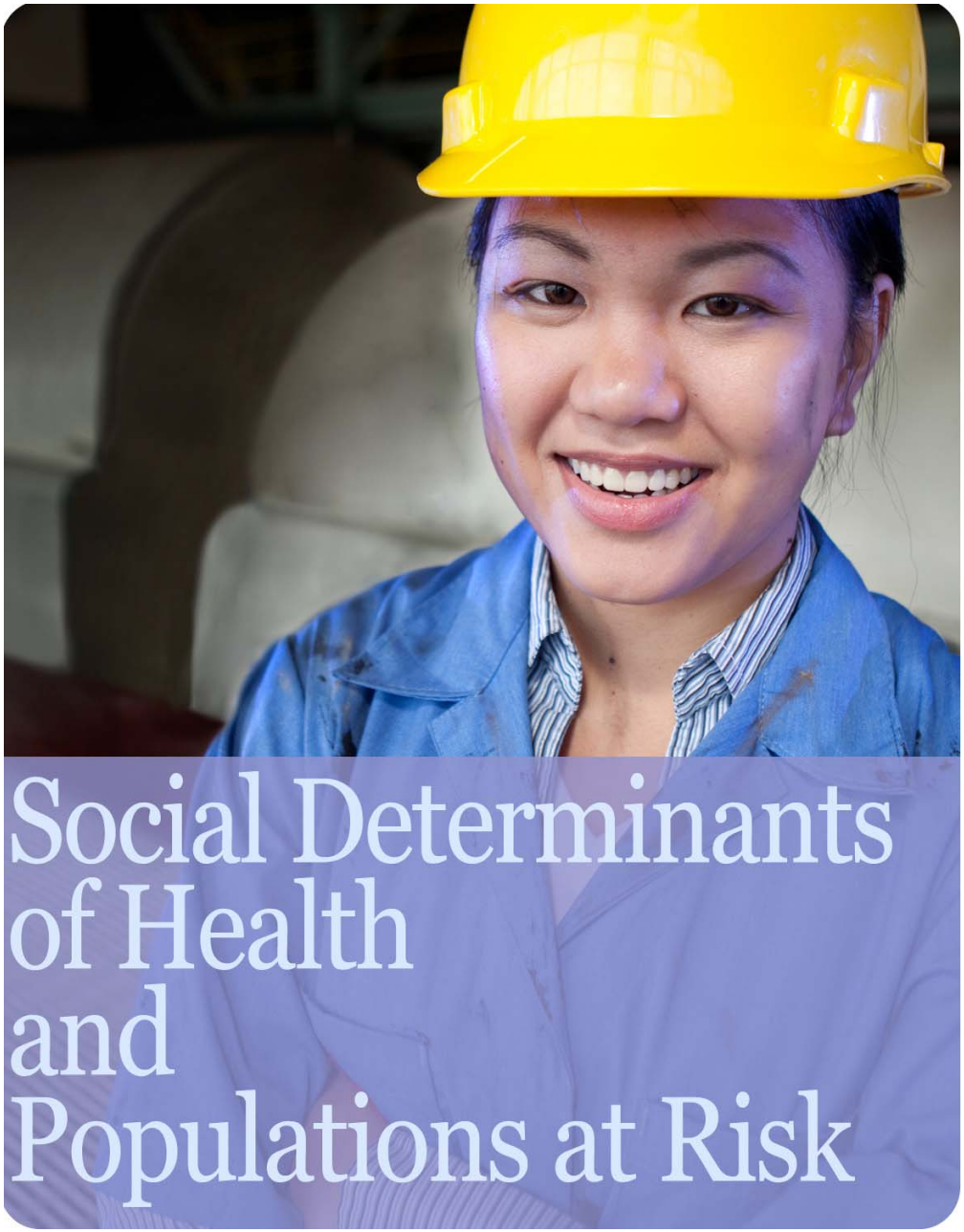

Social Determinants of Health and Populations at Risk

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Nazilla Khanlou
Vanessa Parlette

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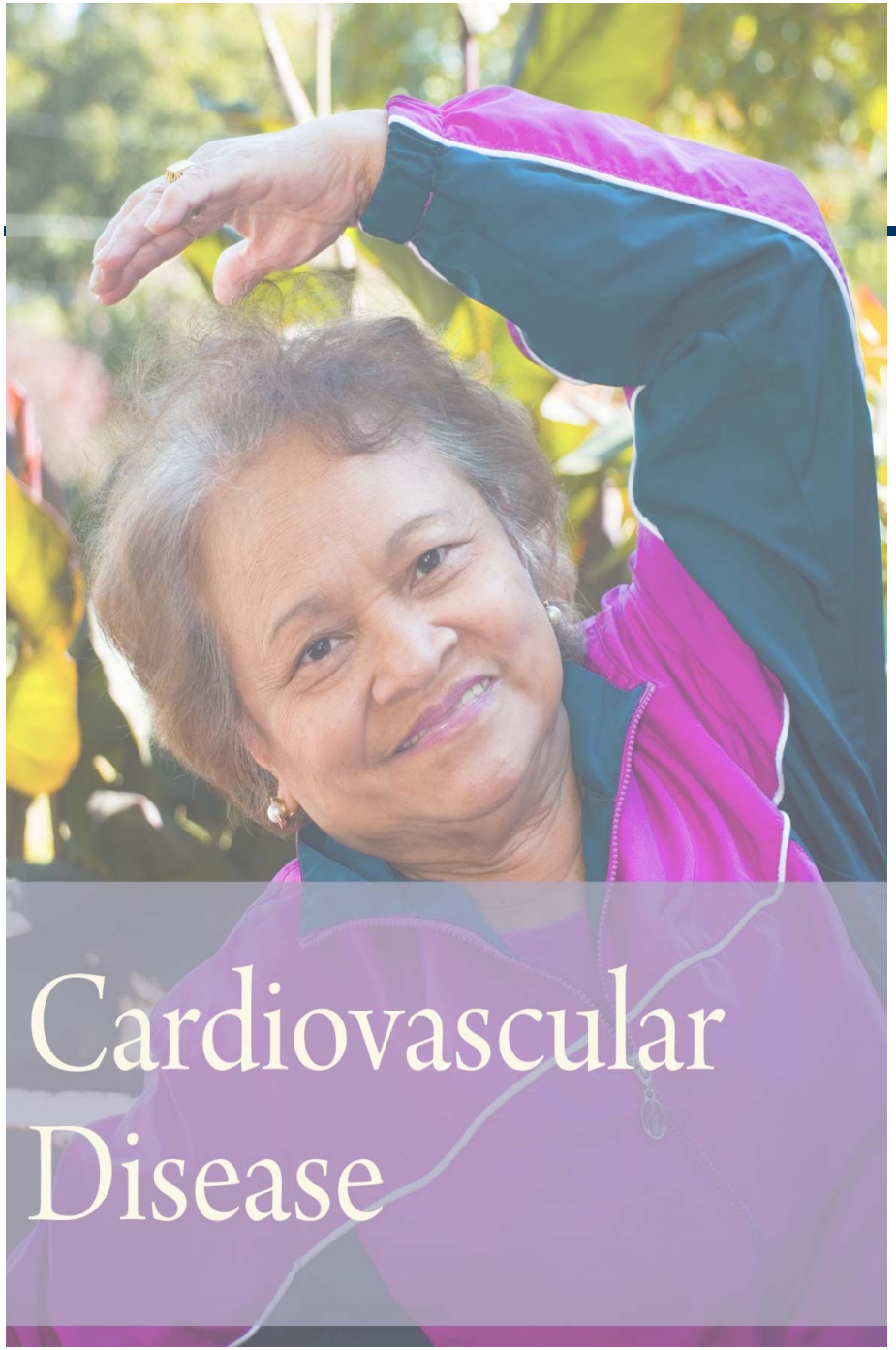

Actionable Data for Improvement

The POWER Study (Project for an Ontario Women's Health Evidence-Based Report) is providing actionable data to help policymakers and providers to improve the health of and reduce inequities among the women of Ontario.

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Project for an Ontario Women's Health Evidence-Based Report

What We Did

- Using a comprehensive set of evidence-based indicators we examined gender and socioeconomic health inequities in order to:
  - identify opportunities for improvement and intervention,
  - present objective evidence to inform priority setting,
  - provide a baseline from which to measure progress.

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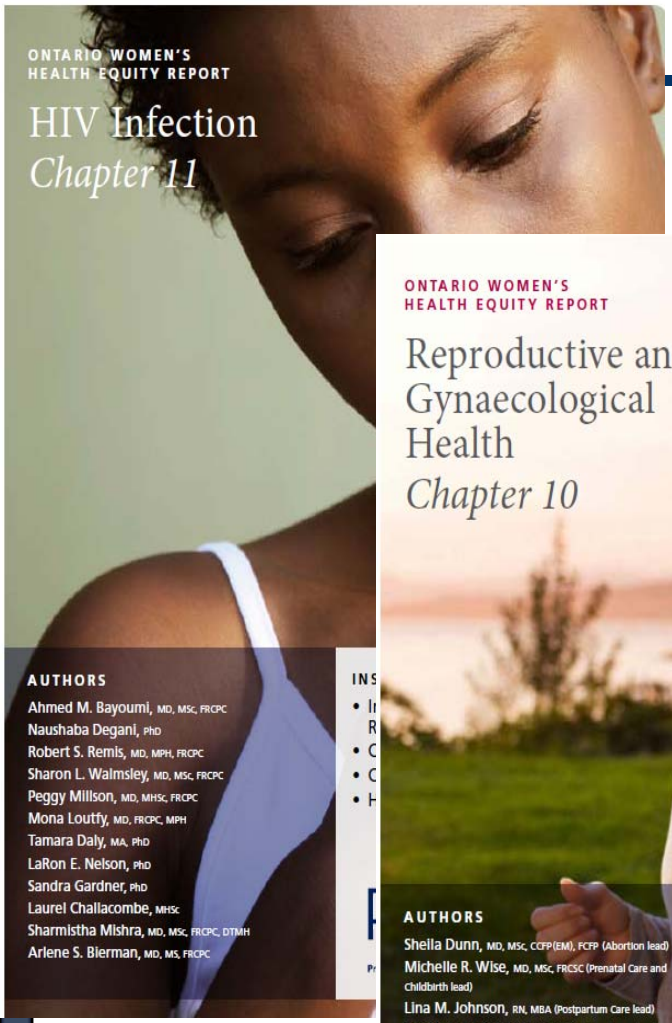
The POWER Study



Ontario Women's Health Equity Report

Volume 1

- Burden of Illness
- Cancer
- Depression
- Cardiovascular disease (CVD)
- Access to Health Care Services

Volume 2

- Musculoskeletal Conditions
- Diabetes
- Reproductive and Gynecological Health
- HIV Infection
- Social Determinants of Health and Populations at Risk
- Older Women's Health

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Women's Health Reporting: Developing a New Model

- The Ontario Women's Health Equity Report is serving as a model for:
  - incorporating gender and equity analysis as an integral component of performance measurement and reporting
  - using a community-engaged research approach in the context of a quantitative indicator report
  - Including indicators that bridge population and public health and health care

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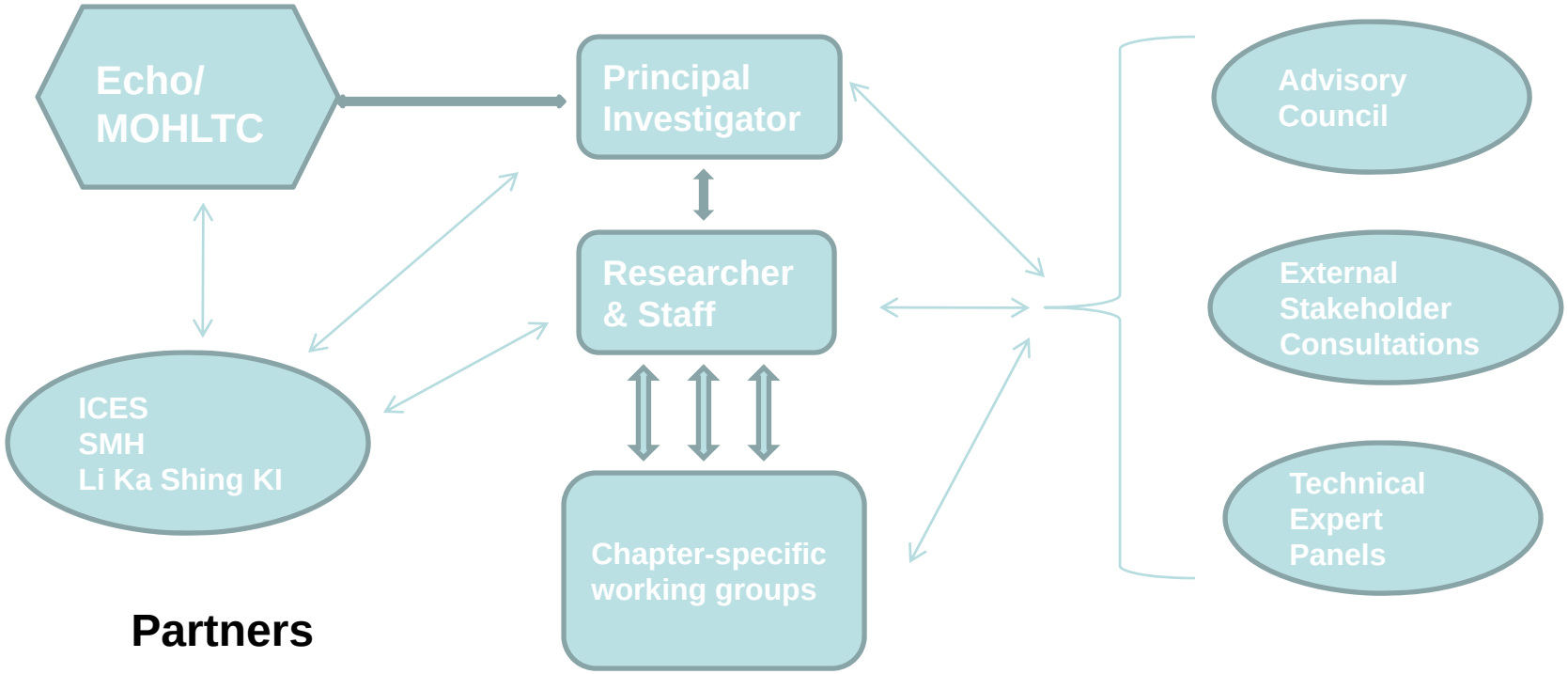
POWER Study Research Collaborative Structure



