Population Health Intelligence for Public Health and Health System Planning and Innovation:

Perspectives from the Canadian Population Health Initiative of CIHI

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Canadian Institute for Health Information (CIHI)

Who We Are

- Established in 1994, CIHI is an independent, not-for-profit corporation that provides essential information on Canada's health system and the health of Canadians. Funded by federal, provincial and territorial governments, we are guided by a board of directors made up of health leaders across the country.

Our Vision

- To help improve Canada's health system and the well-being of Canadians by being a leading source of unbiased, credible and comparable information that will enable health leaders to make better-informed decisions.

The Canadian Population Health Initiative of CIHI

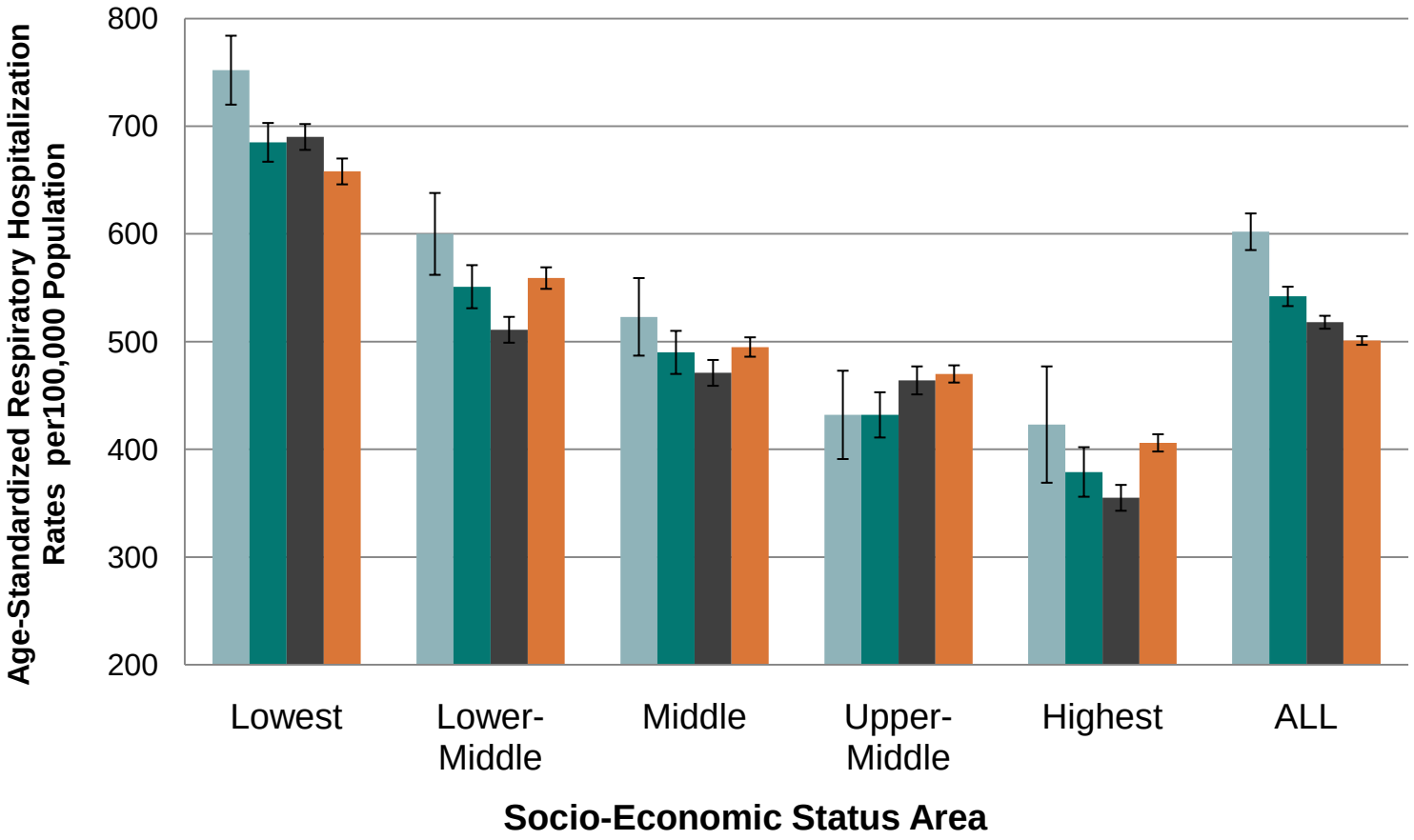
- CPHI's mission is twofold:
  - To foster a better understanding of factors that affect the health of individuals and communities; and
  - To contribute to the development of policies that reduce inequities and improve the health and well-being of Canadians.

Recently released CPHI Reports (Research, Analysis and Knowledge Support)

- Urban Physical Environments and Health Inequalities (2011)
  - explores two aspects of the urban physical environment known to negatively affect health: outdoor air pollution and heat extremes
  - found that those who are already more vulnerable to poor health may be at increased risk of being exposed to the effects of air pollution and heat extremes because of the areas in which they live.
- Analysis in Brief: Hospitalization Disparities by Socio-Economic Status for Males and Females (2010)
  - examines the size and cost of disparities by socio-economic status and sex in hospitalization rates for ambulatory care sensitive conditions and mental illness (conditions for which hospitalization could potentially be avoided with adequate primary health care)

