



POWER Study Women's Health Equity Report

# Cancer

Chapter 4

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

# A Tool for Monitoring and Improvement

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The **P**roject for an **O**ntario **W**omen's Health **E**vidence-Based **R**eport (**POWER**) will serve as a tool to help policymakers and providers to improve the health of and reduce inequities among the women of Ontario.

# Uses for POWER Study

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- Priority Setting
- Building the Evidence Base
- Informing Practice and Policy
- Tool for Improvement
- Integrating Equity into Planning and Quality Improvement

# Stakeholder Consultations

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- Power Study Roundtables
- Consumers: representatives of community based groups and associations
- Providers: clinicians, government, health data agencies, LHINs, CHCs, CCACs
- Range of areas and interests
  - Especially cancer, cardiovascular, and depression
  - Some representation from outside GTA

# Ontario Women's Health Equity Report

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## Volume 1

- Burden of Illness
- Cancer
- Depression
- Cardiovascular disease
- Access to Health Care
- Conclusions and Policy Implications

## Volume 2

- Diabetes
- HIV Infection
- Musculoskeletal Disorders (arthritis, osteoporosis)
- Reproductive and Gynecological Health
- Special Populations (low income, immigrant and older women)
- Social Determinants of Health

## Interactive data cube

# Measuring and Monitoring Gender Differences in Cancer Indicators

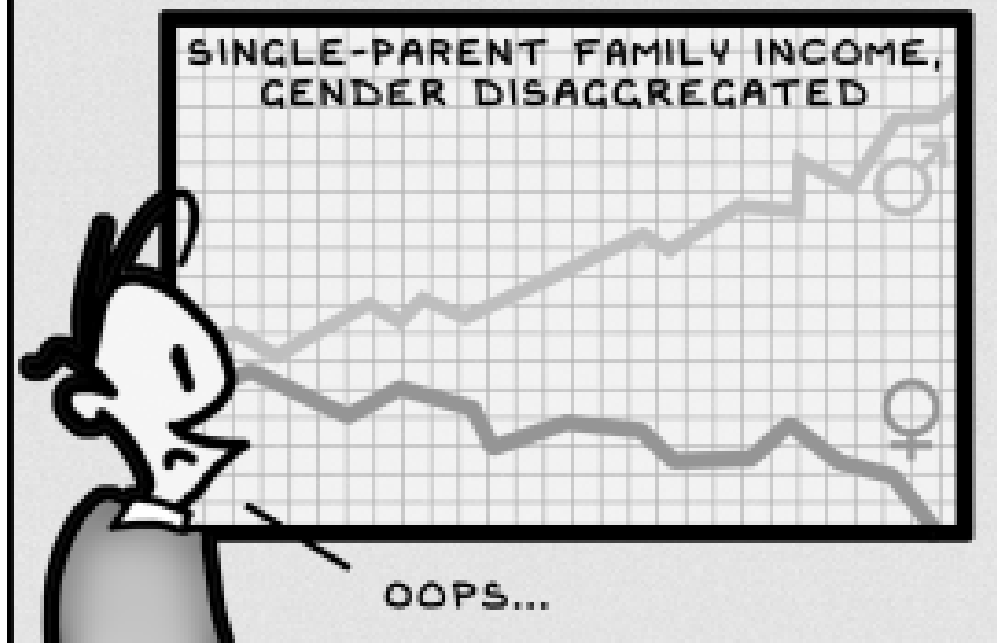
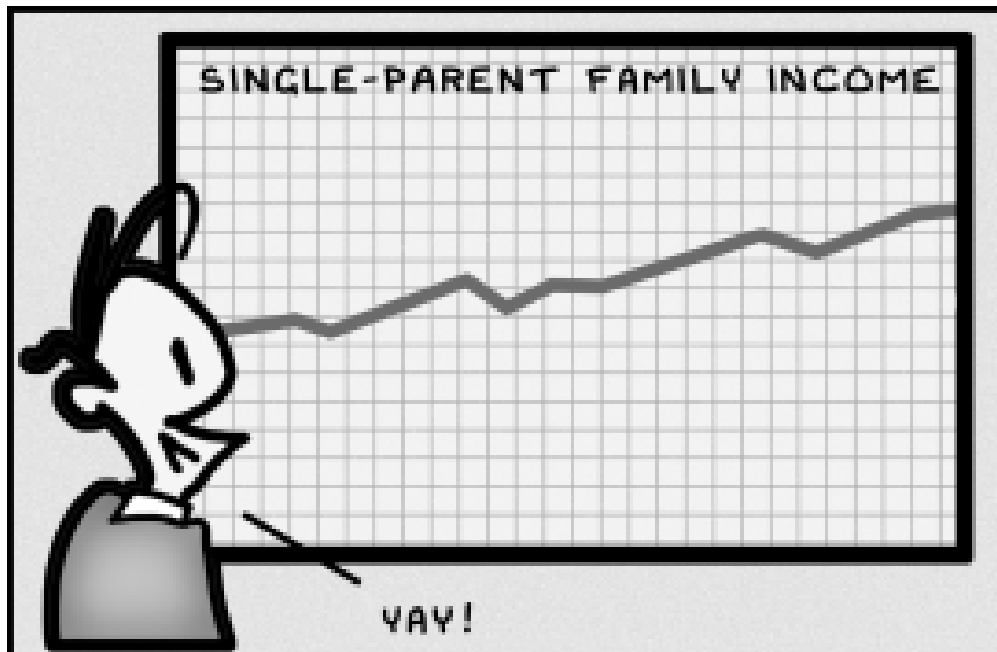
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## **Women and men have very different:**