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Community-Engaged Research

- POWER Study Roundtables
  - Inform indicator selection and interpretation
  - Increase uptake of findings
- Consumers: representatives of community based organizations and associations
- Providers: clinicians, hospitals, community health centres (CHCs)
- Policymakers: government, regional health authorities, public health, health data agencies

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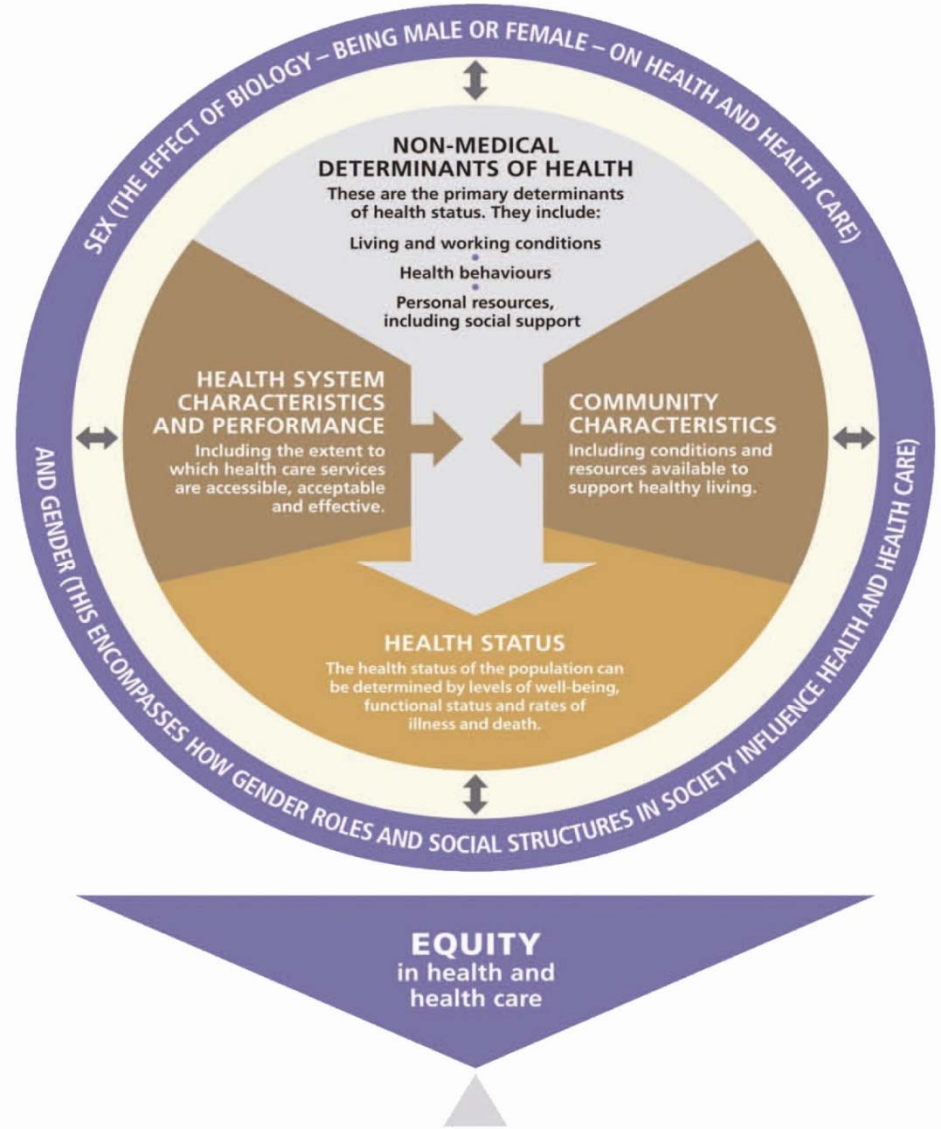
POWER Study Gender and Equity Health Indicator Framework



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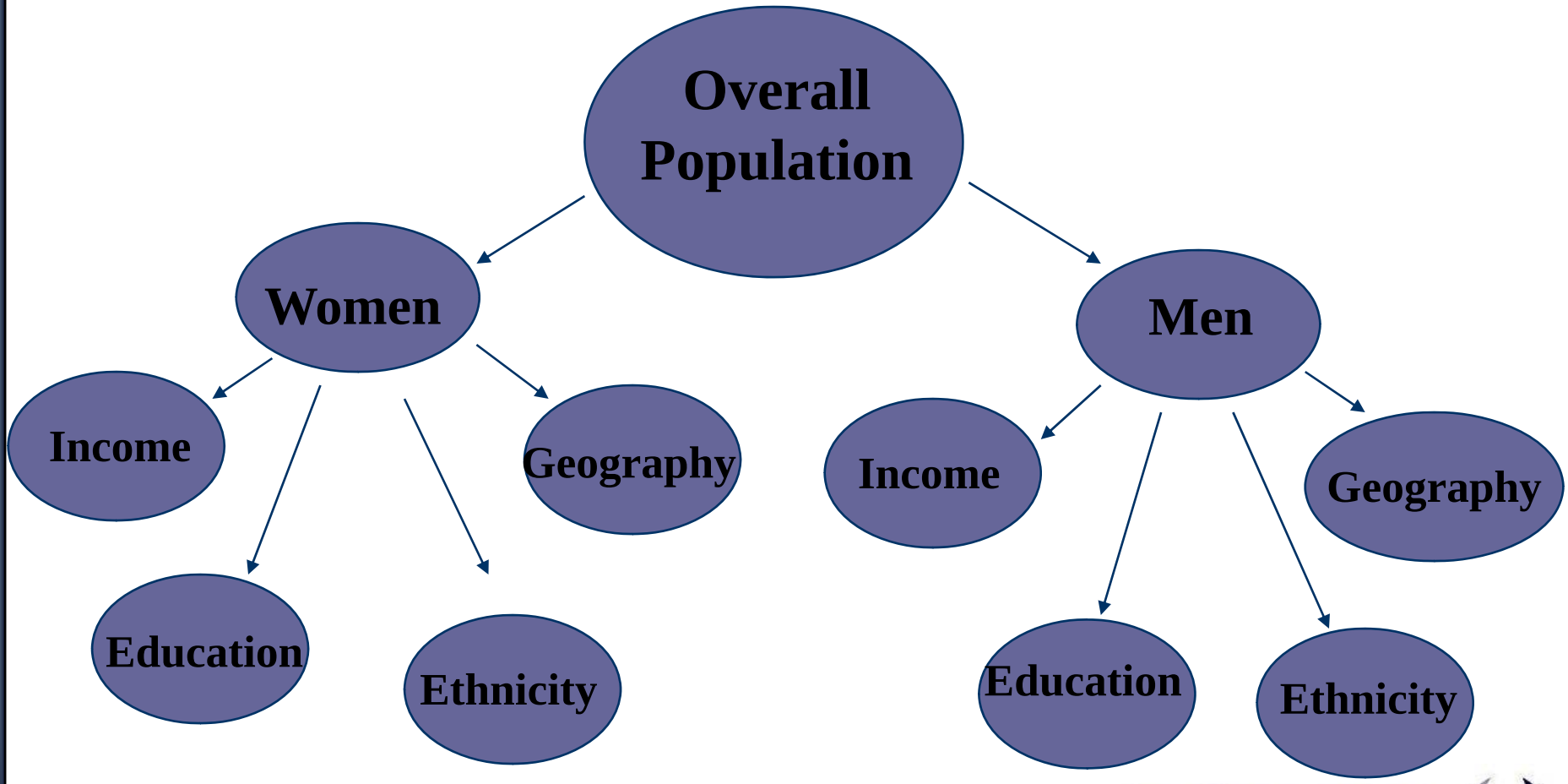
Assessing Equity



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POWER Products and Activities

- Comprehensive Set of Evidence-Based Indicators
- Leading Equity Indicators
- Health Equity Reports
- Highlights documents in English and French
- Webinars
- LHIN-level data provided to LHINs
- Website
- Health Equity Roadmap

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Equity
ISEQH Definitions

- **Equity in Health:** The absence of systematic and potentially remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.

- **Inequity in Health**: Systematic and potentially remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.

- **Equity (policy and actions):** Active policy decisions and programmatic actions directed at improving equity in health or in reducing or eliminating inequalities in health.

- **Equity (research):** Research to elucidate the genesis and characteristics of inequity in health for the purpose of identifying factors amenable to policy decisions and programmatic actions to reduce or eliminate inequities.

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Social Determinants of Health and Populations at Risk

- Social Determinants of Health
- Low-Income Women
- Immigrant and Minority Women

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Social Determinants of Health

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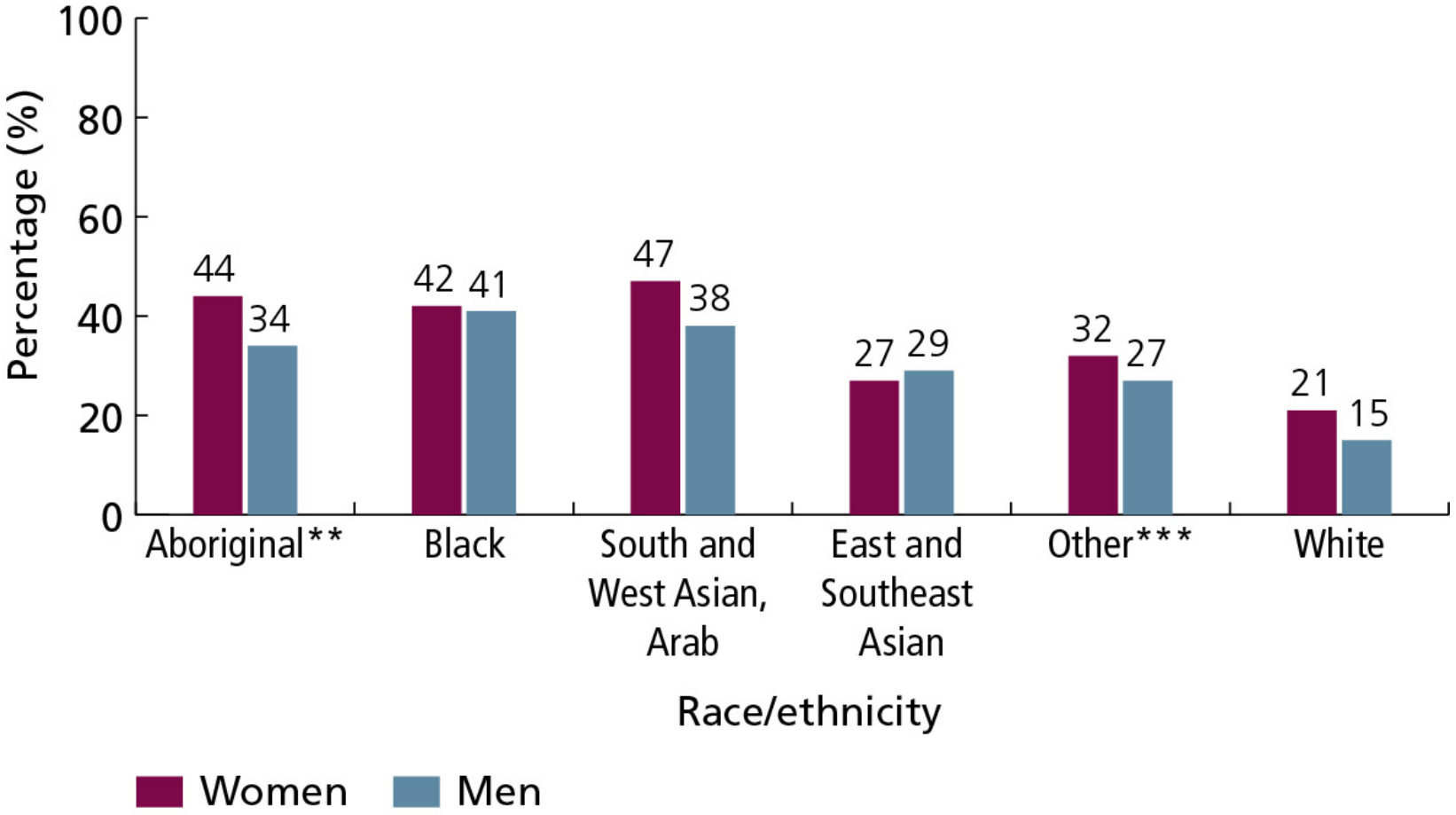
Age-standardized percentage of adults aged 25 and older who reported a lower annual household income, by sex and race/ethnicity, in Ontario, 2005