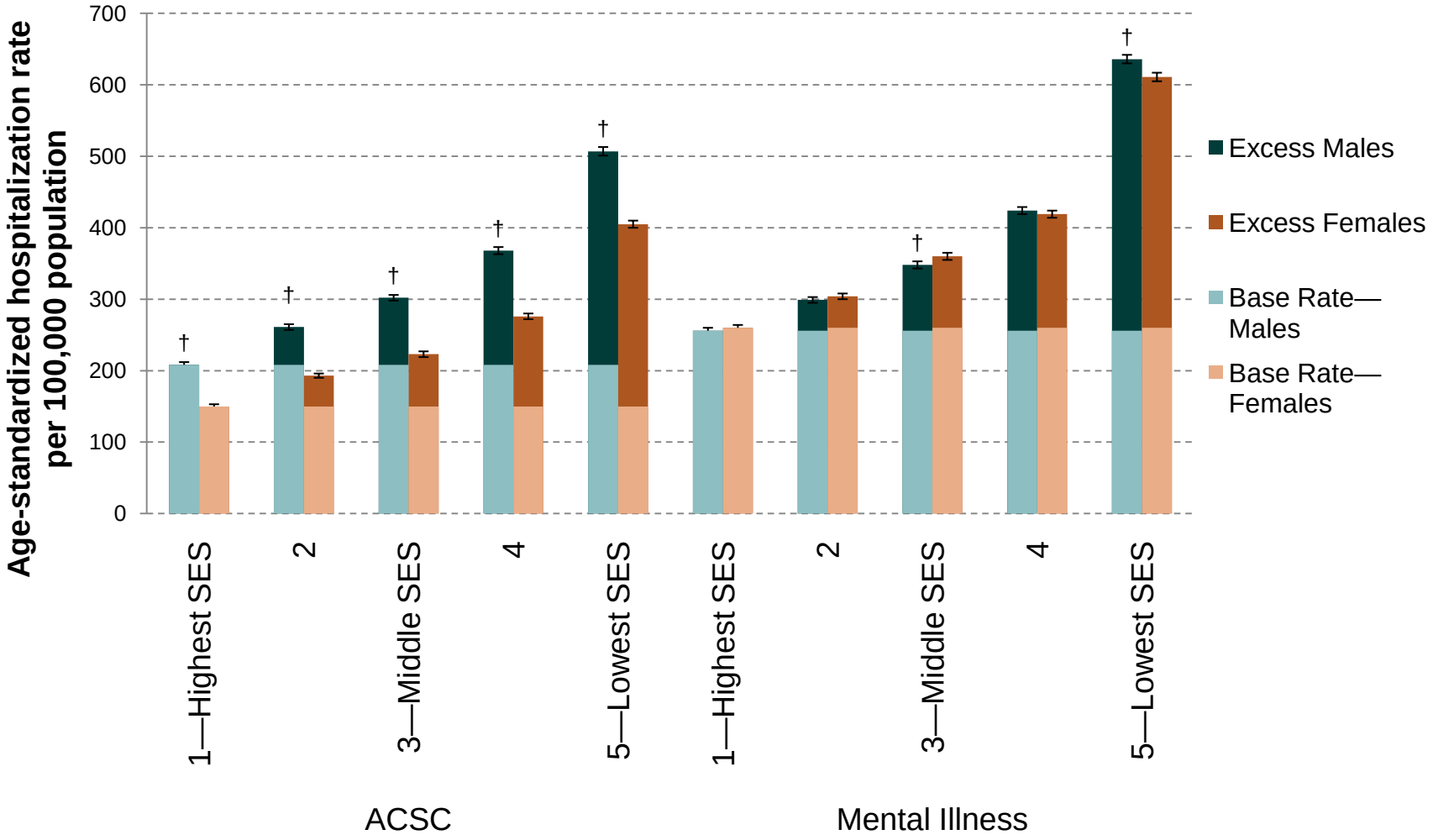
Residential proximity to a source of pollution is not as strong an influence on hospitalizations for circulatory and respiratory diseases as socio-economic status.

Age-Standardized Rates of Hospitalization for Respiratory Diseases by Residential Proximity to Pollutants and Socio-Economic Status



Source: Discharge Abstract Database, FY2007-08; MedEcho, FY2007-08; National Pollutant Release Inventory, 2007.

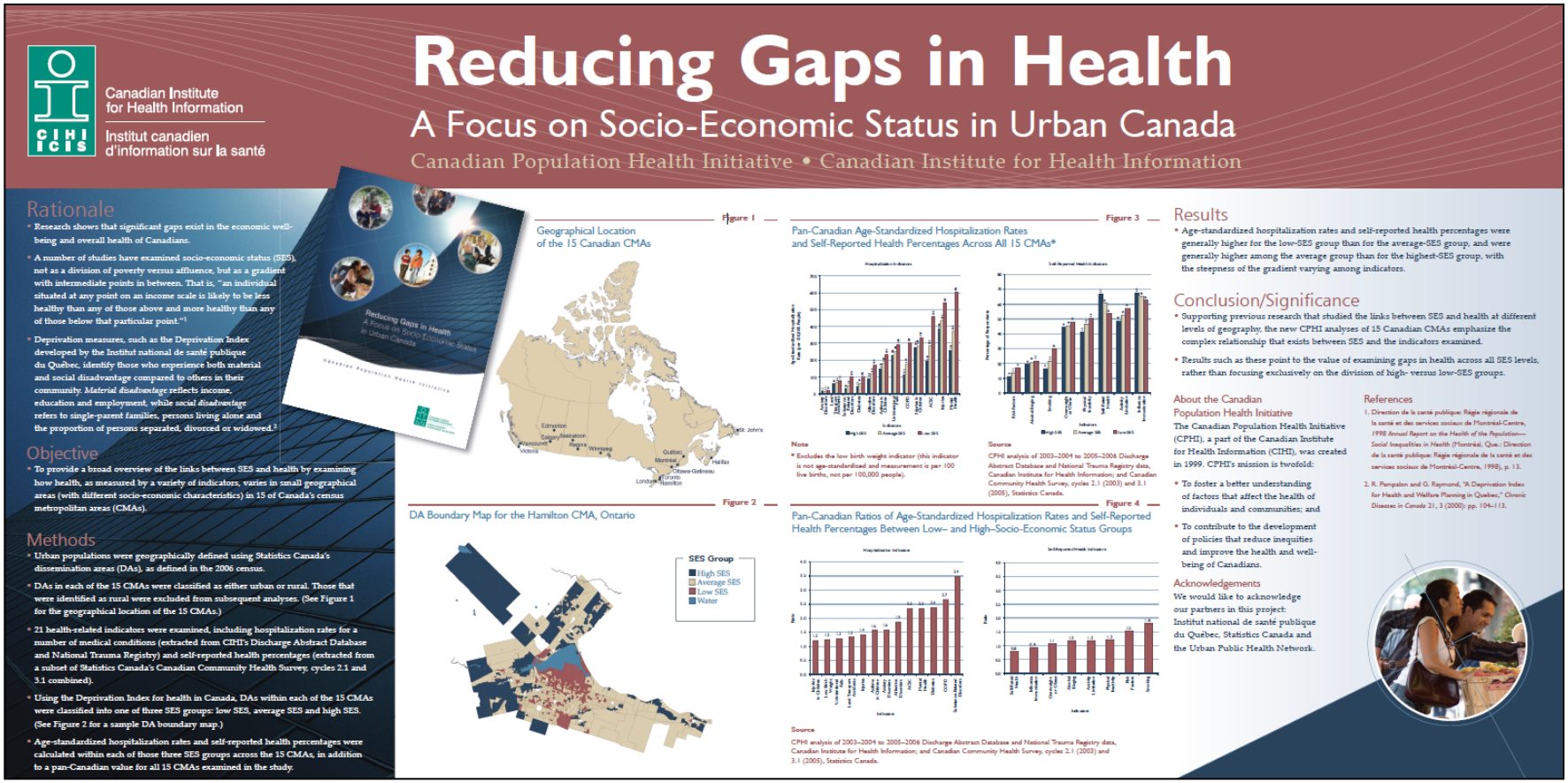
For ACSC and mental illness total excess hospitalization rates are higher for males than females



