.

Martens PJ, Martin B, O'Neil J, MacKinnon M. Distribution of diabetes and adverse outcomes in a Canadian First Nations population: Associations with health care access, socioeconomic and geographical factors. Canadian Journal of Diabetes 2007;31(2):131-139.



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Summary Comparisons... Metis and First Nations compared

Metis

- Poorer health
 - PMR 13% higher
- Greater use of healthcare
 - Hospitals 26% higher
 - Consults 7% higher
- Lower consults, poorer health in North
- Similar/better preventive care

First Nations

- Much poorer health
 - PMR 200% higher
- Greater use of healthcare
 - Hospitals 223% higher
 - Consults 7% higher
- Lower consults, poorer health in South
- Poorer preventive care

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www.umanitoba.ca/faculties/medicine/units/mchp/
(includes copies of all reports – full reports and four-page summaries)

Youtube video about our workplace ...

http://www.youtube.com/watch?v=r--a96JEuXo&feature=youtube_gdata

Martens P, Bartlett J, Burland E, Prior H, Burchill C, Huq S, Romphf L, Sanguins J, Carter S, Bailly A. Profile of Metis Health Status and Healthcare Utilization in Manitoba: A population-based study. Winnipeg, MB: Manitoba Centre for Health Policy and Manitoba Metis Federation, June 2010.

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Luo ZC, Wilkins R, Heaman M, Smylie J, **Martens PJ**, McHugh NGL, Labranche E, Simonet F, Wassimi S, Minich K, Fraser WD. Birth outcomes and infant mortality among First Nations, Inuit, and non-Indigenous women by northern versus southern residence, Quebec. *J Epidemiol Community Health* 2012;**66**:328-333 doi:10.1136/jech.2009.092619

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Martens PJ. Increasing breastfeeding initiation and duration at a community level: an evaluation of Sagkeeng First Nation's community health nurse and peer counsellor programs. *Journal of Human Lactation* 2002;18(3):236-246.

Young TK, **Martens PJ**, Taback SP, Sellers EA, Dean HJ, Cheang M, Flett B. Type-2 Diabetes in Canadian Aboriginal Children: prenatal and early infancy risk factors. *Arch Pediatr Adolesc Med* 2002;156(7):651-655.

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