DATA SOURCES: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)
** Includes off-reserve Aboriginal adults (North American Indian, Métis, Inuit)
*** Includes Latin American, other racial and multiple racial origins

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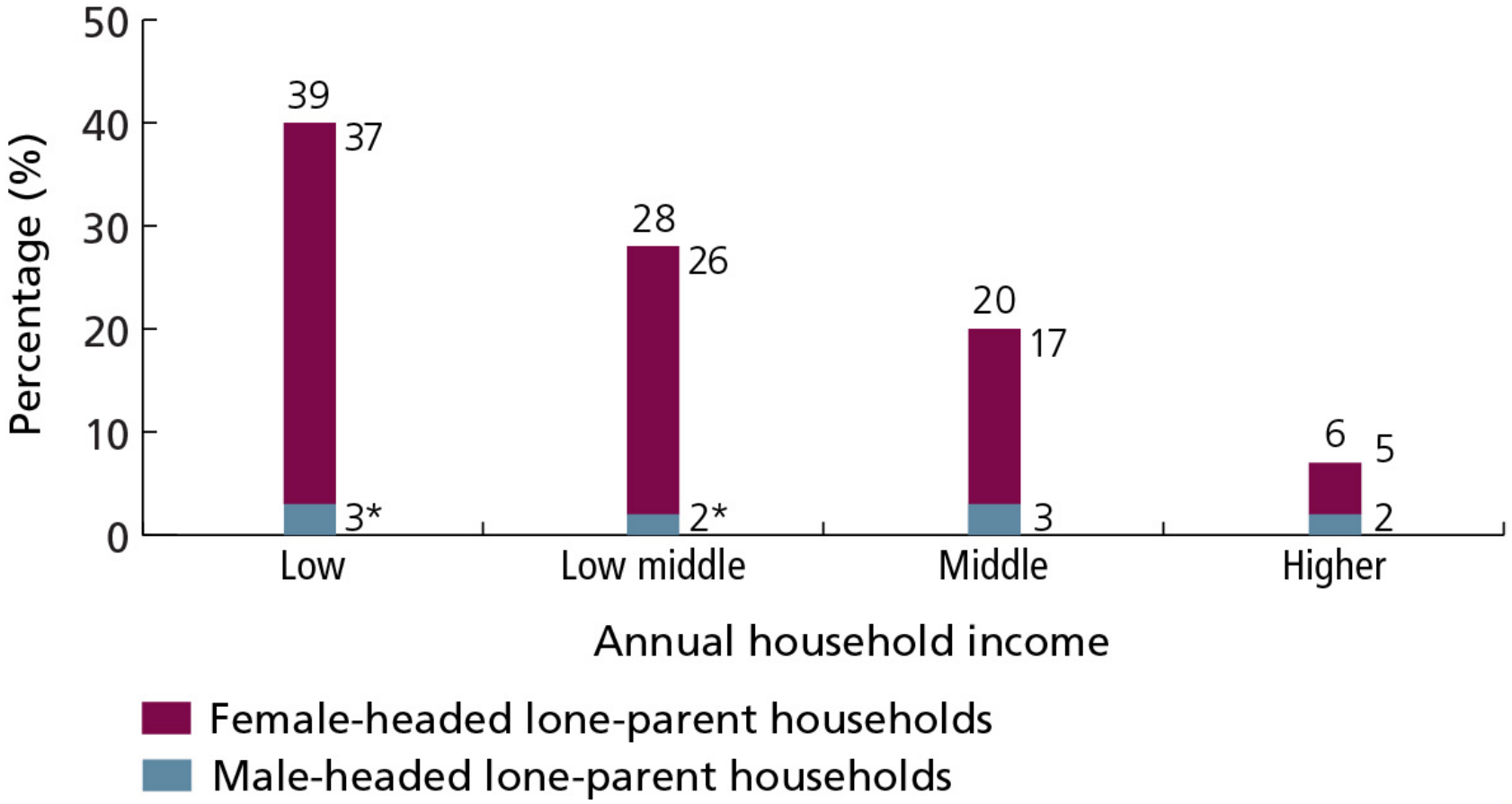
Percentage of households with children under age 25 that are lone-parent households, by sex of lone-parent and annual household income, in Ontario, 2007-08



DATA SOURCES: Canadian Community Health Survey (CCHS), 2007-2008
NOTES: Numbers may not add up due to rounding;
* Interpret with caution due to high sampling variability

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Low-Income Populations

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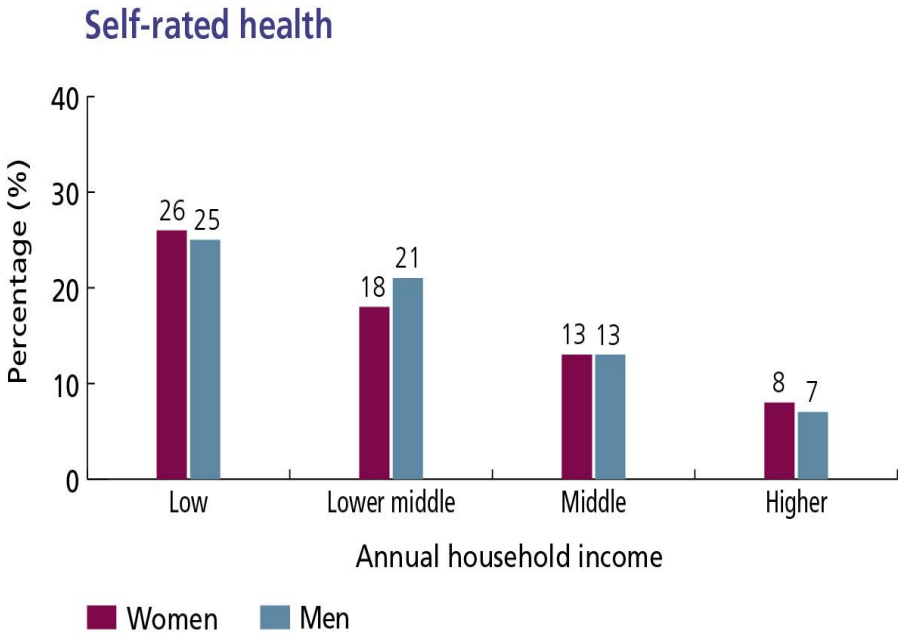
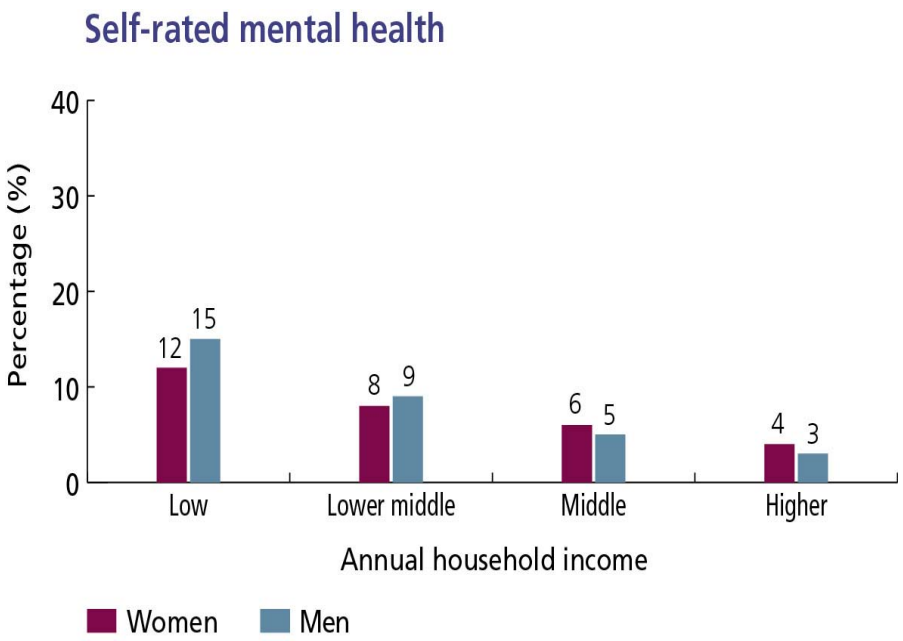
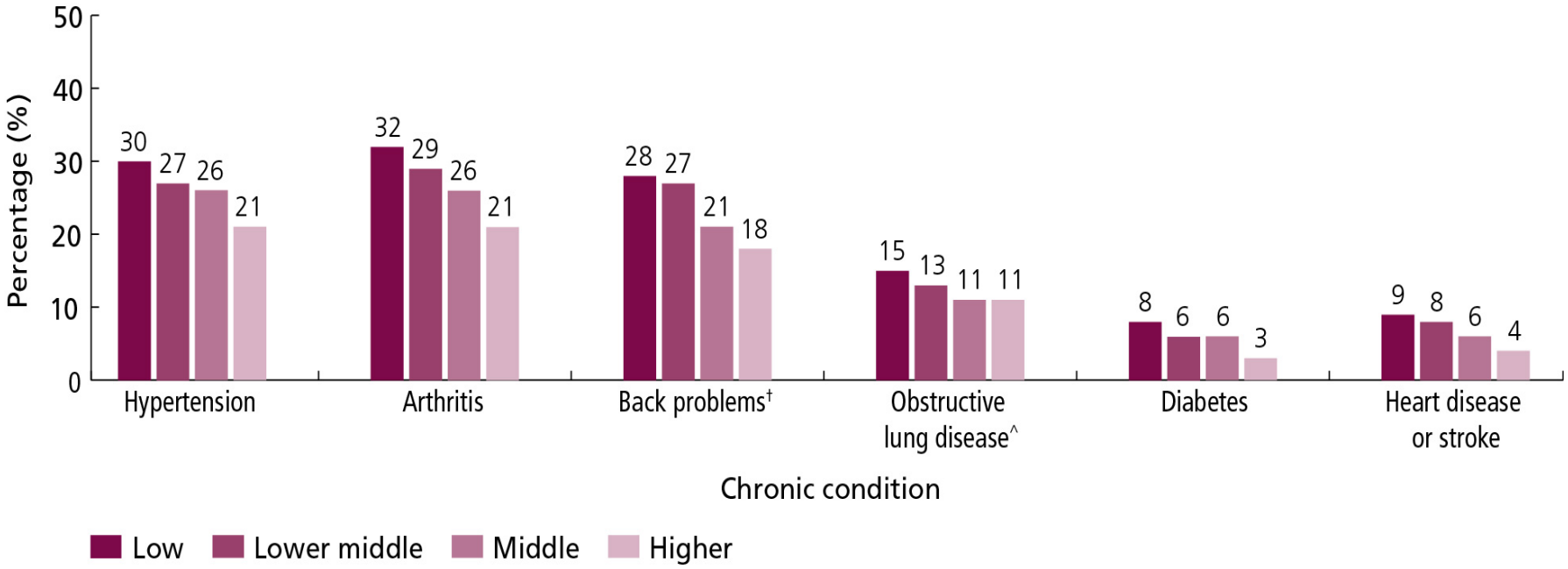
Age-standardized percentage of adults aged 25 and older who reported their health or mental health as fair or poor, by sex and annual household income, in Ontario, 2005





DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

Age-standardized percentage of women aged 25 and older who reported having selected chronic diseases, by annual household income, in Ontario, 2005



DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1); †Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1) and 2007

^ Obstructive lung disease includes asthma, chronic bronchitis, emphysema, or chronic obstructive pulmonary disease