Recently released CPHI Reports (Policy Analysis and Decision Support)

- Population Health Intervention Research Casebook (2011, in partnership with CIHR's IPPH)
  - describes research related to healthy weights and mental health exploring what works and what does not work about program and policy interventions to address health equity issues at a population level
- Recognizing and Exploring Positive Mental Health—Policy Dialogue: Synthesis and Analysis (2011)
  - consolidates information and ideas shared by decision makers, program planners and community leaders who participated in a facilitated dialogue around the concept of positive mental health and wellness

Reducing Gaps in Health:
A Focus on Socio-Economic Status in Urban Canada (2009)

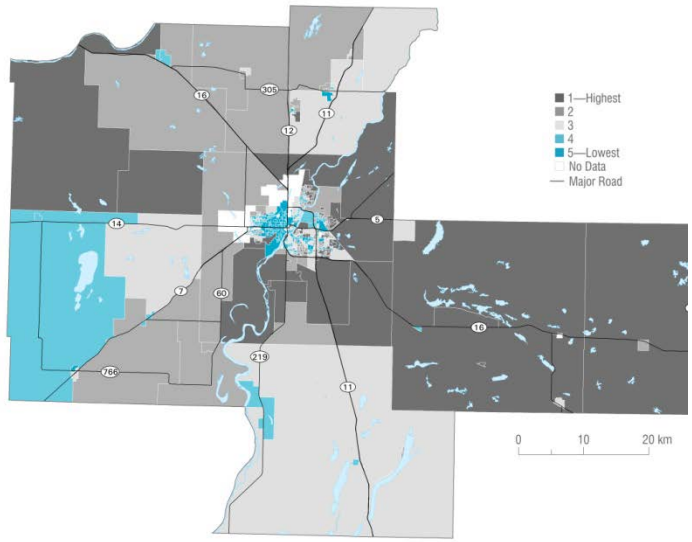


Data Briefs (33 CMAs):
Exploring Urban Environments and Inequalities in Health

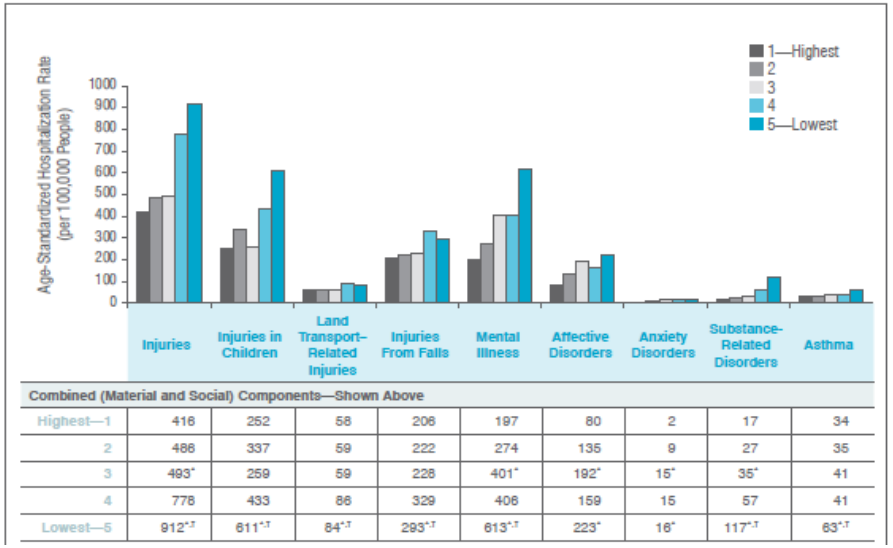
Exploring Urban Environments and Inequalities in Health

Saskatoon Census Metropolitan Area

Distribution of Socio-Economic Status in the Saskatoon CMA—Combined (Material and Social) Components of the INSPQ Deprivation Index at the Dissemination Area Level

