

Using Health Equity Data to Advance Population Health in Toronto Central LHIN

Presentation at 4th Annual Hospital Equity Symposium

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Presentation Objectives

- Why collect equity data?
- Overall goals for TC LHIN use of equity data
- Framework for equity data collection and analysis
- Evidence for reducing disparities and examples from Canada and US
- ICES analysis and focus areas
- Next steps

Why Collect Equity Data?

1. Excellent Care for All Legislation
2. Sustainability of the health care system

Having more granular patient level equity data helps us to go beyond the area level information to clearly understand and care for our patients.

Overall Goals for Toronto Central LHIN's Use of Equity Data

- Reduce health disparities
- Improve patient experience
- Improve patient outcomes
- Inform the operationalizing/implementing of the 2015-2018 Strategic Plan, particularly the priority on taking a population health approach and Sub-LHIN region planning
 - ✓ Support improvement of Ministry LHIN Accountability Agreement (M-LAA) Indicators
 - ✓ Support improvement of Hospital Service Accountability Agreement (H-SAA) Indicators
 - ✓ Inform Quality Improvement Plans (QIPs) and Quality Improvement activities
 - ✓ Support program planning
 - ✓ Guide funding allocation
- Inform patient/community engagement efforts
- Better position hospitals and TC LHIN for Health System Funding Reform (Health Based Allocation Model (HBAM) and Quality Based Procedures (QBPs))

All residents have equitable, quality-driven care while maintaining a focus on a sustainable healthcare system.