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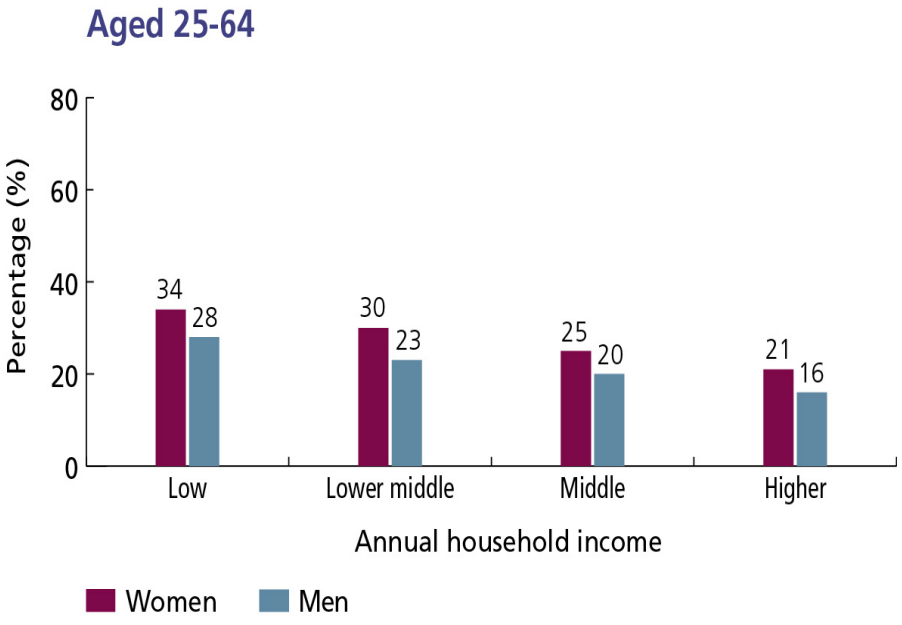
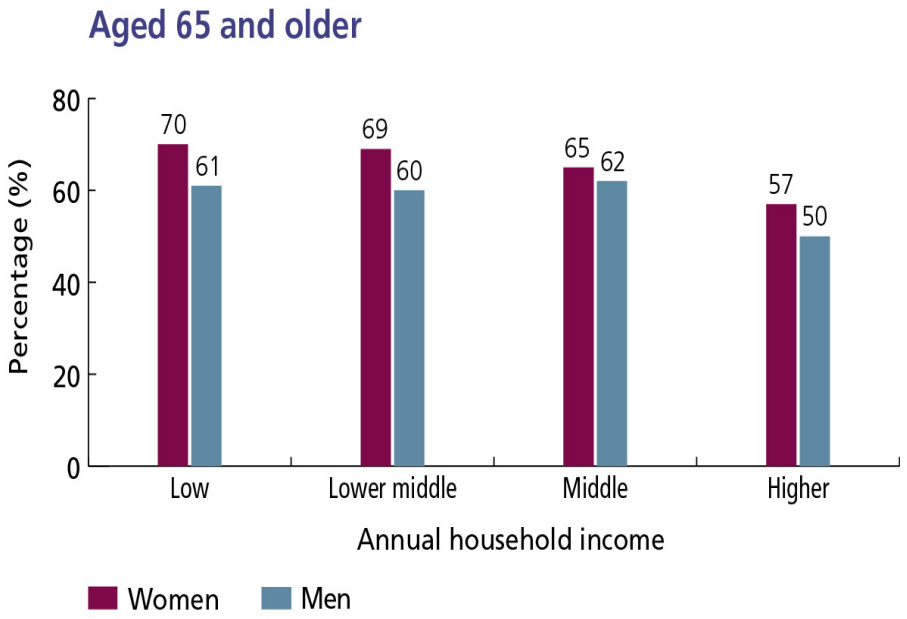
Age-specific percentage of adults aged 25 and older who reported having two or more chronic conditions, by sex and annual household income, in Ontario, 2005





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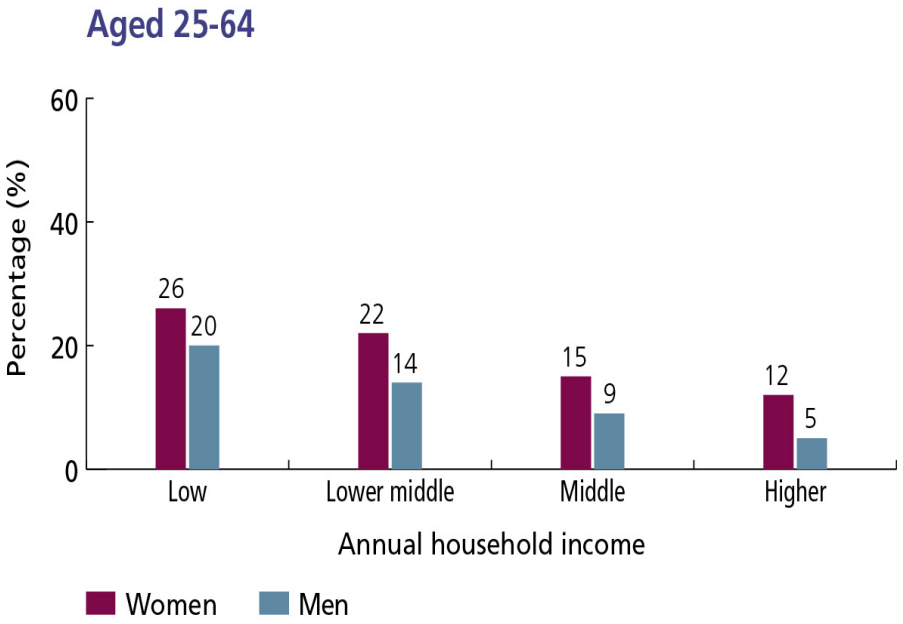
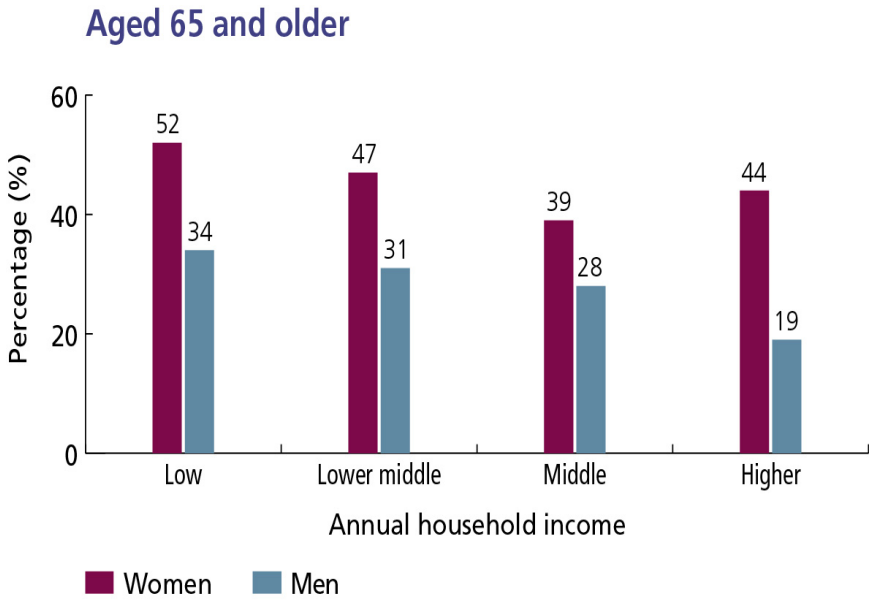
DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

Age-specific percentage of adults aged 25 and older who reported having limitations in IADLs (Instrumental Activities of Daily Living) and/or ADLs (Activities of Daily Living), by sex and annual household income, in Ontario, 2005





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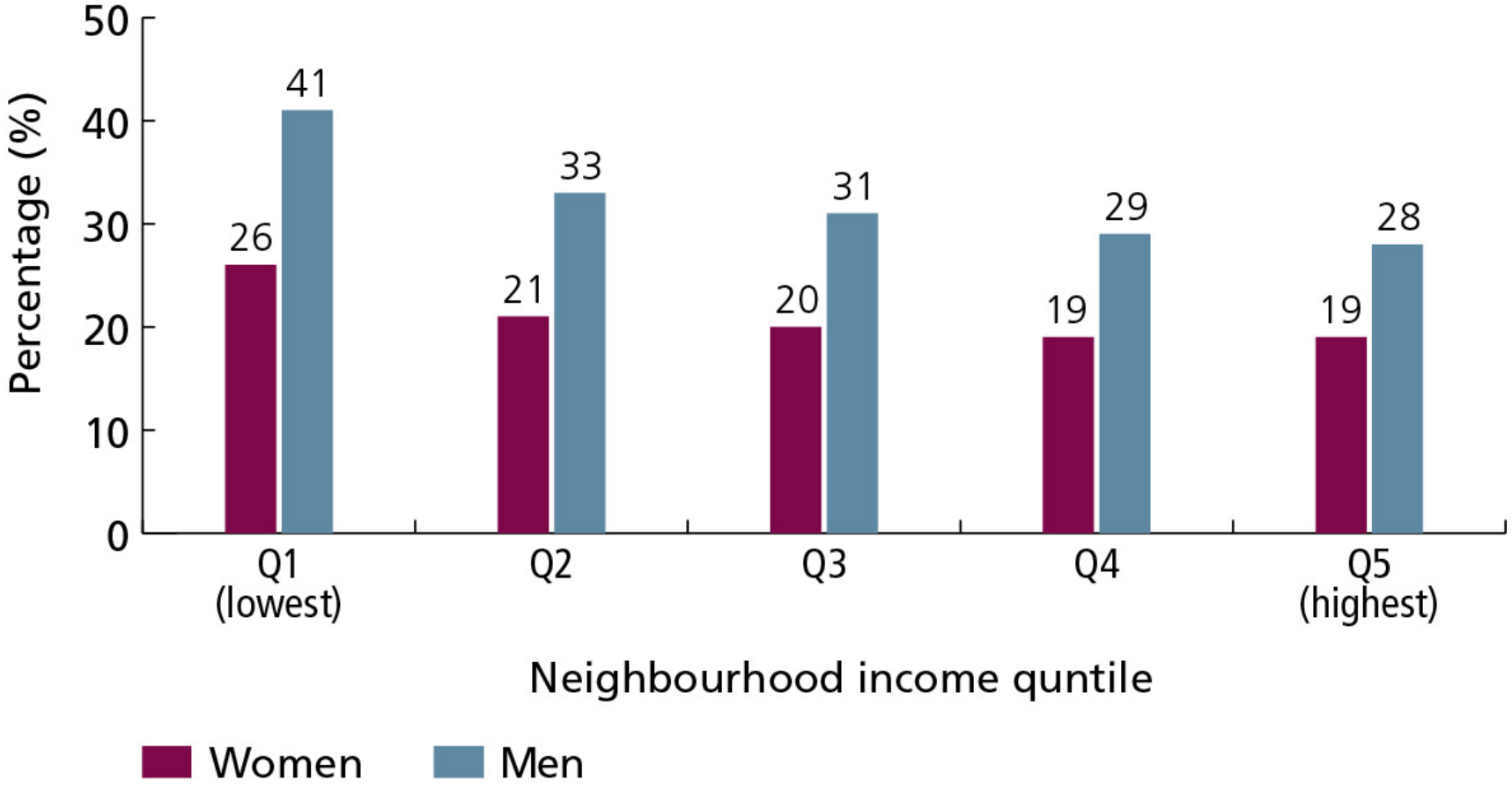
DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

Percentage of the population who died before age 75 (premature mortality), by sex and neighbourhood income quintile, in Ontario,^ 2001



DATA SOURCE: Statistics Canada's Canadian Mortality Database and 2001 Census

^Only Ontario Census Metropolitan Areas (CMAs) were included.

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Impact of Inequities is Large

- If all Ontarians had the same health as Ontarians with higher incomes,
  - an estimated 318,000 fewer people (166,000 women and 152,000 men) would be in fair or poor health
  - an estimated 231,000 fewer people (110,000 women and 121,000 men) would be disabled;
  - There would be an estimated 3,373 fewer deaths each year (947 women and 2,426 men) among Ontarians living in metropolitan areas.