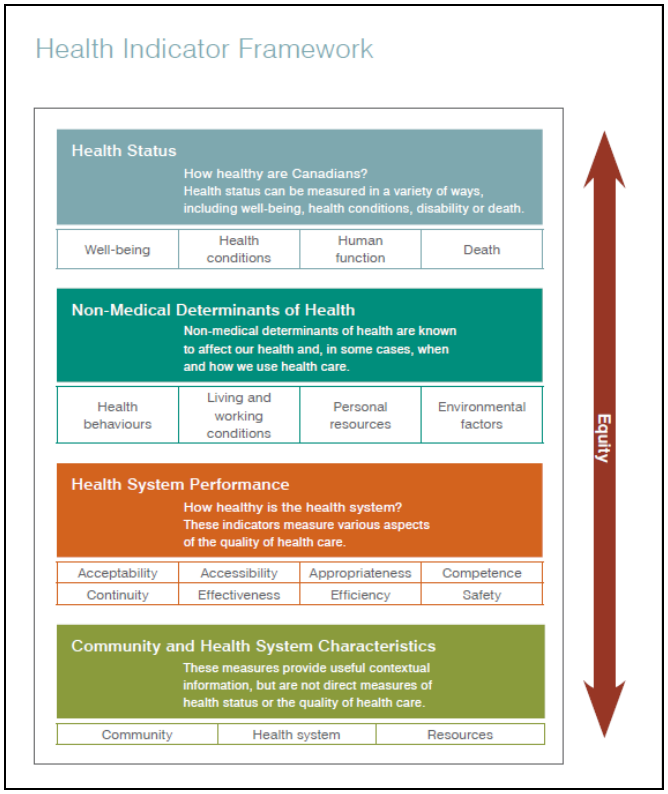


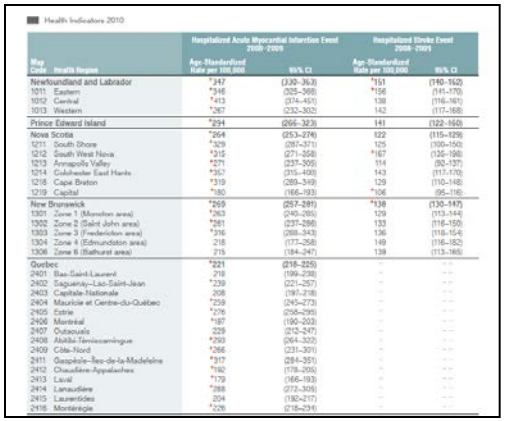
Age-Standardized Hospitalization Rates by Socio-Economic Status Group for the Saskatoon CMA

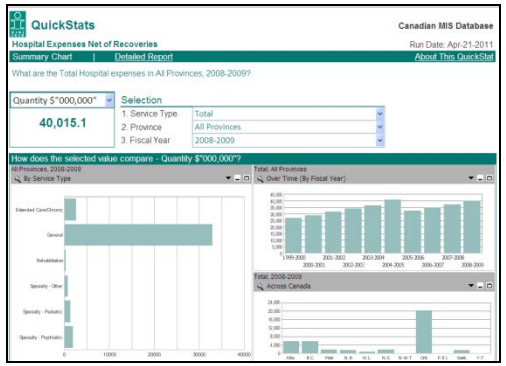


Combined (Material and Social) Components—Shown Above	Injuries	Injuries in Children	Land Transport–Related Injuries	Injuries From Falls	Mental Illness	Affective Disorders	Anxiety Disorders	Substance-Related Disorders	Asthma
Highest—1	416	252	58	208	197	80	2	17	34
2	486	337	59	222	274	135	9	27	35
3	483*	259	59	228	401*	192*	15*	35*	41
4	778	433	86	329	406	159	15	57	41
Lowest—5	912*,†	611*,†	84*,†	293*,†	613*,†	223*	16*	117*,†	63*,†

CIHI Indicators
2010: Measuring Disparities in the Health System







Determinants of Mental Health and Resilience Report Series

- CPHI reports:
  - Homelessness – 2008
  - Delinquency & Criminal Activity – 2008
  - Exploring Positive Mental Health -2009
- Commissioned papers:
  - Mentally Health Communities – 2008
  - Mentally Health Communities-Aboriginal Perspective – 2009

CPHI Education Activities

- Applying a Population Health Perspective to Health Planning and Decision Making Workshop
  - For local health system managers and front-line planners
  - Over a thousand participants in the full day in person workshops, and at abbreviated sessions (e.g. CPHA)
  - Similar content available as an e-learning module for self-study

- E-learning modules
  - Promoting Healthy Weight
  - Improving the Health of Young Canadians
  - Mental Health and Homelessness in Canada
  - Linking Mental Health, Delinquency and Criminal Activity
  - Exploring Positive Mental Health in Canada
  - Identifying and Acting on Inequities in Health *(in development)*

Webex Seminars

- Archived audio and powerpoint materials from online discussion forums and panel presentations:
  - Casebook for Population Health Intervention Research
  - Competencies for Population Health Intervention Research
  - Reducing Gaps in Health
  - Exploring Positive Mental Health
  - Mental Health, Delinquency and Criminal Activity

Upcoming Work by CPHI

- Upcoming reports
  - Obesity in Canada (joint report with PHAC)
  - Urban Physical Environments Policy Review and Synthesis Product
  - Cardiovascular healthcare for First Nations, Inuit and Métis Populations
  - Analysis in Brief: Disparities in Primary Health Care and Ambulatory Care Sensitive Conditions
  - Health System Efficiency in Canada
- Population Health Infostructure Project (feasibility study)
- Advanced Education Workshops (under consideration):
  - Accessing and Utilizing Population Health Data and Information
  - Identifying and Assessing Interventions for Population Health

Planning process currently underway at CIHI

- CIHI Board of Directors are meeting in June for a strategic planning session (including mandate, scope, vision, values) and charting the course for the next 5 years.