1. Data Collection

Collect standardized SES data

Link to utilization, admission, status, outcomes

Analyze data

2. Knowing Our Patients

Determine variations in health status/outcomes

Determine variations in service utilization

Identify barriers in service use and provision

Determine who will require changes in service

3. Designing Programs

Design new services

Ensure the right services are available

Tailor services to different groups

Reduce barriers to service provision in existing services

4. Delivering Services

Ensure community knows of services

Ensure community has access to needed services

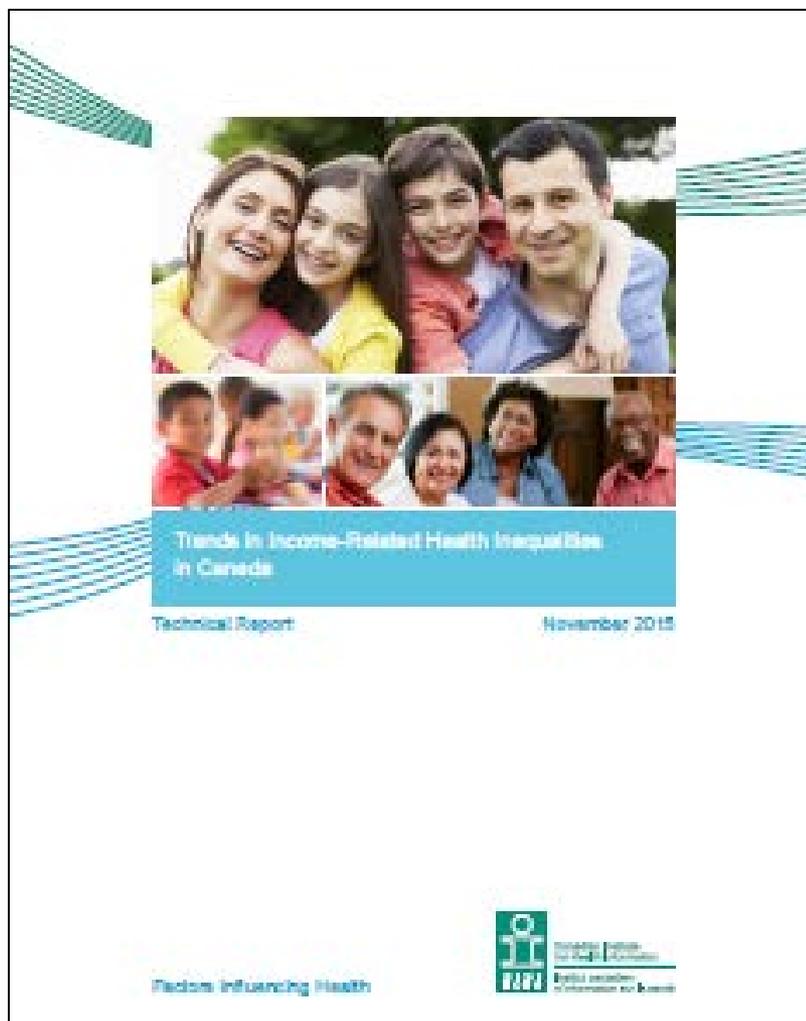
5. Achieving Outcomes

Fewer unnecessary ER and inpatient hospital visits

Unnecessary costs are prevented

6. Evaluating and Monitoring

Why Focus on Reducing Health Disparities - The Evidence

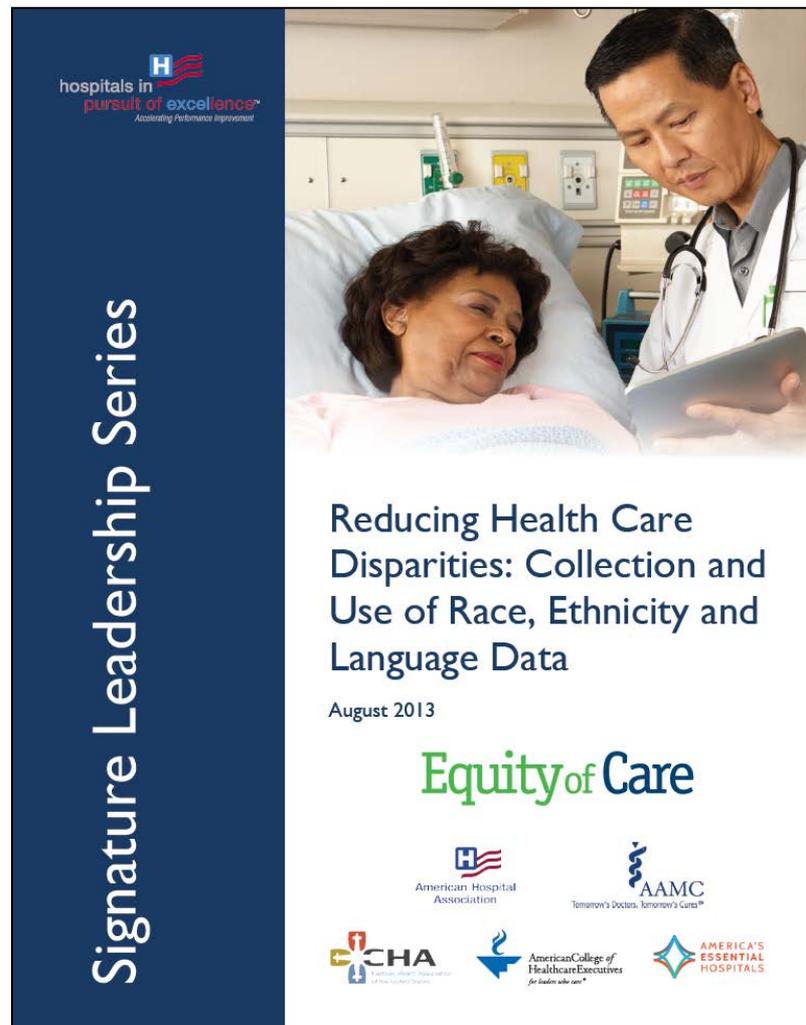


Trends in Income-Related Health Inequalities in Canada

Technical Report November 2015

Factors Influencing Health

Health Equity Research Institute



Signature Leadership Series

hospitals in pursuit of excellenceSM
Accelerating Performance Improvement

Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data

August 2013

Equity of Care

American Hospital Association
AAMC
Tomorrow's Doctors. Tomorrow's Care.SM

CHA
American College of Healthcare Executives
AMERICA'S ESSENTIAL HOSPITALS
For better care. ever.SM

Why Focus on Reducing Health Disparities?

Current State

- Inequities in service delivery and health outcomes
- Increasing unnecessary costs

Future State

- All residents have equitable, quality-driven care while maintaining a focus on a sustainable healthcare system.