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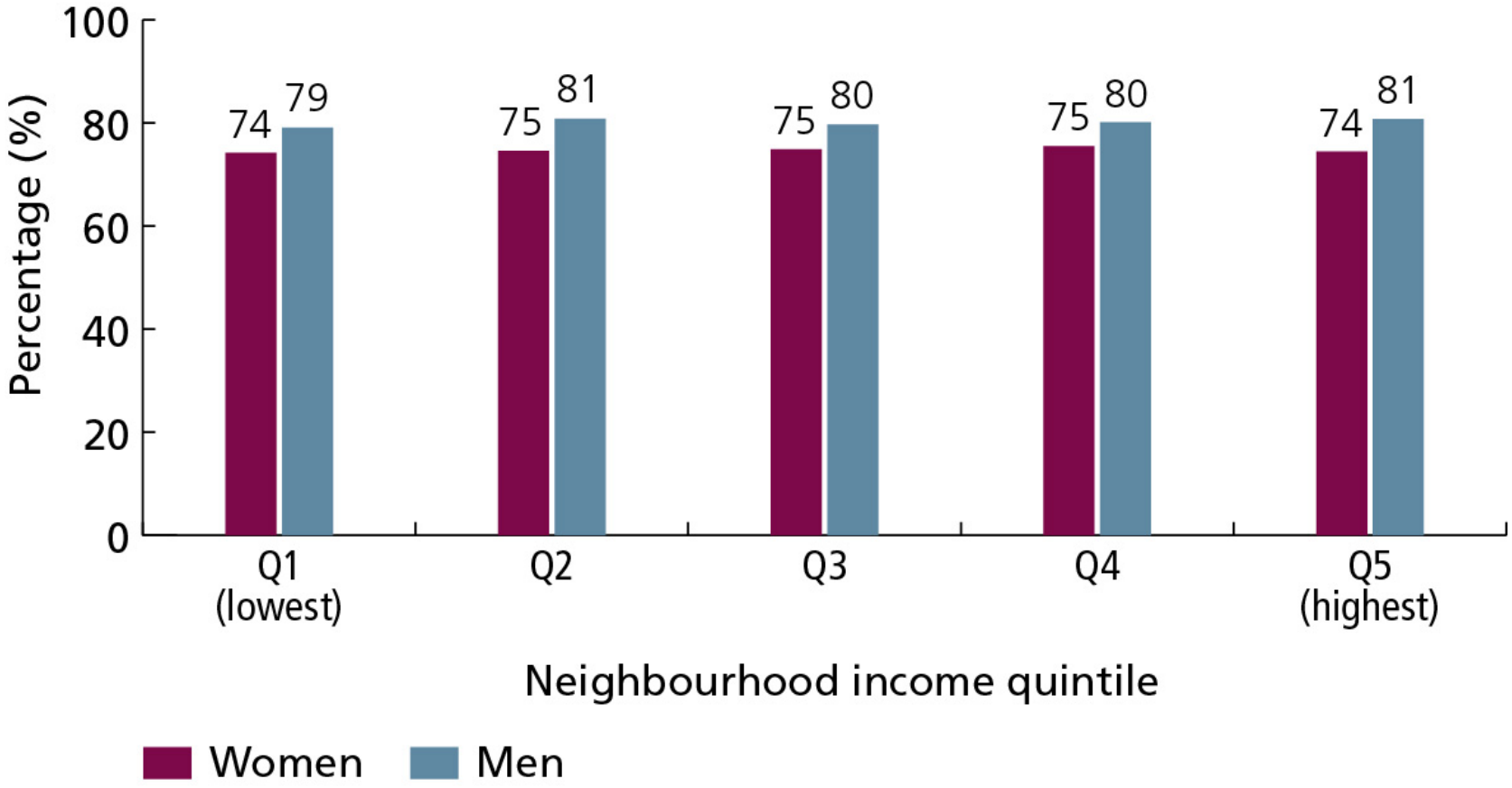
Percentage of acute myocardial infarction (AMI) patients aged 65 and older who filled a statin prescription within 90 days post discharge from hospital, by sex and neighbourhood income quintile, in Ontario, 2005/06



DATA SOURCES: Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); Ontario Drug Benefits (ODB) Database; Registered Persons Database (RPDB); Statistics Canada 2001 Census

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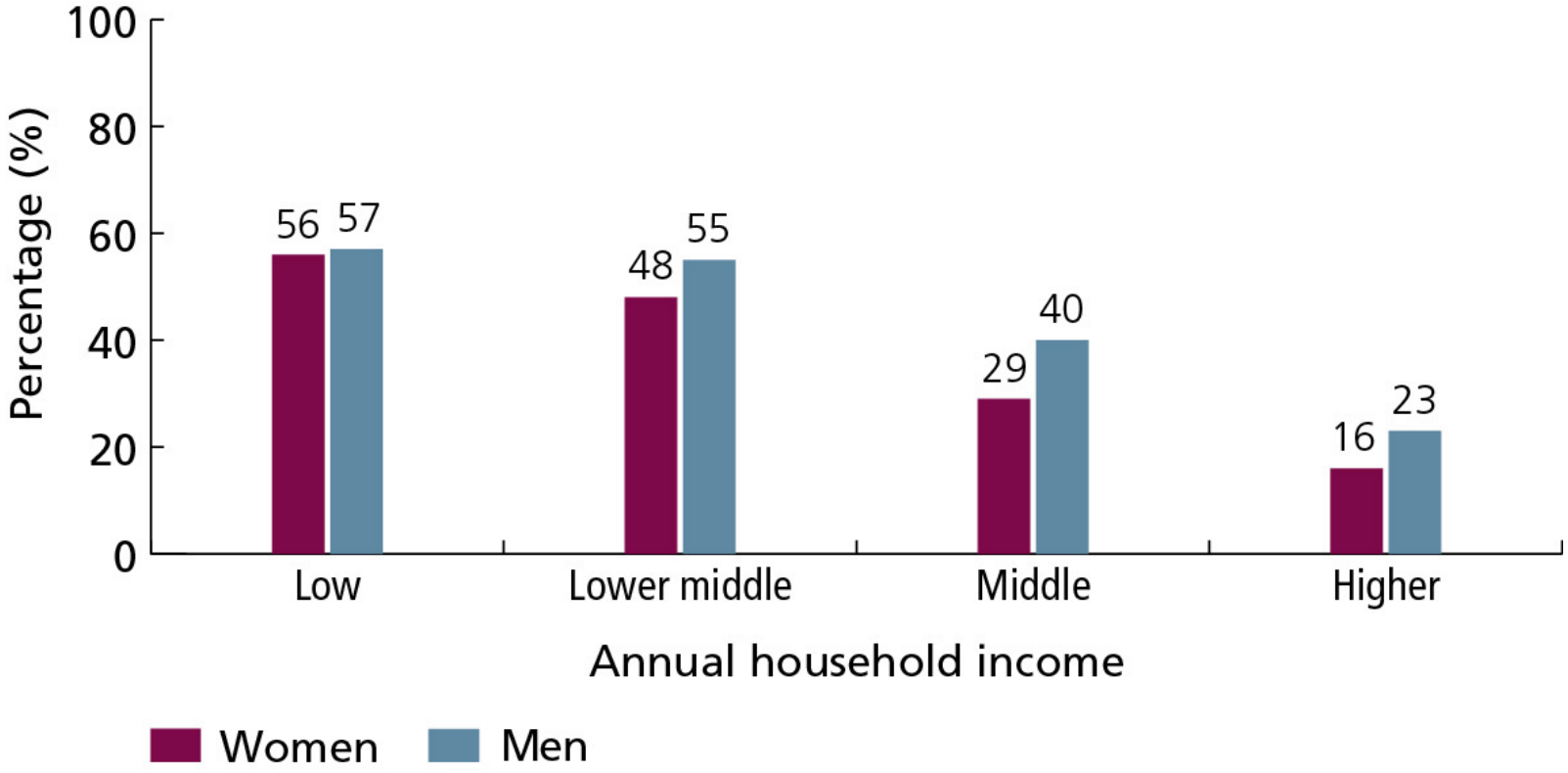
Percentage of adults aged 25 and older who did not visit a dentist in the past 12 months, by sex and annual household income, in Ontario, 2005



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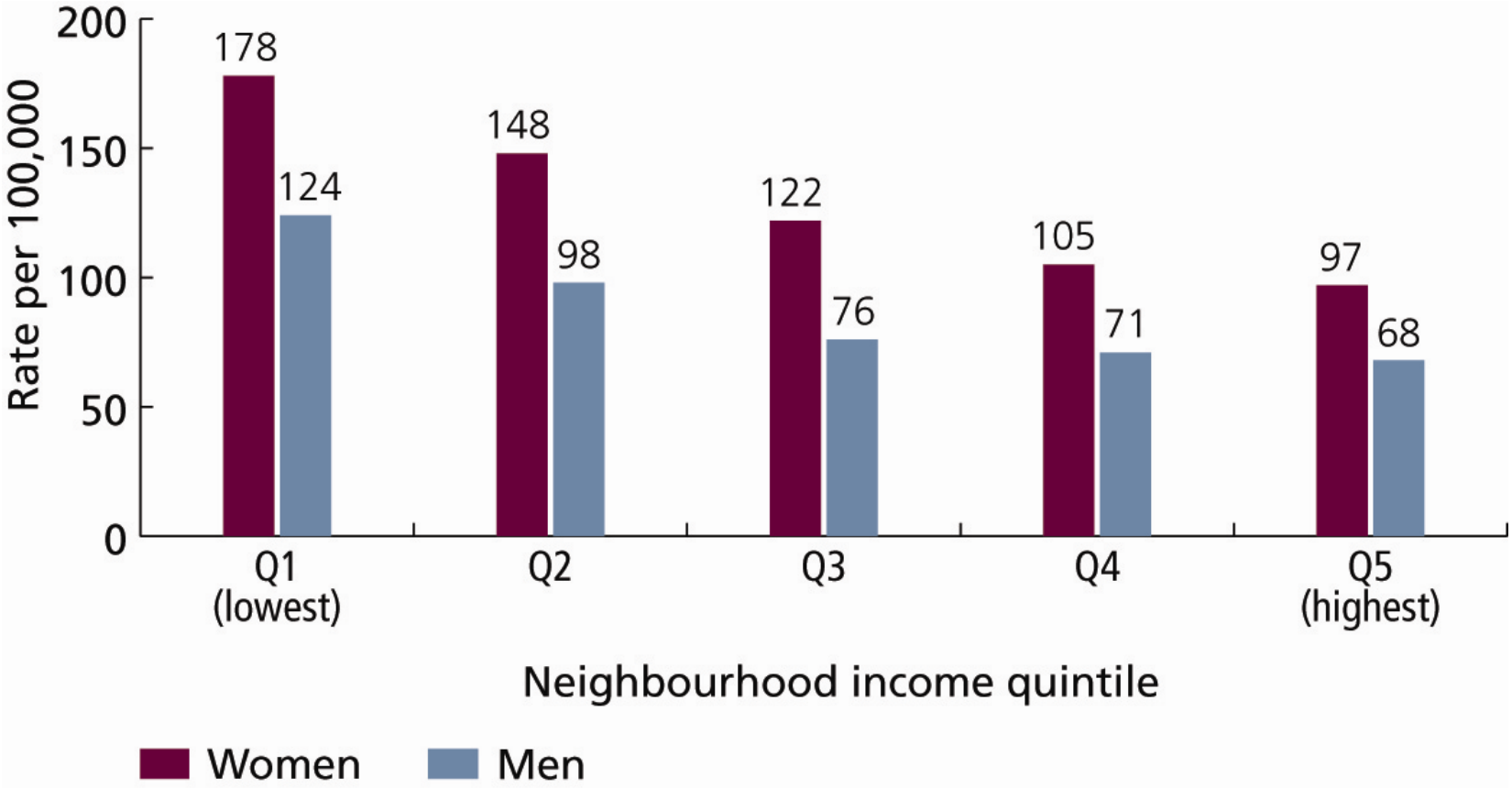
DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

Age-standardized rate (per 100,000 population) of hospitalizations for depression in Ontarians aged 15 and older, by sex and neighbourhood income quintile, 2005/06^



DATA SOURCES: Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); Statistics Canada 2001 Census; Registered Persons Database (RPDB)