Regional Use of Data for Planning and Innovation

- Local / regional investment in infrastructure and capacity required to make best use of population health data for health system planning.
- Population health data should be used for both public health and preventive services planning as well as overall health system planning and quality improvement.
- E.g. Health Status reports, Data Portals, Surveillance and Research, Health Equity reports and equity audits,

Saskatoon Health Region

Public Health Observatory

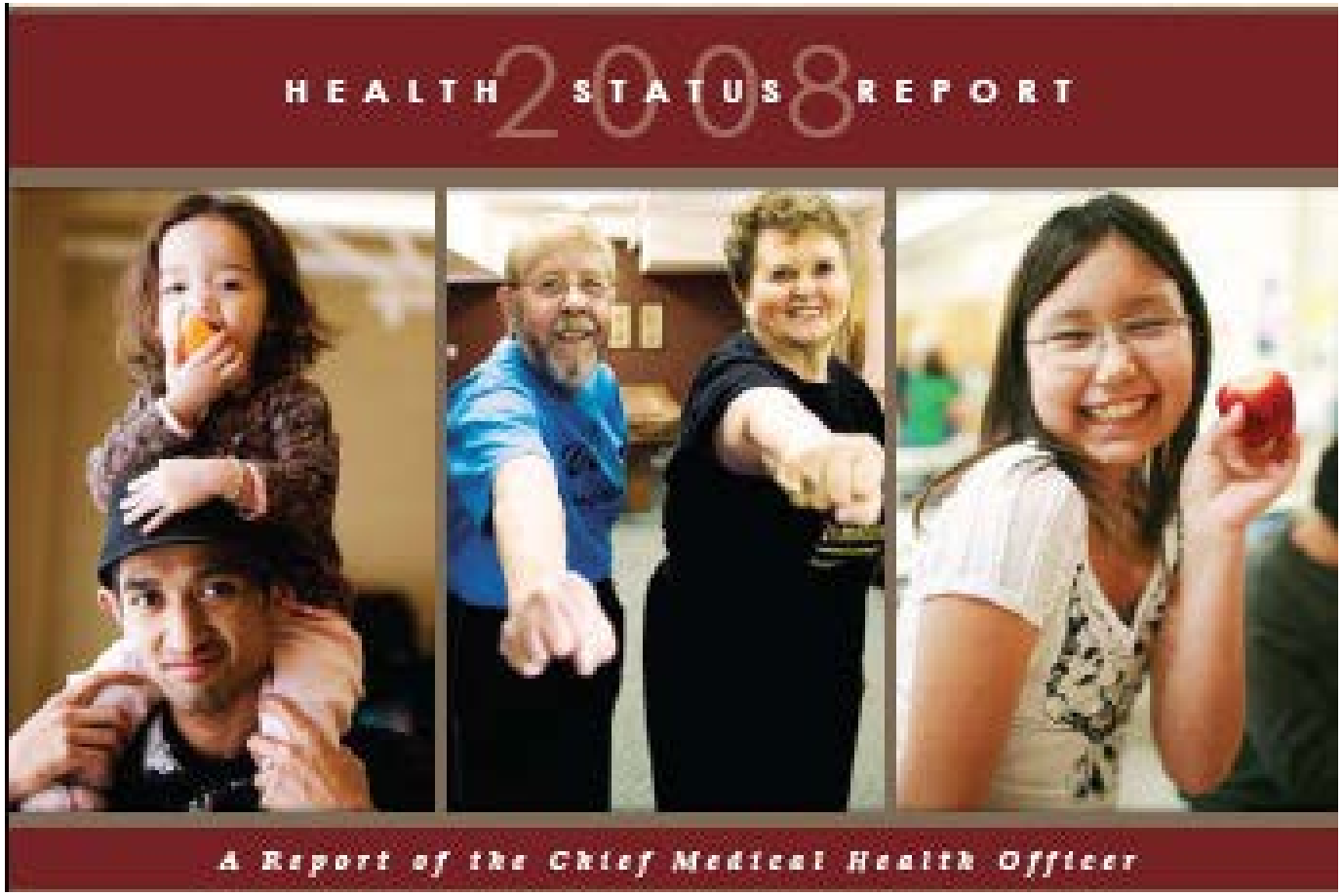
Public Health Services

Evidence, Action, Equity: Making Population Health Information Count

In partnership, we aim to improve health and reduce health inequity through surveillance, research, and knowledge transfer and exchange to inform decision-making, policy, and service delivery.

HEALTHIEST PEOPLE | HEALTHIEST COMMUNITIES | EXCEPTIONAL SERVICE

Reports for Health Planning



Life expectancy at birth, SHR and core neighbourhood residents, 1998 - 2004

	1998	2001	2004
SHR	79.0	79.4	79.8
Core Nhds	75.4	75.0	74.4

Health Status Reports

- Required by provincial government for RHA planning
- Include key health status indicators and conditions that influence health
- Analysis and commentary in the areas of demographics, reproductive and infant health, morbidity and mortality, communicable disease, social environment, physical environment, health behaviours
- Includes CMHO recommendations for SHR, partners and province

Data portals

- CommunityView
  - The Comprehensive Community Information System for Saskatoon

COMMUNITY VIEW™ COLLABORATION *Building Evidence for Action*

Site Catalogue

Home | The Catalogue | Hot Topics | Our Partners | Collaboration | About Us | Our Tools | Our Data

Data and Documents

Find, map and chart the data you need!

click here »

Hot Topics

A compilation of prepared data, maps, charts and documents for issues of importance in our community.

click here »

Learn more

Information about the CommunityView Collaboration.

click here »

Welcome to the CommunityView Collaboration

Our goal is to provide you with relevant, reliable, local information and evidence to inform your planning, decision-making, and policy for Saskatoon and surrounding area.

We bring together **data** from different human service sectors and community based organizations, and the many **resources, projects, initiatives** and **research** that are contributing to the well-being of Saskatoon.