- Patterns of illness, morbidity, and mortality
- Social contexts
- Experiences with health care

## **Health inequities among women associated with:**

- Socioeconomic position
- Age
- Geography



# Women's Health Reporting: Developing a New Model

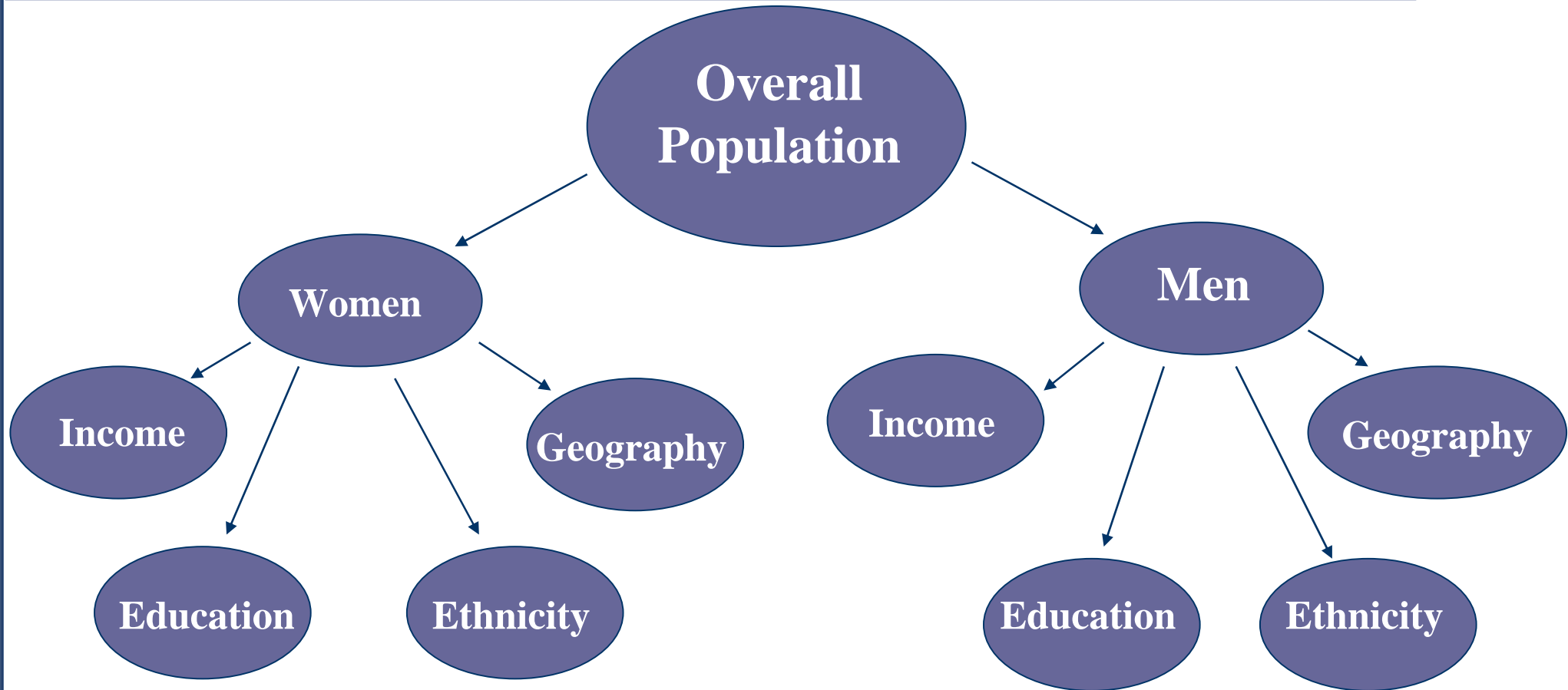
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- The Ontario Women's Health Equity Report can serve as a model for
  - incorporating gender and equity as an integral component of improvement efforts;
  - focusing on the need to integrate efforts to improve population health and health care services;
  - building upon evidence-based analyses to provide new information on factors and pathways contributing to gender and socioeconomic differences in health outcomes.