^ People who were discharged from hospital from Mar 1, 2005 - Feb 28, 2006

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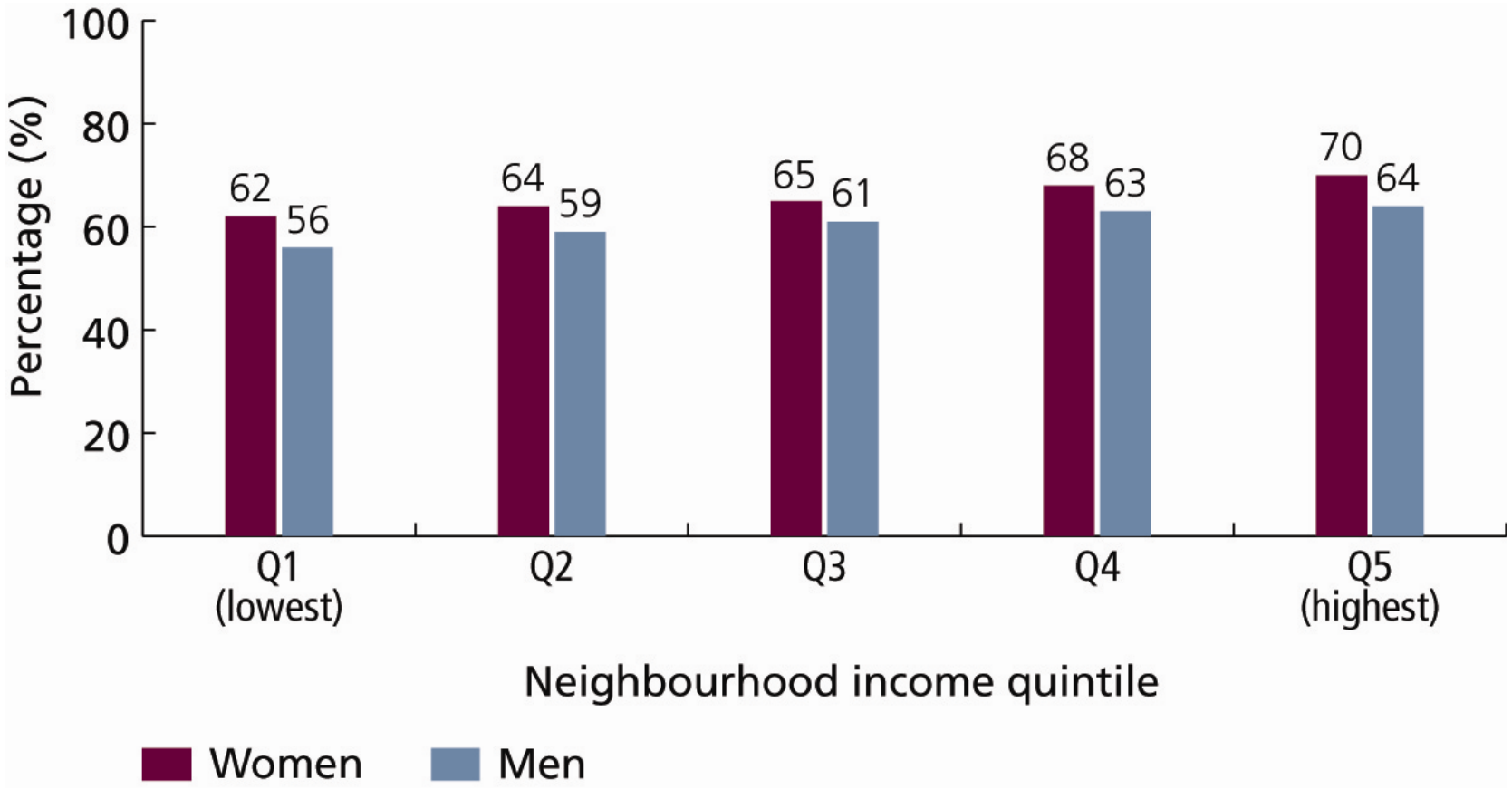
Age-standardized percentage of patients aged 15 and older admitted to hospital for depression who had a physician visit for depression within 30 days of discharge, by sex and neighbourhood income quintile, in Ontario, 2005/06^



DATA SOURCES: Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD); Ontario Health Insurance Plan (OHIP); Statistics Canada 2001 Census

^ People who were discharged from hospital from Mar 1, 2005 – Feb 28, 2006

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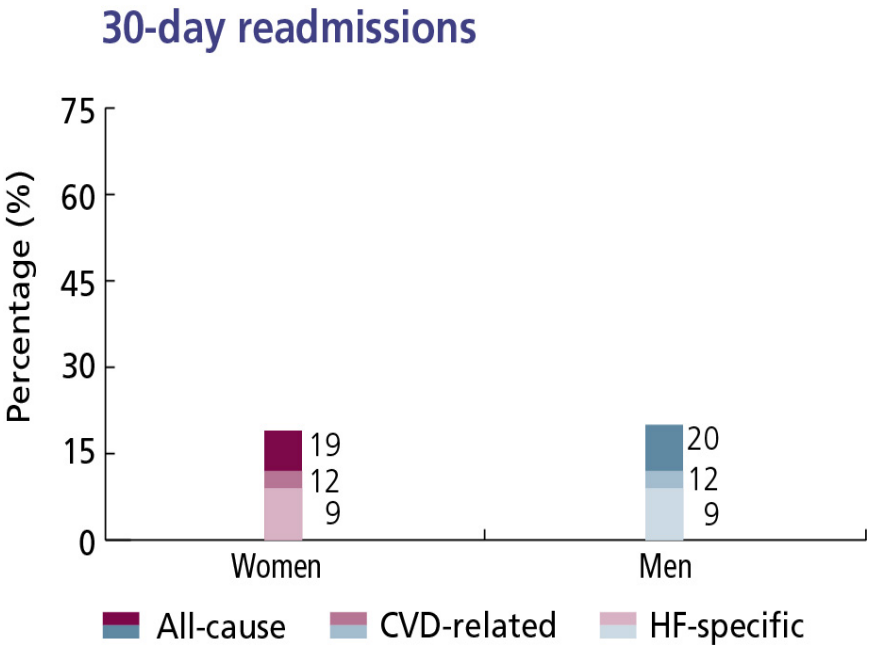
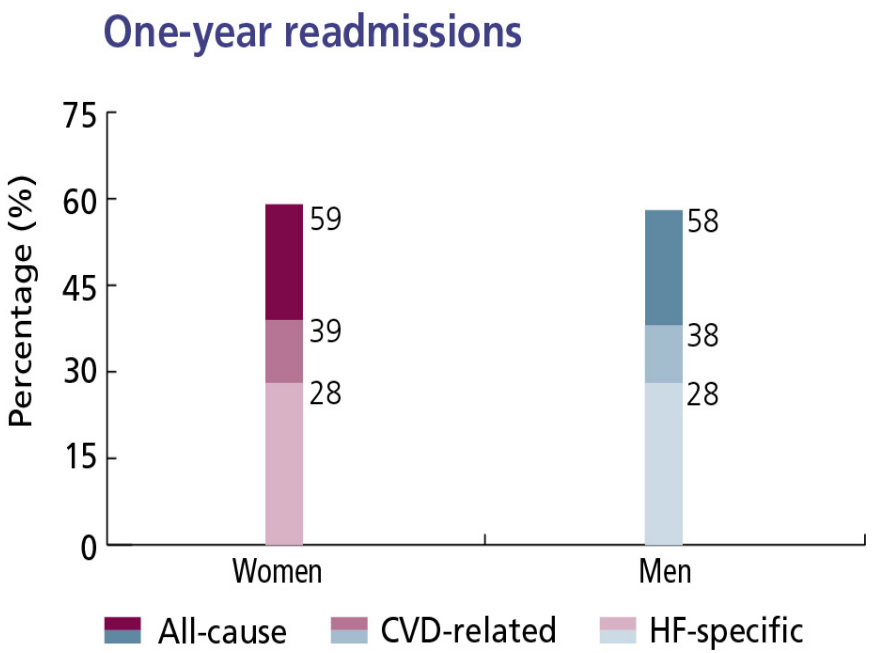
Risk-adjusted percentage of heart failure (HF) patients aged 45 and older who were non-electively readmitted to hospital, by sex and reason for admission, in Ontario, 2005/06





DATA SOURCE: Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD)
NOTE: HF specific readmissions are part of CVD-related readmissions. All-cause readmissions represent all readmissions including CVD-related visits
CVD = cardiovascular disease

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Number of hospitalizations for selected ambulatory care sensitive conditions, by sex and condition, in Ontario, 2006/07

Condition	Overall	Women	Men
CHF	18,909	9,639	9,270
COPD	23,791	11,752	12,039
Asthma	2,375	1,729	646
Diabetes	6,855	2,924	3,931
All conditions	51,930	26,044	25,886

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Data source: Canadian Institute for Health Information Discharge Abstracts Database (CIHI-DAD)

Potentially avoidable hospitalizations if all income groups achieved same rates as higher income groups – "back of the envelope" calculation

Total Admissions*	**51,930**
Avoidable	**15,709**
% Avoidable	**30%**

*Heart Failure, COPD, Diabetes, Asthma

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Data source: Canadian Institute for Health Information Discharge Abstracts Database (CIHI-DAD)

Potentially avoidable hospitalizations if all LHINs achieved admission rates of LHINs with lowest rates – "back of the envelope" calculation

Total Admissions*	**51,930**
Avoidable	**15,482**
% Avoidable	**29.8%**

*Heart Failure, COPD, Diabetes, Asthma

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Data source: Canadian Institute for Health Information Discharge Abstracts Database (CIHI-DAD)

Immigrant and Minority Populations

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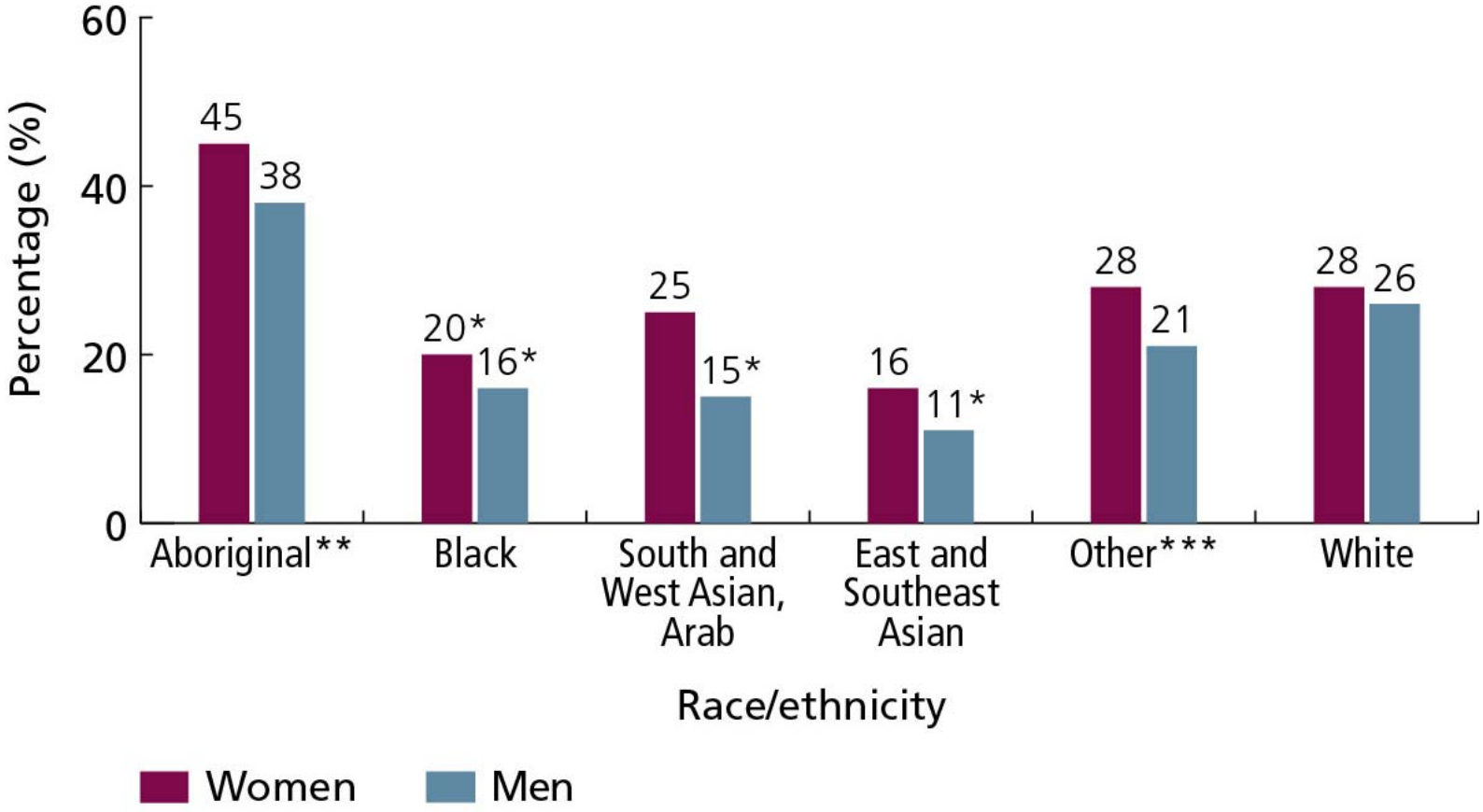
Age-standardized percentage of adults aged 25 and older who reported having activity limitations,¥ by sex and race/ethnicity, in Ontario, 2005



DATA SOURCE: Canadian Community Health Survey (CCHS), 2005 (Cycle 3.1)

¥ Activities at home, school or work have been limited due to a long-term physical condition, mental condition or health problem