Condition (2012)	Estimated annual cost of hospitalization/condition in Canada	Trends in inequality lowest income vs highest income level	Hospitalizations that could have been avoided if all income levels had same rate as those in the highest income level
COPD hospitalization rates (less than 75)	<ul style="list-style-type: none"> • \$8,000 per hospitalization • Total = ~\$314.6M 	<ul style="list-style-type: none"> • 3.1 times • 150 more hospitalizations for every 100,000 adults 	<ul style="list-style-type: none"> • 45.3% • ~18,700 hospitalizations
Mental Illness (selected MH & SA) Hospitalization rate per 100,000	<ul style="list-style-type: none"> • \$11,700 per hospitalization • Total = ~\$6.3 billion 	<ul style="list-style-type: none"> • 2.08 times greater 	<ul style="list-style-type: none"> • 26.8% • ~40,300 hospitalizations
Alcohol-Attributable* Hospitalization indicator per 100,000(15+)	<ul style="list-style-type: none"> • \$7,500 per hospitalization • High direct and indirect costs 	<ul style="list-style-type: none"> • 2.42 times greater • 93 more hospitalizations for every 100,000 adults 	<ul style="list-style-type: none"> • 31.6% • ~ 9,000 hospitalizations
Hospitalized Heart Attack Rate per 100,000	<ul style="list-style-type: none"> • \$11,800/hospitalization • \$853.7M 	<ul style="list-style-type: none"> • 1.35 times greater • 85 more hospitalizations for every 100,000 adults 	<ul style="list-style-type: none"> • 14.6% • ~11,000 hospitalized
Diabetes prevalence Rate per 100	<ul style="list-style-type: none"> • \$13.5 billion 	<ul style="list-style-type: none"> • 2 times greater • 5.1 more cases of diabetes for every 100 adults 	<ul style="list-style-type: none"> • 32.1% • ~ 673,700 fewer people with diabetes

*Alcohol attributable hospitalizations captures inpatient treatment at general hospitals for chronic diseases or conditions that have been classified as entirely attributable to alcohol, excluding alcohol-related injuries (including motor vehicle-related ones) and suicides.

Source: CIHI, Trends in Income-Related Health Inequalities in Canada: Technical Report. November 2015

Benefits of Reducing Health Disparities

Benefit	Example		Quantified Benefit
	Issue	Program	
Reduce health disparities and costs¹	<ul style="list-style-type: none"> Increasing rates of COPD hospitalization, highest among low income. <p><i>Winnipeg Regional Health Authority. Seven Oaks–Inkster Community and Seven Oaks Gen Hosp.³</i></p>	<ul style="list-style-type: none"> Pilot COPD Integrated Pathway Project to improve access and continuity of care for COPD patients in the northwest Winnipeg (low income) 	<ul style="list-style-type: none"> Decrease in smoking, better management, increase in referrals to pulmonary. Rehab, increased patient & provider satisfaction Decreased hospital LOS by 7 days/ admission = 385 patient days saved at ~ \$1,000/day; Total cost saving ~ \$385,000.
Reduce costs²	<ul style="list-style-type: none"> High readmission rates in African-American population: <p><i>Methodist Le Bonheur Healthcare, Memphis, Tenn.⁴</i></p>	<ul style="list-style-type: none"> Program to transition patients from hospital to home 	<ul style="list-style-type: none"> \$8,700 lower average cost versus non-participants Decrease in readmissions for heart failure - from 35% to 20%
Reduce disparities in health outcomes²	<ul style="list-style-type: none"> Latino patients struggling with diabetes self-management <p><i>Massachusetts General Hospital, Boston⁵</i></p>	<ul style="list-style-type: none"> Culturally tailored individual and group coaching sessions to Latino patients 	<ul style="list-style-type: none"> Decrease from 13% to 9% in gap of % Latinos compared with whites with uncontrolled diabetes
Drive decision making on where to invest and deploy resources²	<ul style="list-style-type: none"> Identified 45 different languages used by its patients; <p><i>Vidant Health, based in North Carolina⁶</i></p>	<ul style="list-style-type: none"> Health System created a patient-centered communications task force to improve language interpretation services among its 10 hospitals and 40 physician practices 	

Sources: 1) CIHI, Trends in Income-Related Health Inequalities in Canada: Technical Report. November 2015

2) Hospitals in Pursuit of Excellence. (2013). Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data. Equity of Care

Accessed from: http://www.hpoe.org/Reports-HPOE/Equity_Care_Report_August2013.PDF

ICES Analysis: Hospital Level Information

- Linkages to ICES databases: hospital utilization, disease registries, primary care, home care, etc.