# Assessing Equity

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# Health Indicator Measurement and Reporting: A Tool to Drive Change

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**Health indicator measurement and reporting provide essential tools for informing and monitoring efforts to:**

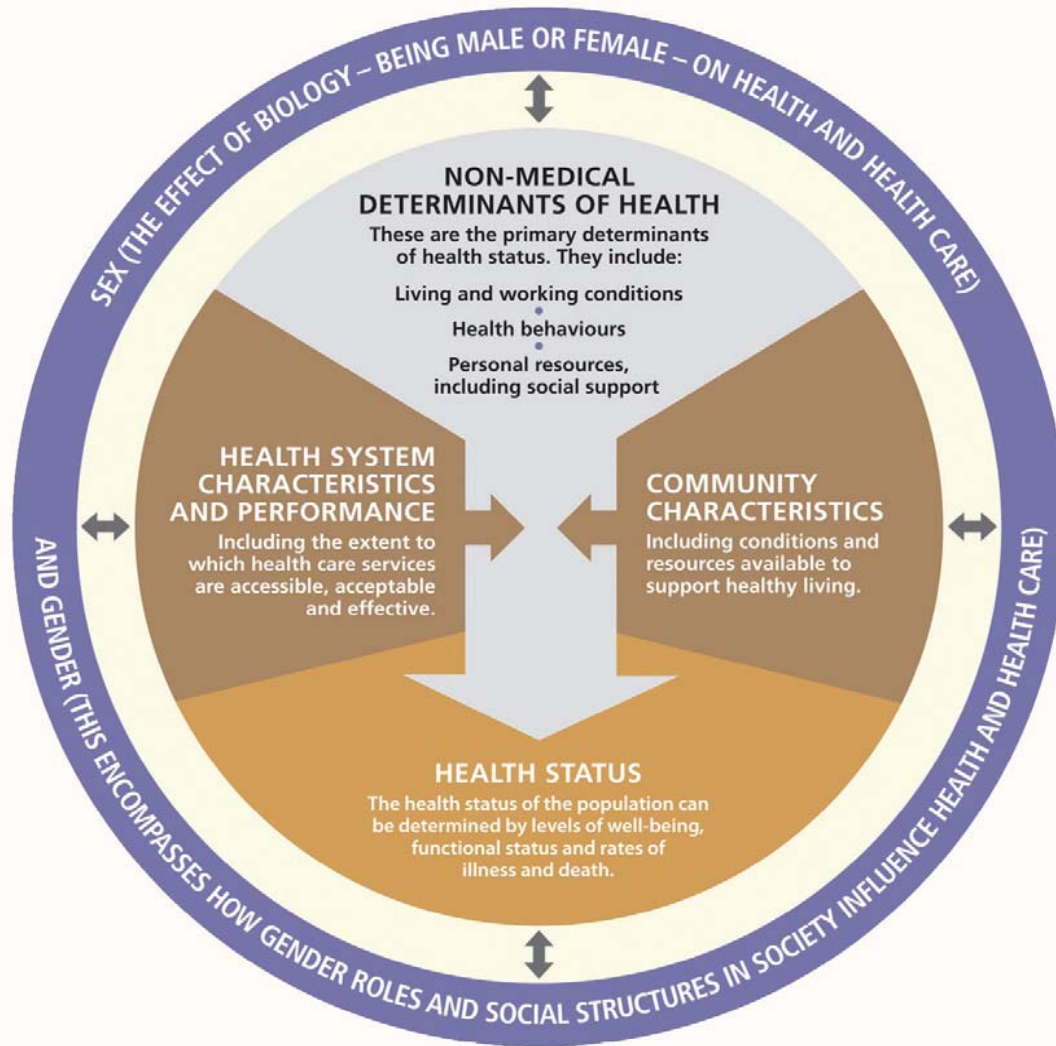
- Improve population health
- Improve access to quality and outcomes of health care services
- Reduce inequities in health and health care

# Effecting Change . . .

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- Reporting by itself does not result in improvement.
- For performance measurement and reporting to result in change it needs to be evidence-based, strategy driven, linked to a commitment for change by health system leaders and providers, and mechanisms for accountability.