Ultimately, through community collaboration, we are *Building Evidence for Action!*

Latest news

27.05.2010
New Resources and Hot Topics

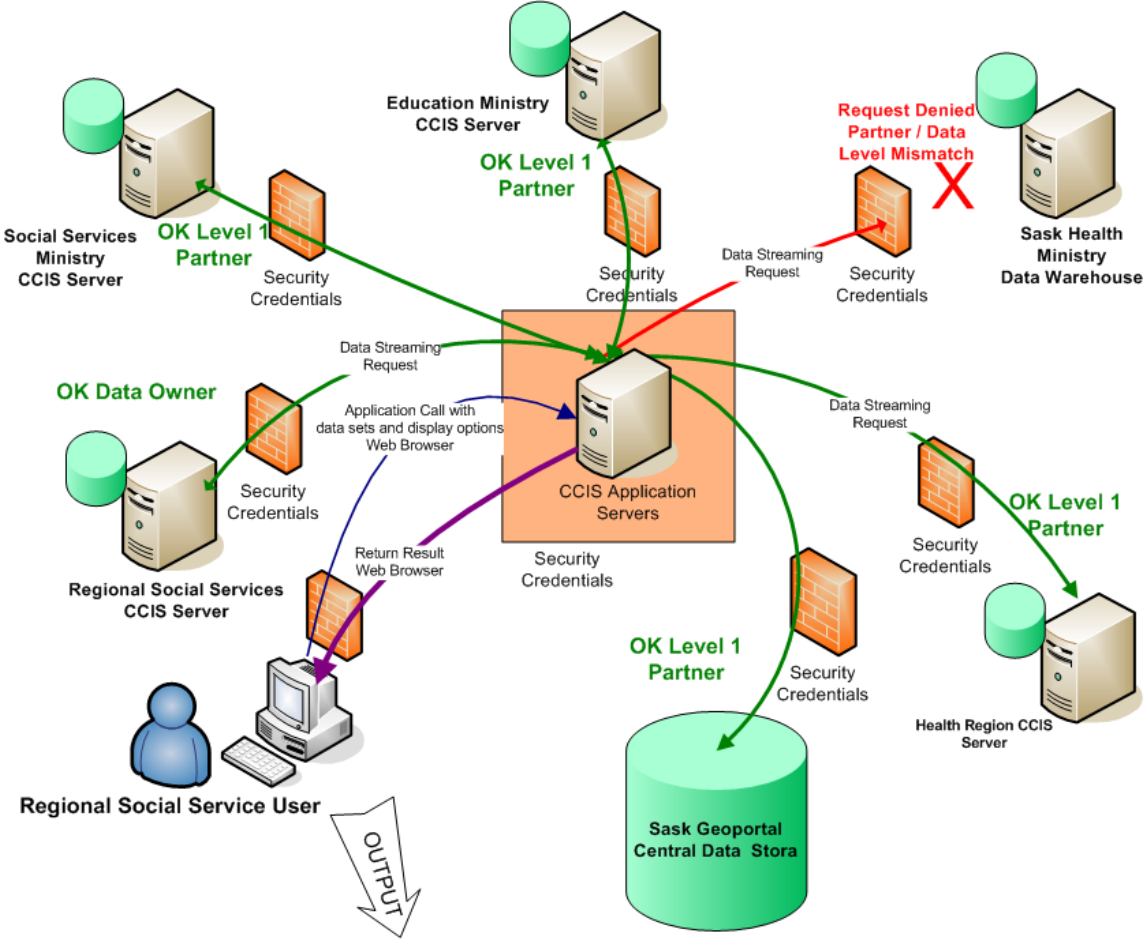
Check out the new Immunization Hot Topic - a prepared information package regarding immunization in Saskatoon.

view hot topics

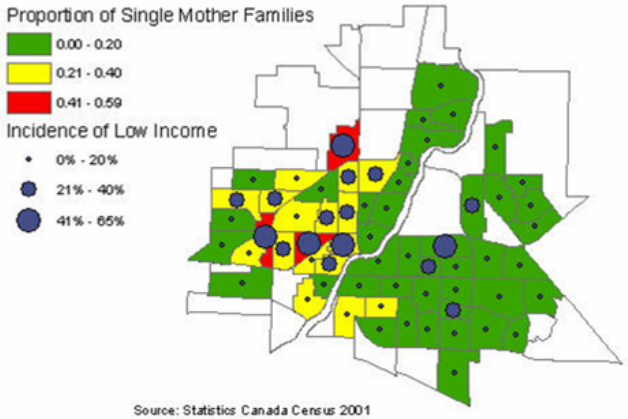
27.05.2010
Survey

Details about the survey can be placed here.