1. What are the socio-demographic characteristics of patients served by TC LHIN hospitals?

2. Are there differential outcomes/inequities for patients?

Who is most affected by health inequities?

Age group, sexual orientation, gender, whether born in Canada, preferred language, ethnic origin, conditions/disabilities income, number of people supported by income

- For all hospitals and selected units, where applicable

Indicators/Areas of Analysis by ICES

Volumes

- Admissions, discharges, separations, ALC, length of stay, diagnosis, discharge disposition

Timely Access

- E.g. wait time in the ED

Outcomes

- MLAA, Quality indicators (e.g. repeat ED visits, unscheduled readmissions, ambulatory care sensitive conditions)

Medical and surgical procedures

- Rates of hip and knee replacement

Quality of care

- Best practices (e.g. treatment of AMI)

Health status

- Diabetes, hypertension, asthma, CHF, MI, COPD, cancer, mental health, multiple chronic conditions (4+)

Continuity of care

- Regular primary care provider, Seen within 7-14 days after discharge

ICES Request - Future

From a Population Perspective

- 1) **Who is being served by TC LHIN hospitals and who is not?**
 - Comparison of the overall TC LHIN population profile with the profile of TC LHIN patients who used hospitals to determine if some groups are over or under represented

- 2) **What is the socio-demographic profile of high users of the TC LHIN health care system?**
 - 4 or more selected conditions

- 3) **Are there geographic differences in use of hospital services based on selected equity variables?**
Identify high needs areas
 - Sub-LHIN level and neighborhood level; neighborhoods for selected indicators

Linkage to Community Services

- 1) **Socio-demographic characteristics of community mental health and addictions (CMHA) services and community support services (CSS) clients who use hospital services**
 - Linkage of hospital socio-demographic characteristics to Community Business Intelligence (CBI) database

Next Steps

1. Continued equity data collection, and improvements in data quality, to reach critical mass of patients being seen in hospitals
2. Use of the equity information to identify high needs populations for TC LHIN funded program
3. Sharing best practices on addressing health equity disparities
4. Collaborate with other stakeholders e.g. Wellesley Institute to make evidence on equity and interventions more available
5. Foster spread and scale of successful local innovations

Questions?

References

1. CIHI, Trends in Income-Related Health Inequalities in Canada: Technical Report. November 2015. Accessed from: https://secure.cihi.ca/free_products/trends_in_income_related_inequalities_in_canada_2015_en.pdf
2. Hospitals in Pursuit of Excellence. (2013). Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data. Equity of Care. Accessed from: http://www.hpoe.org/Reports-HPOE/Equity_Care_Report_August2013.PDF
3. Dziadekwicz R. Integrated care pathway: using best practices to manage chronic disease. Presented at: Best Practices in Rehabilitation 2014: Collaborate, Innovate, Rehabilitate; June 6, 2014; Winnipeg, MB.
4. U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. (2012, March 14). Church-health system partnership facilitates transitions from hospital to home for urban, low-income African Americans, reducing mortality, utilization, and costs. Retrieved from <http://www.innovations.ahrq.gov/content.aspx?id=3354>
5. Green, A.R. (2008, September). Quality improvement for disparities reduction: The Chelsea community health center experience, the Disparities Solutions Center at Massachusetts General Hospital. Sixth National Conference on Quality Health Care for Culturally Diverse Populations. Conference conducted at the meeting of DiversityRx, Minneapolis, MN.
6. S. Collier (personal communication, February, 2012). From Report: Hospitals in Pursuit of Excellence. (2013). Reducing Health Care Disparities: Collection and Use of Race, Ethnicity and Language Data. Equity of Care

Additional References

1. Provincial Health Services Authority, (2011). *Towards Reducing Health Inequities: A Health System Approach to Chronic Disease Prevention. A Discussion Paper*. Vancouver, BC: Population & Public Health, Provincial Health Services Authority. Accessed from: <http://www.phsa.ca/population-public-health-site/Documents/TowardsReducingHealthInequitiesFinalDiscussionPape.pdf>