- 
- POWER Study Women's Health Equity Framework



# POWER Study Gender and Equity Health Indicator Framework

# Cancer Chapter Framework

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- Developed by members of the Cancer Working Group
- Include major causes of cancer-related morbidity and mortality in women including:
  - Women-specific tumours: breast, ovarian, cervix and endometrial
  - Non-gender specific tumours: lung and colorectal
- Cover continuum of care from prevention through end-of-life care
- Process and outcome measures eligible provided feasible to calculate from administrative data available in Ontario

# Process for Indicator Selection

Framework for cancer chapter developed by working group

Literature review to identify candidate indicators

No. of indicators identified from literature:  
**427**

Short-listing of candidate indicators by working group members with respect to importance and feasibility of measurement using admin data

No. of indicators presented to TEP:  
**47**

Technical expert panel (TEP)

No. of indicators selected by panel:  
**31**

Analysis with stratification by sex, income & age

# Cancer Chapter Indicators

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- General Indicators (3 indicators)
- Screening Indicators (5 indicators)
- Colorectal Cancer (4 indicators)
- Lung Cancer (3 indicators)
- Breast Cancer (5 indicators)
- Gynecological Cancers (4 indicators)
- End of Life Care (5 indicators)



# Data Sources

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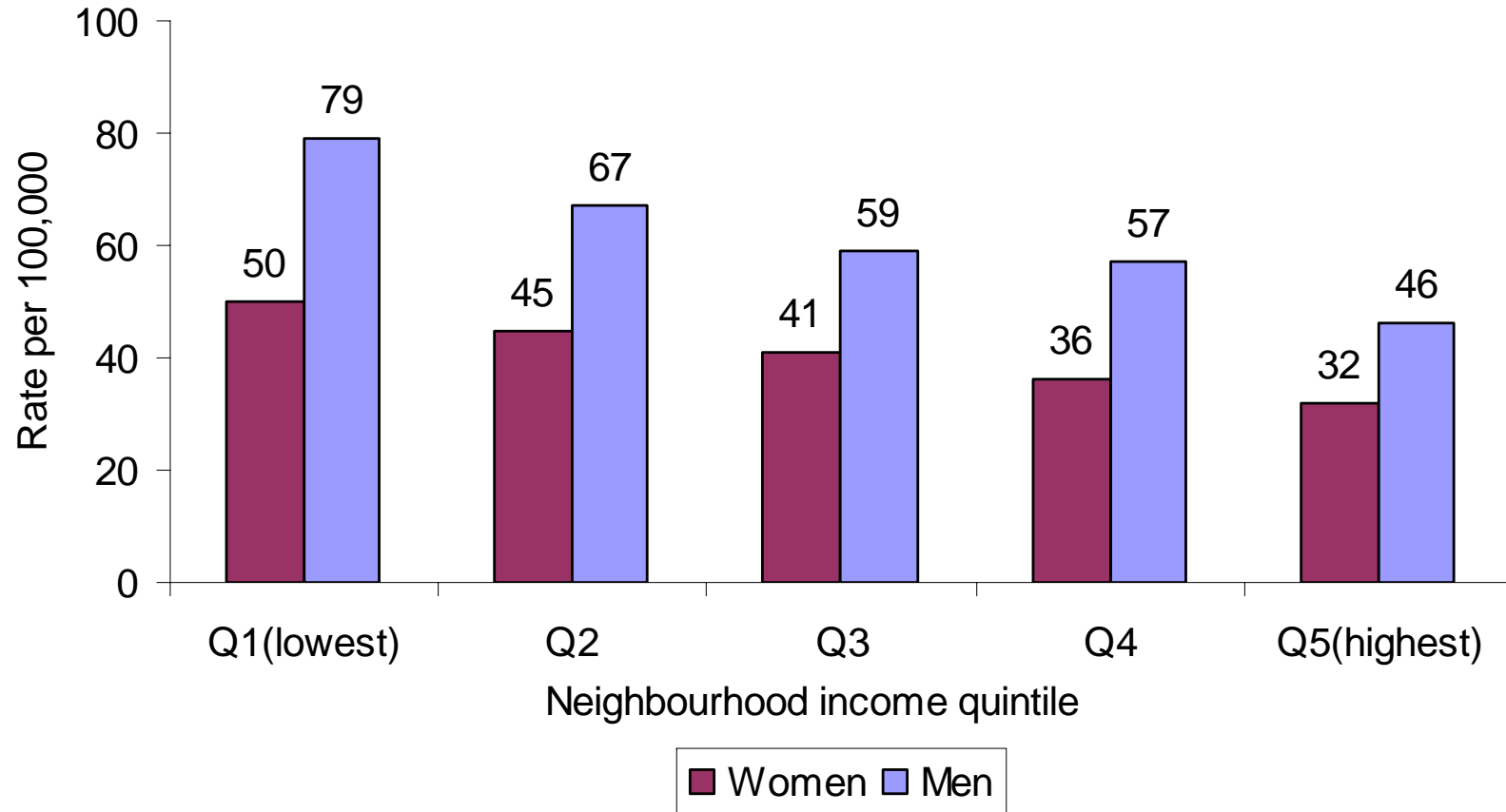
Most recently available data (2003-2005) from:

- Ontario Cancer Registry
- Registered Persons Database
- Ontario Health Insurance Plan Database
- Canadian Institutes of Health Information Database
- CytoBase
- Ontario Breast Cancer Screening Program
- National Ambulatory Care Reporting System
- Ontario Home Care Administrative System

All analyses stratified by sex, age, income and region  
sample size permitting

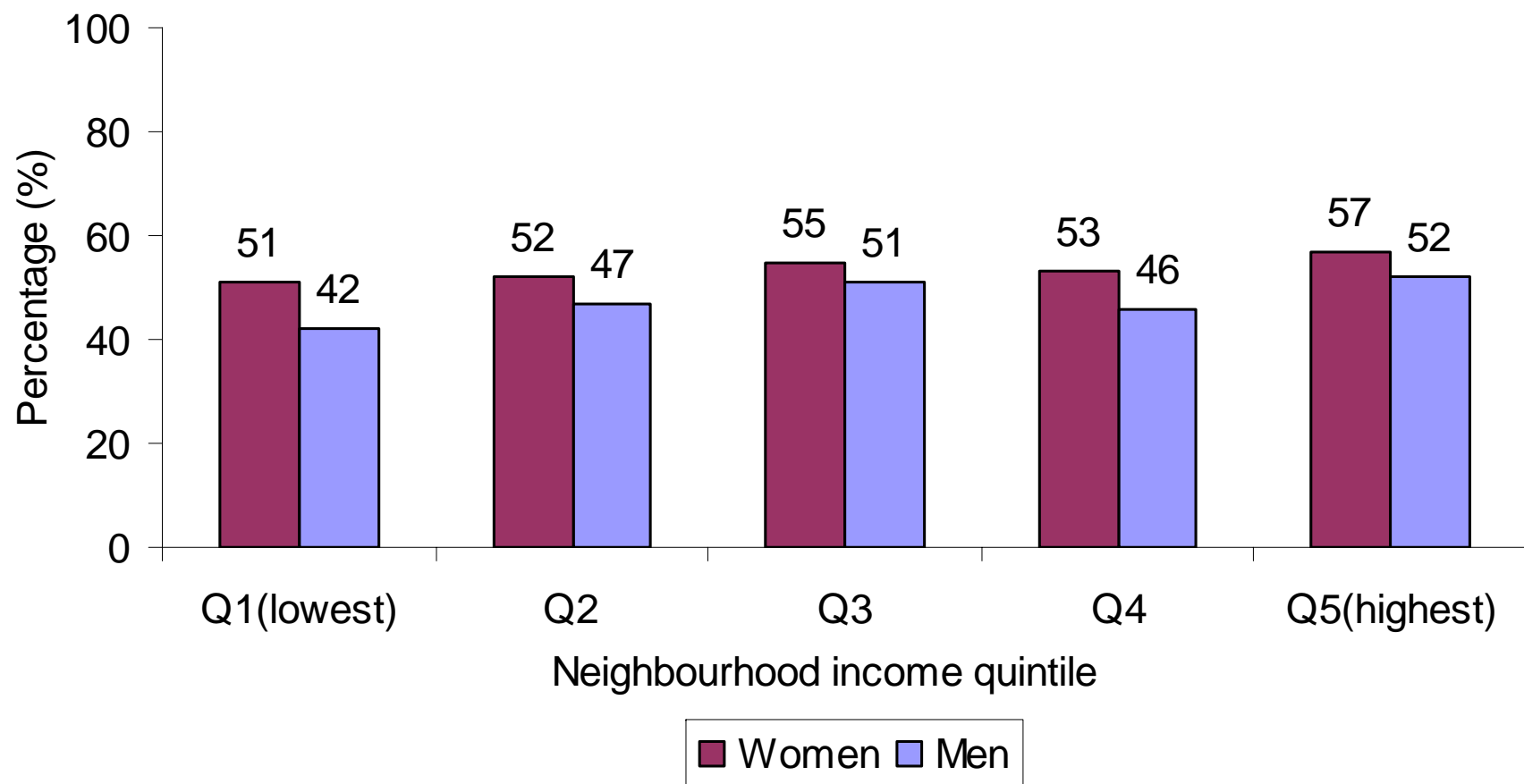
- 
- **Income matters when it comes to cancer incidence, survival and screening but is generally not an important factor in cancer treatment.**