take the survey



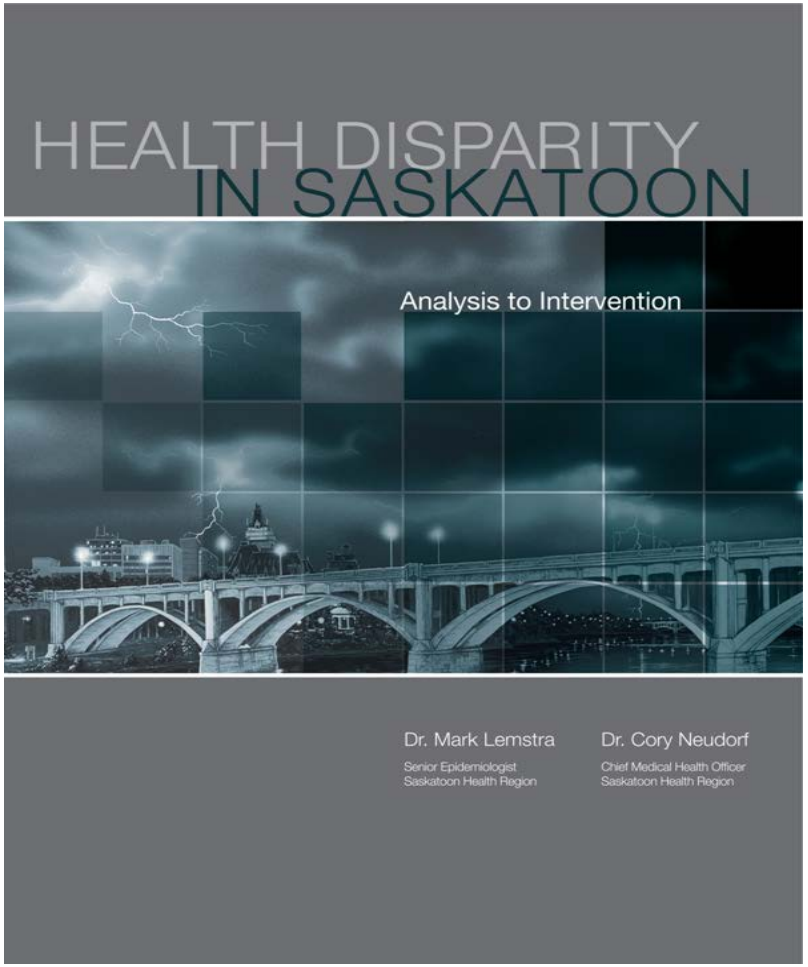
Poverty, Single Mother Families - Saskatoon, 2001



Source: Statistics Canada Census 2001

Surveillance and Research

- Health Disparities Analysis, Research, and Interventions
- Supported by Regional Intersectoral Committee
- Includes scoping of issue, comparisons with other cities, analysis of underlying causes, and a review of evidence-based policy options to adopt
- Poverty Reduction Action Plan – summer 2011



A Population Health approach for the rest of the health system

- Health Care equity audits
  - In public health
    - progress to date from immunization initiatives
  - In a medical area
    - Data from diabetes audit, and plans for interventions with specialists, primary care, CDM&P, public health
  - In a surgical area
    - Data from surgical audit and plans for further analysis and intervention

Health Care Equity audit: Immunisation

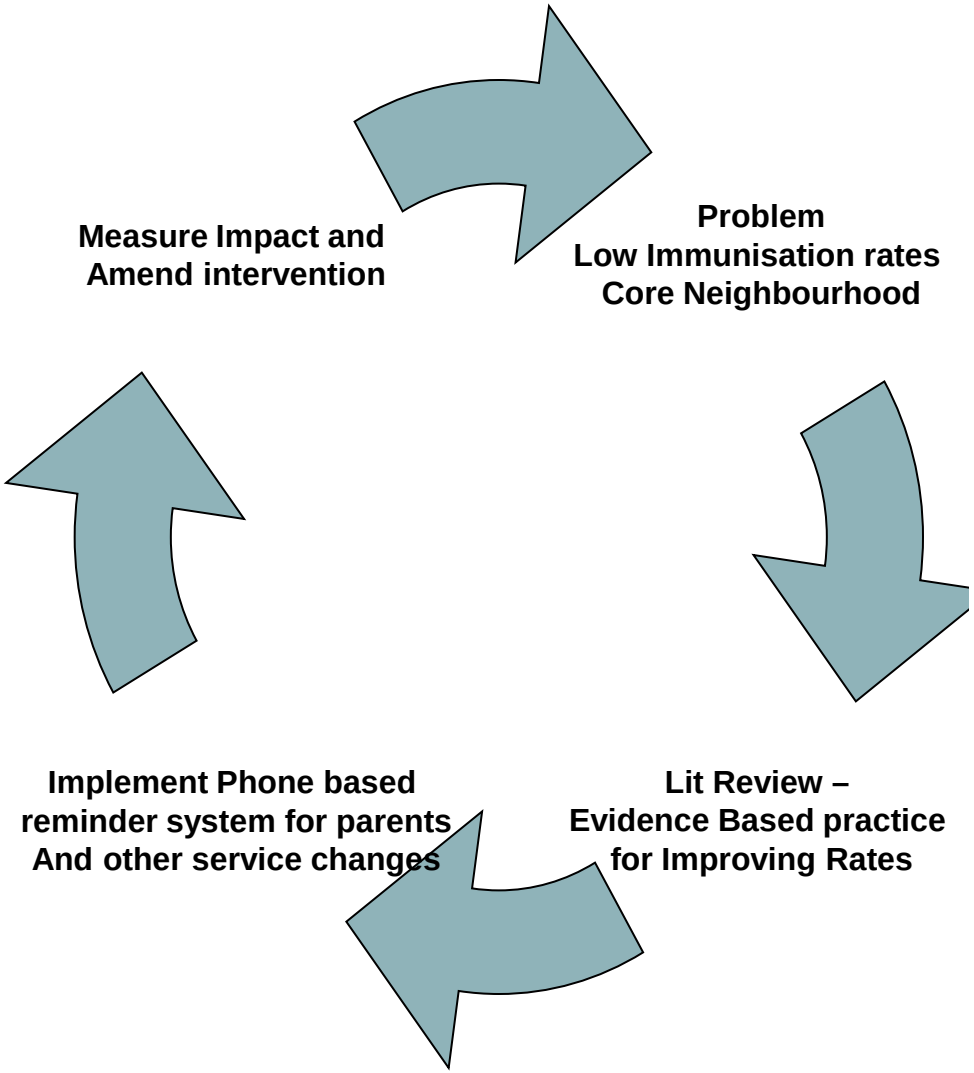
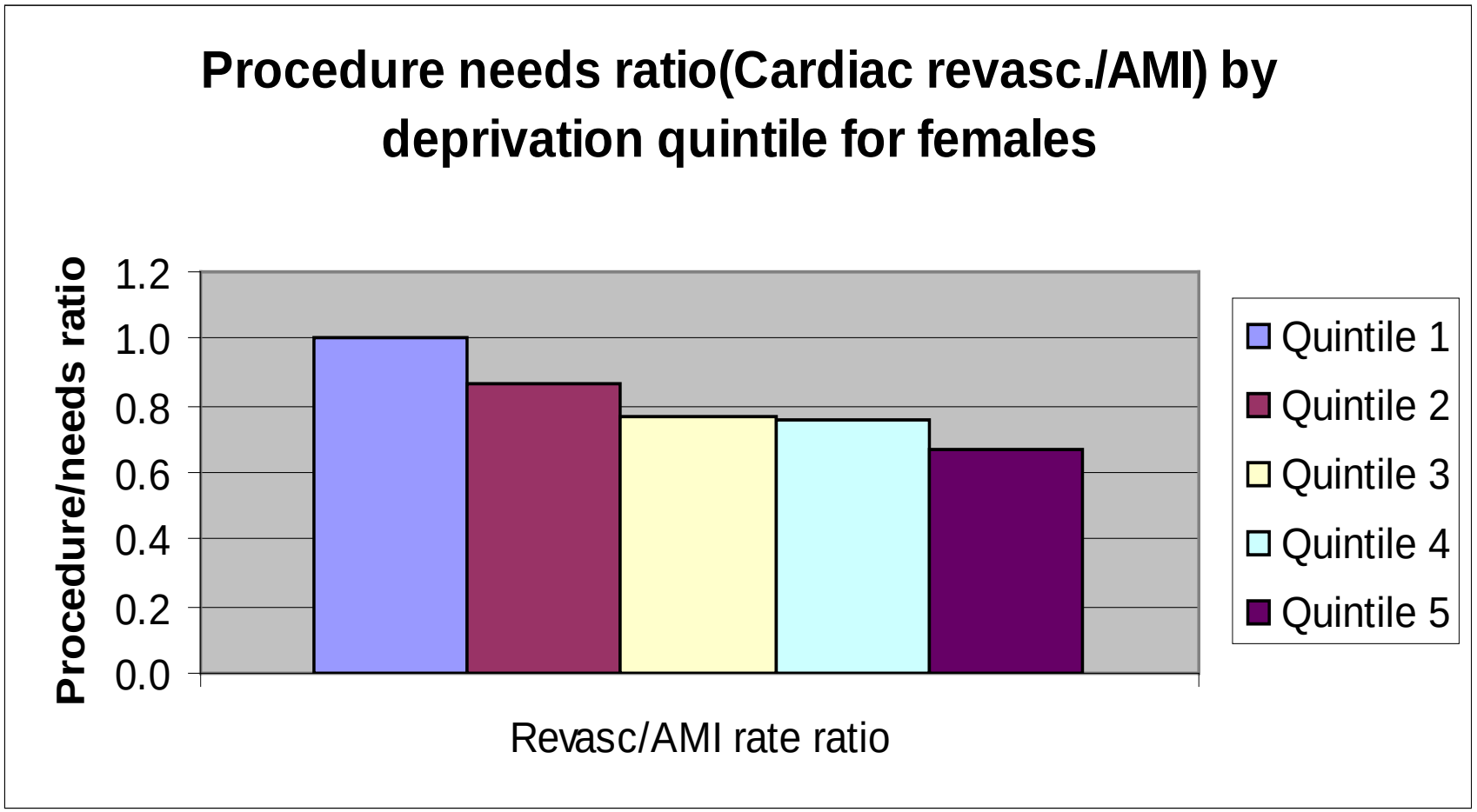