* Interpret with caution due to high sampling variability

** Includes self-identified off-reserve Aboriginal adults (North American Indian, Métis, Inuit)

*** Includes Latin American, other racial and multiple racial origins

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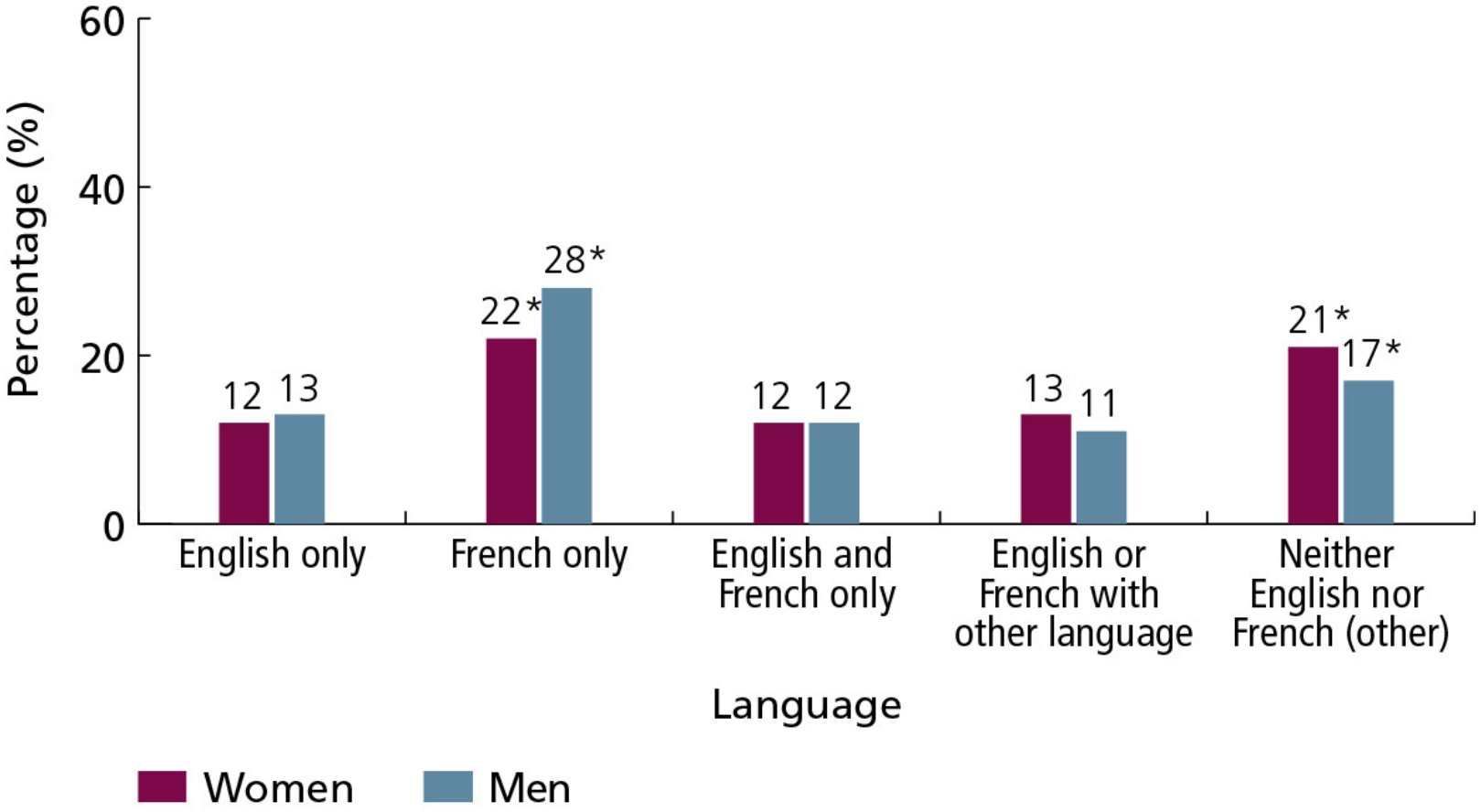
Age-standardized percentage of adults aged 25 and older who reported their health as fair or poor, by sex and language spoken, in Ontario, 2005



DATA SOURCE: Canadian Community Health Survey, 2005 (Cycle 3.1)
* Interpret with caution due to high sampling variability

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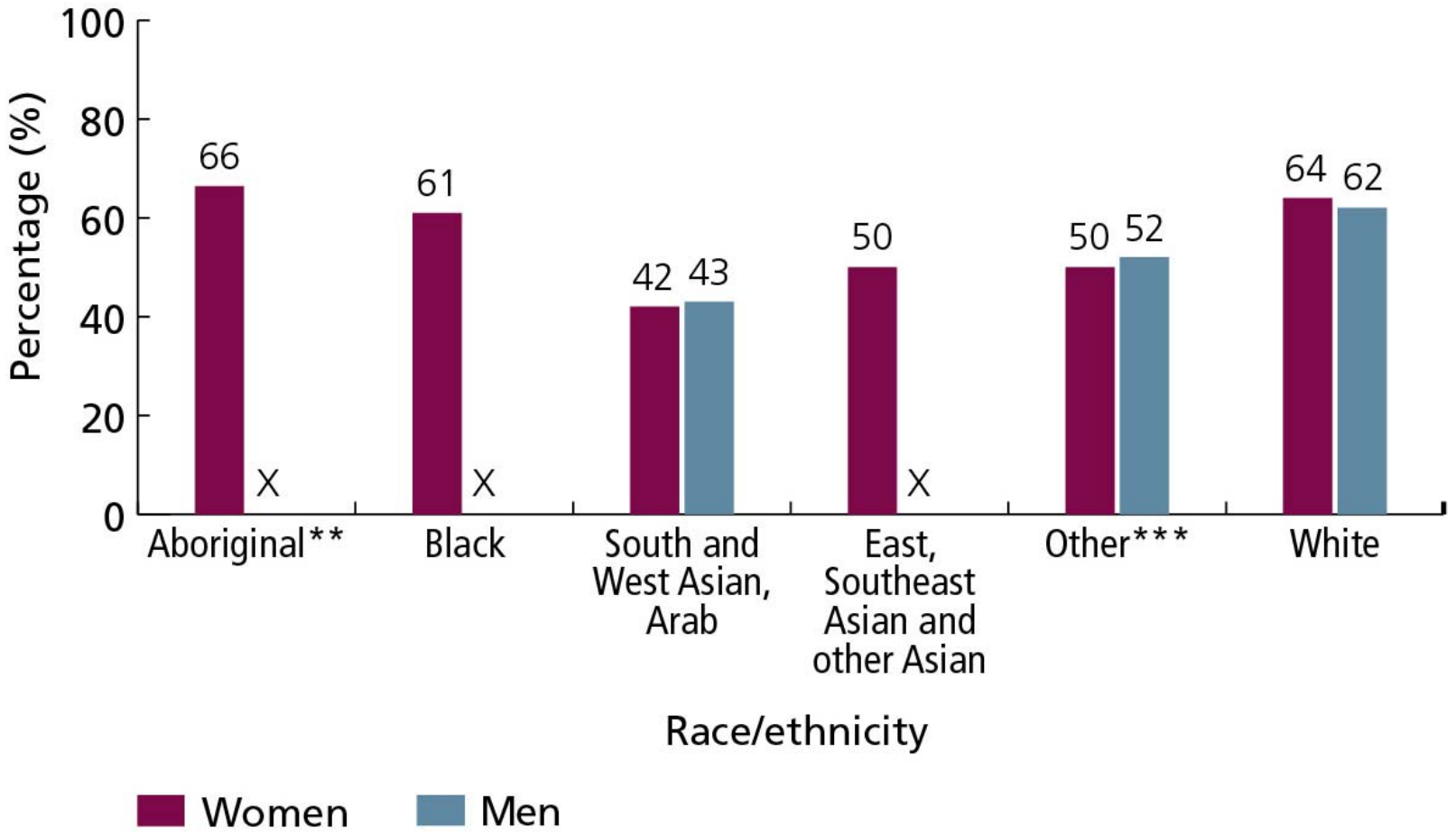
Percentage of adults aged 25 and older who reported being very satisfied with their experience getting to see their doctor for an urgent, non-emergent health problem, by sex and race/ethnicity, in Ontario, 2006–08^



DATA SOURCE: Primary Care Access Survey (PCAS), Waves 4–11
^ The survey period was from October 2006–September 2008
X Suppressed due to small sample size
** Includes North American Indian, Métis, Inuit
*** Includes El Salvador, other European, other Central American, other South American, religion as an ethnicity

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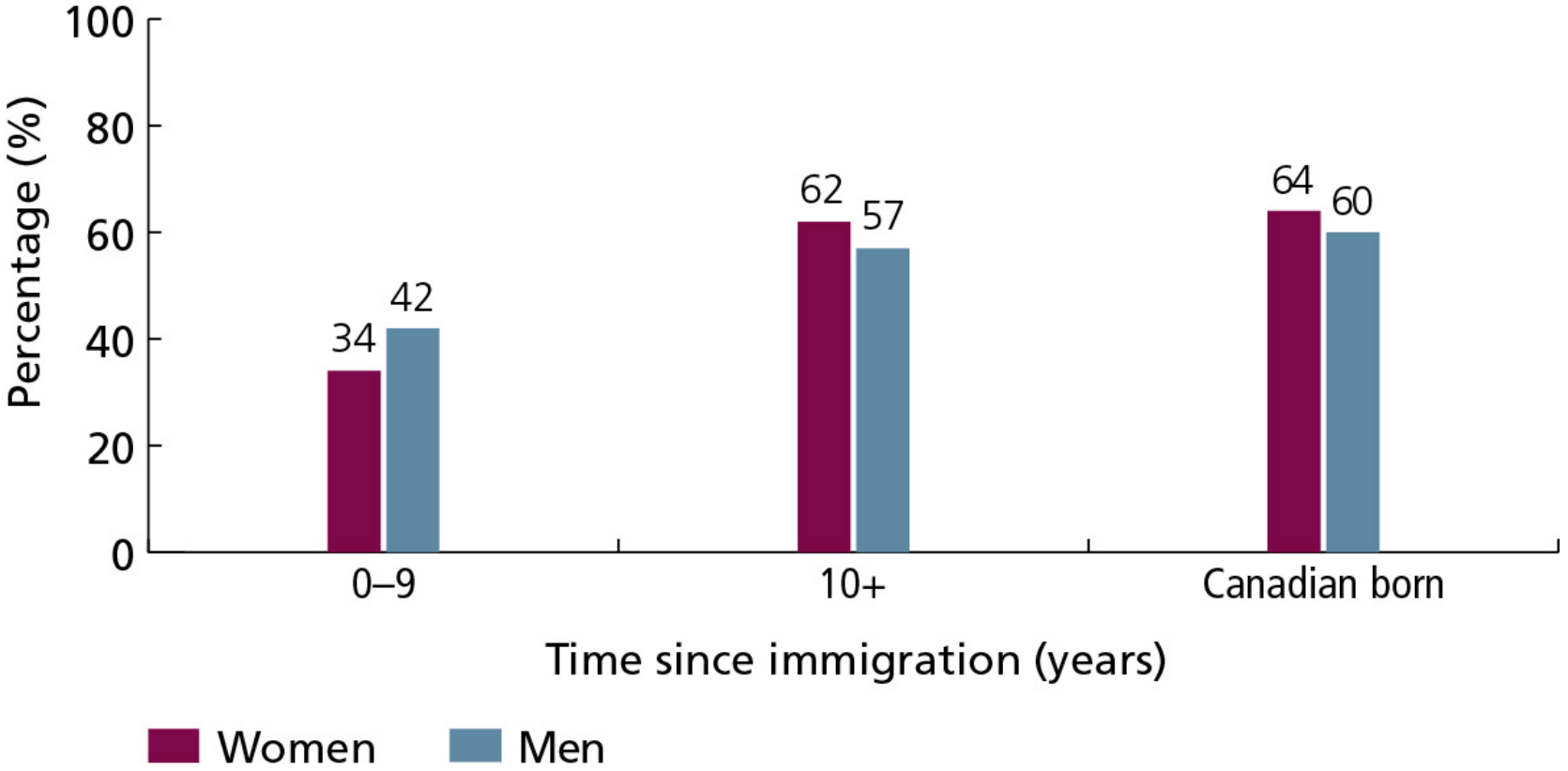
Percentage of adults aged 25 and older who reported being very satisfied with their experience getting to see their doctor for an urgent, non-emergent health problem, by sex and time since immigration, in Ontario, 2006–08^