# Age-standardized incidence of lung cancer per 100,000 population, by sex and neighbourhood income quintile, 2004/05



Data sources: Ontario Cancer Registry (OCR); Registered Persons Database (RPDB); Statistics Canada 2001 Census

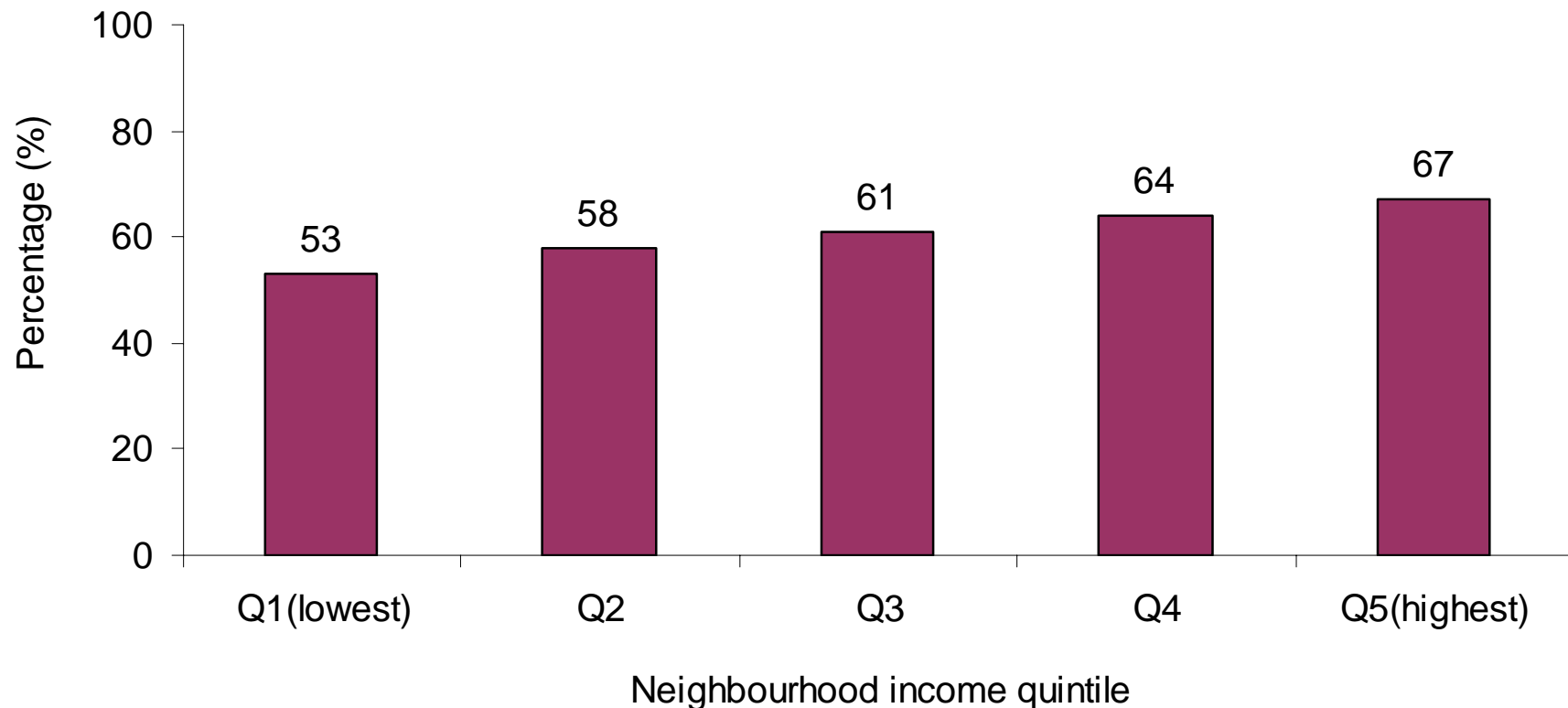
# Age-standardized five-year survival rate (percentage) among patients with colorectal cancer, by sex and neighbourhood income quintile<sup>^</sup>