Figure 4.3: Two Year Old Coverage Rate for Rubella and Measles (Two Doses), Saskatoon Health Region, 2003-2008

	2003	2004	2005	2006	2007	2008
Core Neighbourhoods	45.4	52.3	42.9	50.7	50.9	63.5
Non-Core Neighbourhoods	67.6	66.9	68.3	72.2	74.0	76.0
Rural SHR	74.7	73.3	73.5	72.9	73.7	81.6

Source: Saskatchewan Immunization Management System

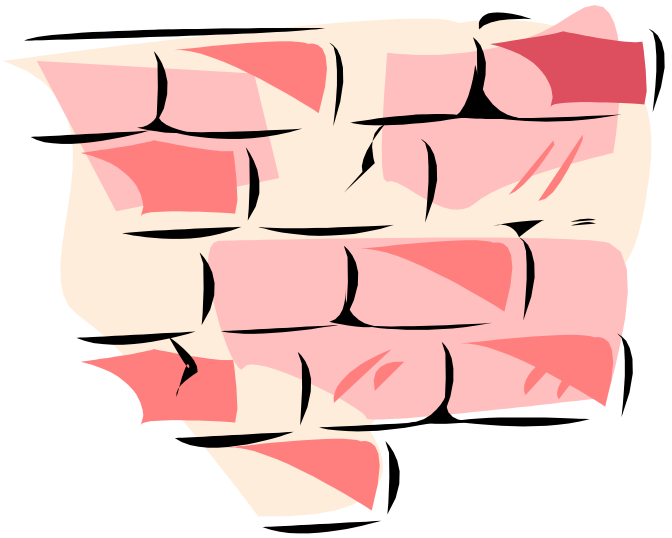
Health Care Equity Audit: Surgery



Barriers to Quality Healthcare

Patient

- Affordability
- Family responsibilities
- Emotional stress
- Demands of work
- Language
- Lack of awareness



Service

- Availability of service
- Culturally insensitive services
- Complexity of access
- Bad experience of service
- Discrimination
- Clinical practice

Summary

- Population Health data can be used in many innovative ways at provincial, regional and local levels for:
  - Public Health and Health system planning
  - Inter-sectoral planning and policy making
  - Research and evaluation
  - Increasing health equity
- Investment in infrastructure and capacity is required:
  - With knowledge of the local context
  - With expertise in public health, health system, and inter-sectoral levels