DATA SOURCE: Primary Care Access Survey (PCAS), Waves 4–11

^ The survey period was from October 2006–September 2008

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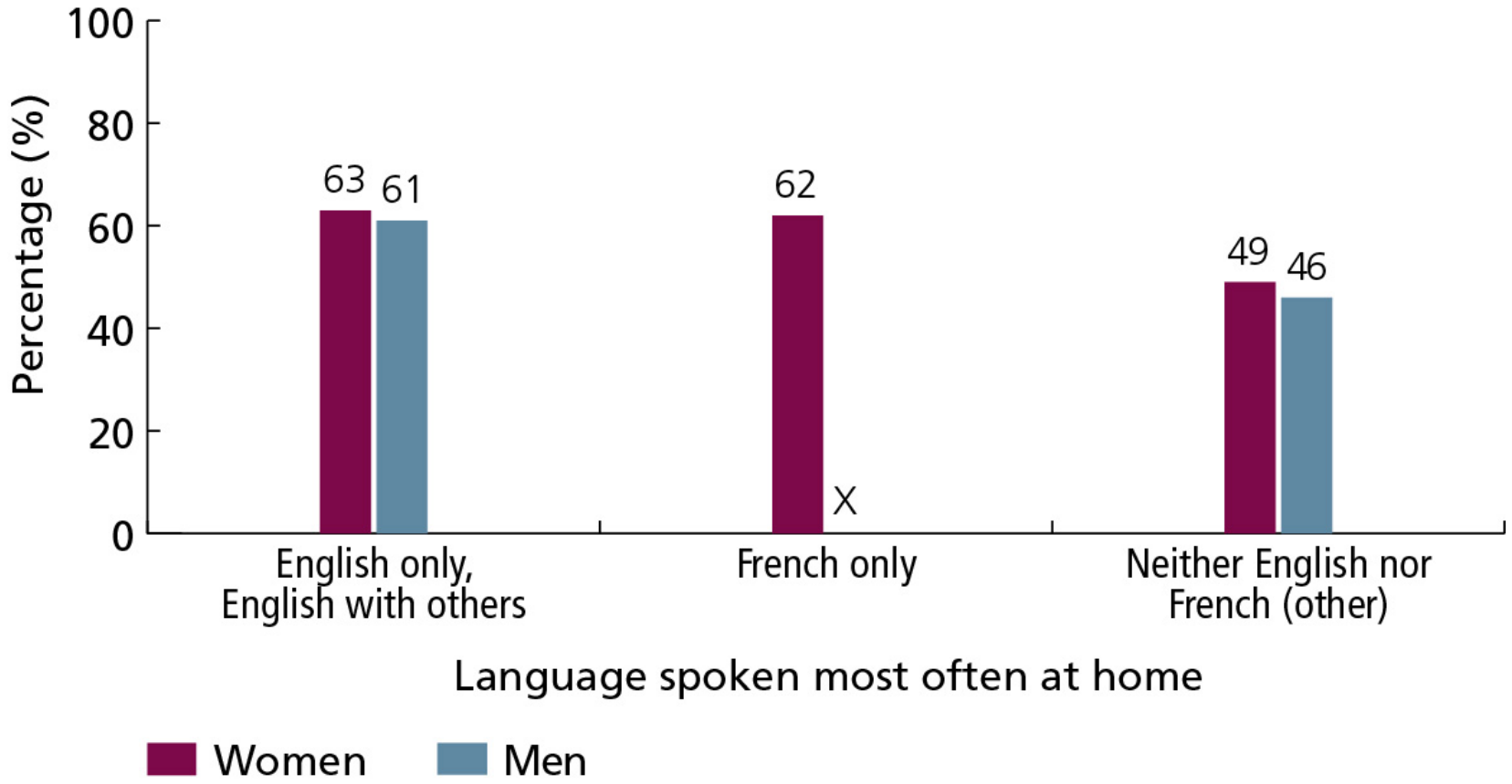
Percentage of adults aged 25 and older who reported being very satisfied with experience getting to see their doctor for an urgent, non-emergent health problem, by sex and language spoken most often at home, in Ontario, 2006–08^



DATA SOURCE: Primary Care Access Survey (PCAS), Waves 4–11
^ The survey period was from October 2006–September 2008
X Suppressed due to small sample size

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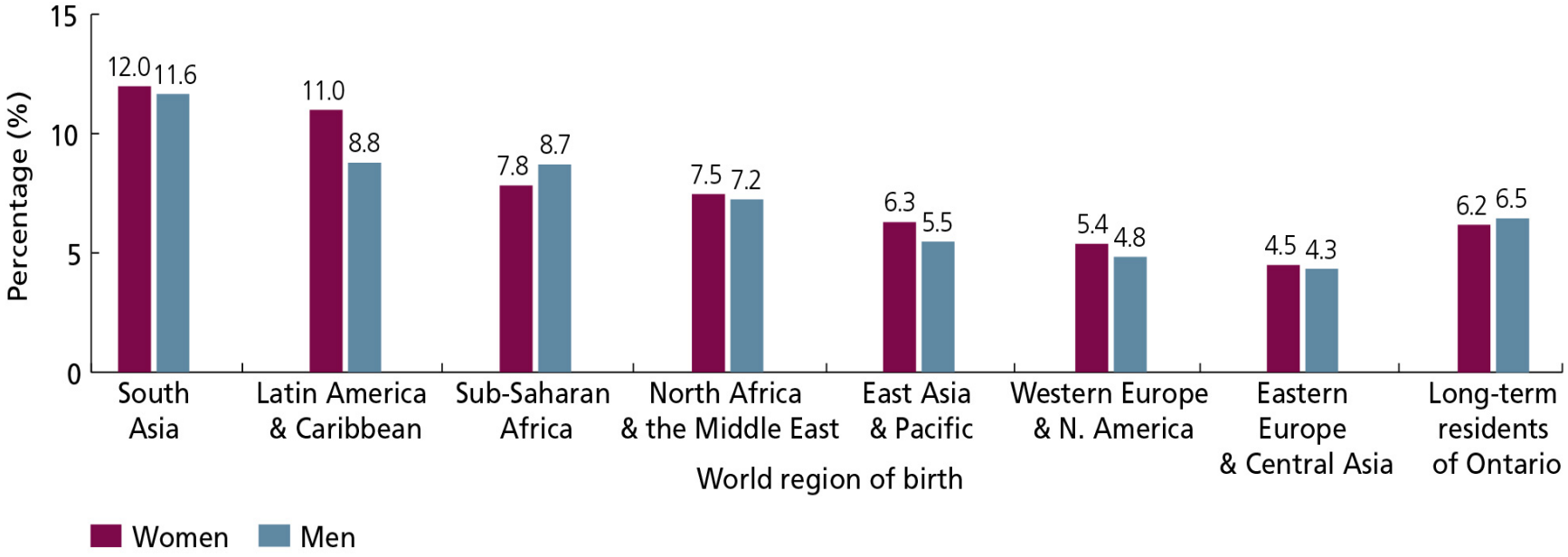
Age-standardized prevalence of diabetes among urban-dwelling immigrants,^ by sex and world region of birth, and among urban-dwelling long-term residents,† in Ontario, 2005



DATA SOURCES: Landed Immigrant Data System (LIDS); Registered Persons Database (RPDB); Ontario Health Insurance Plan (OHIP); Ontario Diabetes Database (ODD)

^ includes women and men who were granted permanent residency status in Canada between 1985 and 2000

† includes Canadian-born residents, as well as people granted permanent residency status before 1985

This graph has been adapted from: Creatore MI, Moineddin R, Booth G, Manuel DH, DesMeules M, McDermott S, et al. Age- and sex-related prevalence of diabetes mellitus among immigrants to Ontario, Canada. *CMAJ* 2010; 182(8):781-789.

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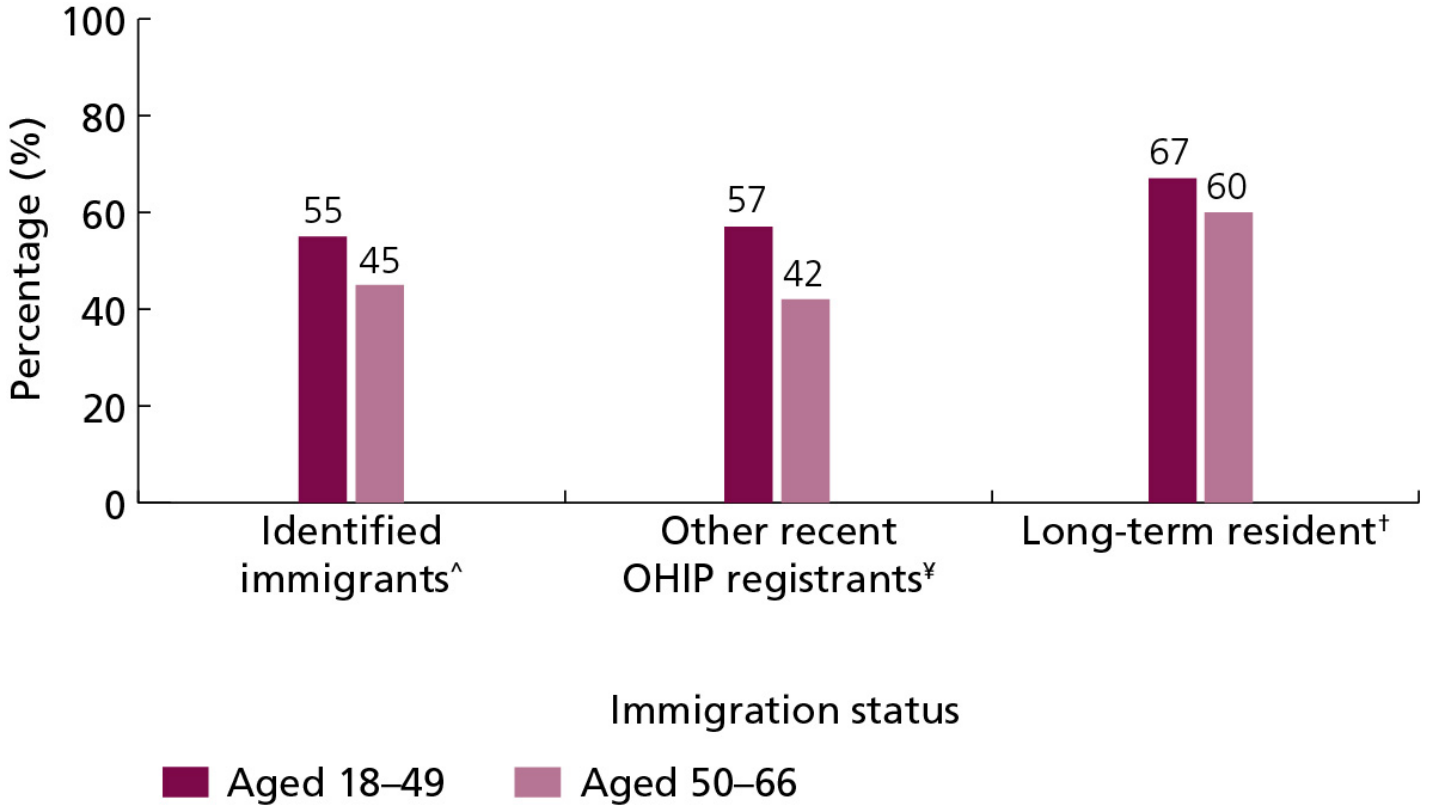
Percentage of screen-eligible women living in urban areas who were appropriately screened for cervical cancer, by immigrant status and age group, 2006-2008



DATA SOURCES: Landed Immigrant Data System (LIDS); Registered Persons Database (RPDB); Ontario Health Insurance Plan (OHIP); Ontario Cancer Registry (OCR); Canadian Institute for Health Information Discharge Abstract Database (CIHI-DAD)

^ includes women who were granted permanent residency status in Canada between 1985 and 2000

¥ includes women who were not identified by the LIDS, but who first registered for the Ontario Health Insurance Plan (OHIP) after April 1, 1993

† includes Canadian-born women, as well as women who were granted permanent residency status before 1985 (excluding recent OHIP registrants)

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Gender Inequities in Health and Health Care

- The social determinants of health influenced women and men differently.
- Many of the observed inequities result from chronic diseases and their risk factors.
- Inequities in health status were much greater than inequities in access to and quality of care.
- Inequities in screening and chronic disease management were greater than inequities in care for acute conditions.

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Opportunities for Intervention

- Sizable and modifiable health inequities on multiple measures across multiple domains.
- Low income women experience highest burden of chronic illness and disability
- Differences in health status and access associated with ethnicity
- Opportunity to improve population health while reducing health inequities by focusing on chronic disease prevention and management and targeting at-risk populations.
- Reducing illness burden is key to health system sustainability as population ages.

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Ontario Data Needs

- Drug Data Under 65
- Primary Care Data
- Ethnicity
- Gender Relevant Measures
- Richer Data on Clinical Factors
- Patient Reported Outcomes Measures
- Vital Statistics Data
- Facilitate Linkages

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Leading Health Equity Indicators

- Prevention and Population Health
- Access to Care
- Cancer Screening
- Chronic Disease Management
- Reproductive Health
- Social Determinants of Health

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POWER Health Equity Road Map

1. Equity, a major attribute of high-performing health systems and important dimension of health care quality, is key to health system sustainability and needs to be a priority.
2. Health equity cannot be achieved without moving upstream and addressing the root causes of disease in the social determinants of health.
3. Prioritize chronic disease prevention and management to improve overall population health and reduce health inequities.

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POWER Health Equity Road Map

4. Focus on patient-centeredness to improve access to, satisfaction with, and outcomes of care for all.
5. Province-wide, integrated, organized models of care delivery can improve health outcomes and reduce inequities in care.
6. Coordinate population health, community, and clinical responses.
7. Link community and health services to optimize outcomes and improve efficiency.

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POWER Health Equity Road Map

8. Implement a health equity measurement and monitoring strategy and routinely include gender and equity analysis in health indicator monitoring.
9. Develop strategies for effective implementation by creating learning networks and designing innovations for scale up and spread.
10. Create a culture of innovation and learning while building the evidence base for accelerated improvement through rigorous evaluation and research.

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For more information, please contact us:

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