Data sources: OCR; RPDB; Statistics Canada 2001 Census

<sup>^</sup> For cases diagnosed in 2000/2001

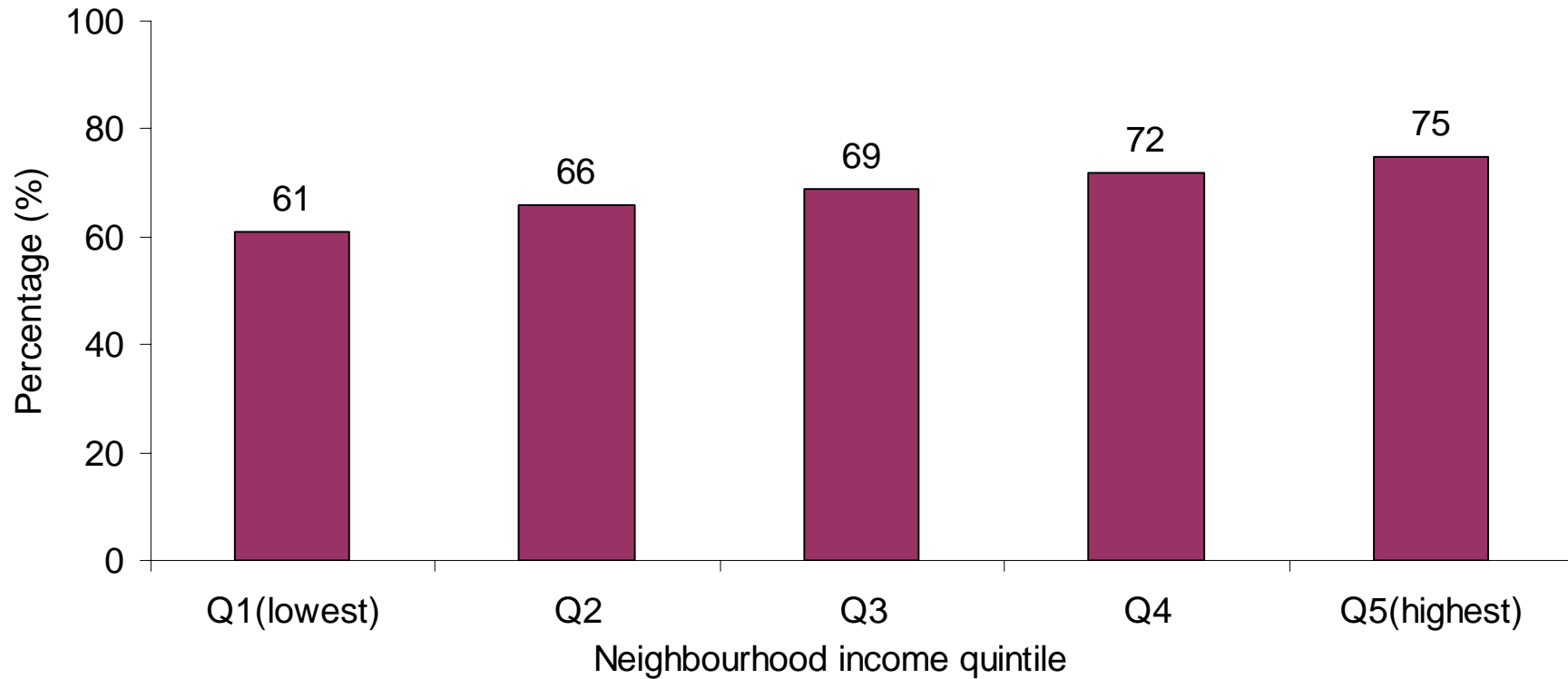
# Age-standardized percentage of screen-eligible<sup>^</sup> women who had a mammogram in the last two years, by neighbourhood income quintile, 2005/06



Data sources: Ontario Breast Screening Program (OBSP); OCR; Ontario Health Insurance Plan (OHIP); RPDB; Statistics Canada 2001 Census

<sup>^</sup>Women aged 50-69 with no history of breast cancer

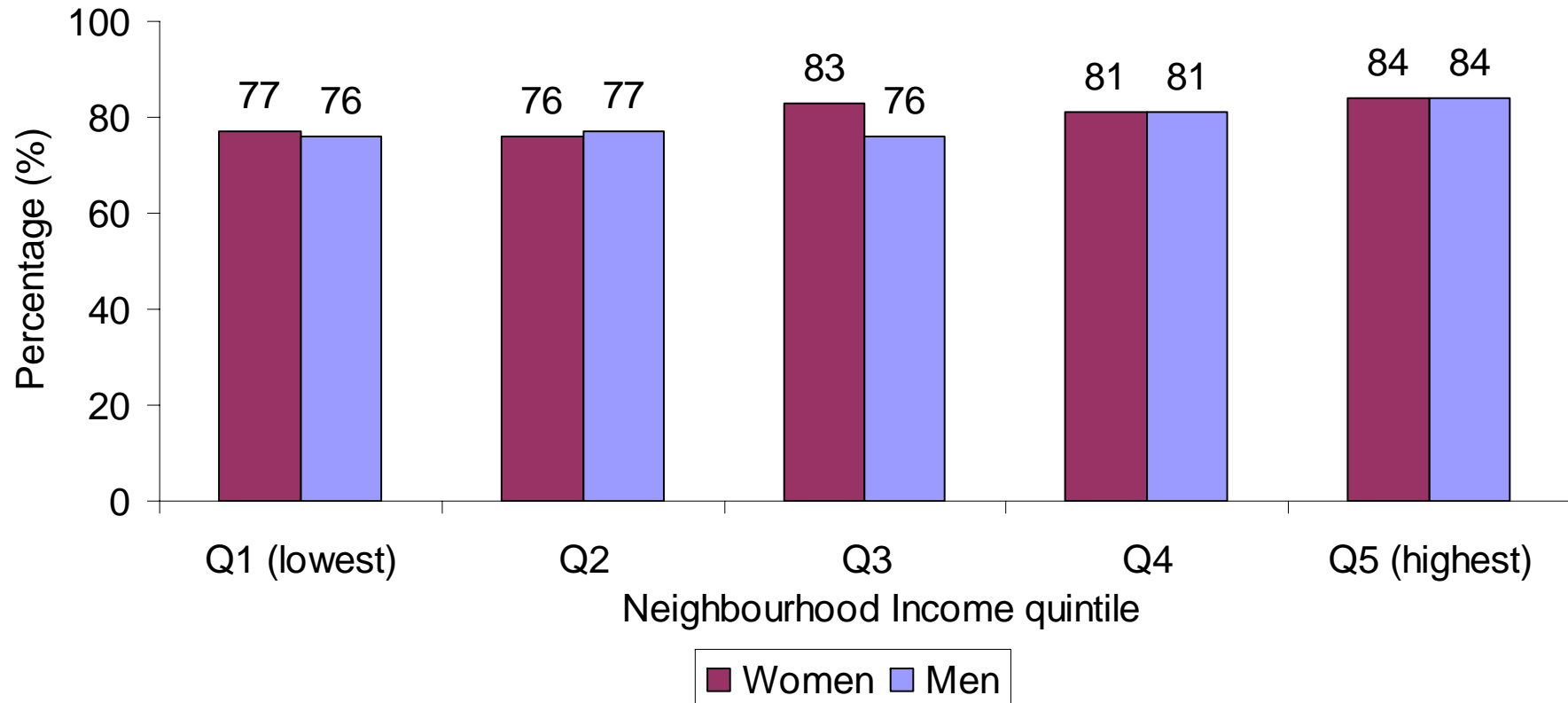
# Age-standardized percentage of screen-eligible<sup>^</sup> women who had at least one Pap test in the last three years, by neighbourhood income quintile, 2004/05



Data sources: CytoBase; OCR; OHIP; RPDB; Canadian Institute for Health Information Discharge Abstracts Database (CIHI-DAD); Statistics Canada 2001 Census

<sup>^</sup>Women aged 18-70 with no history of cervical cancer or prior hysterectomy

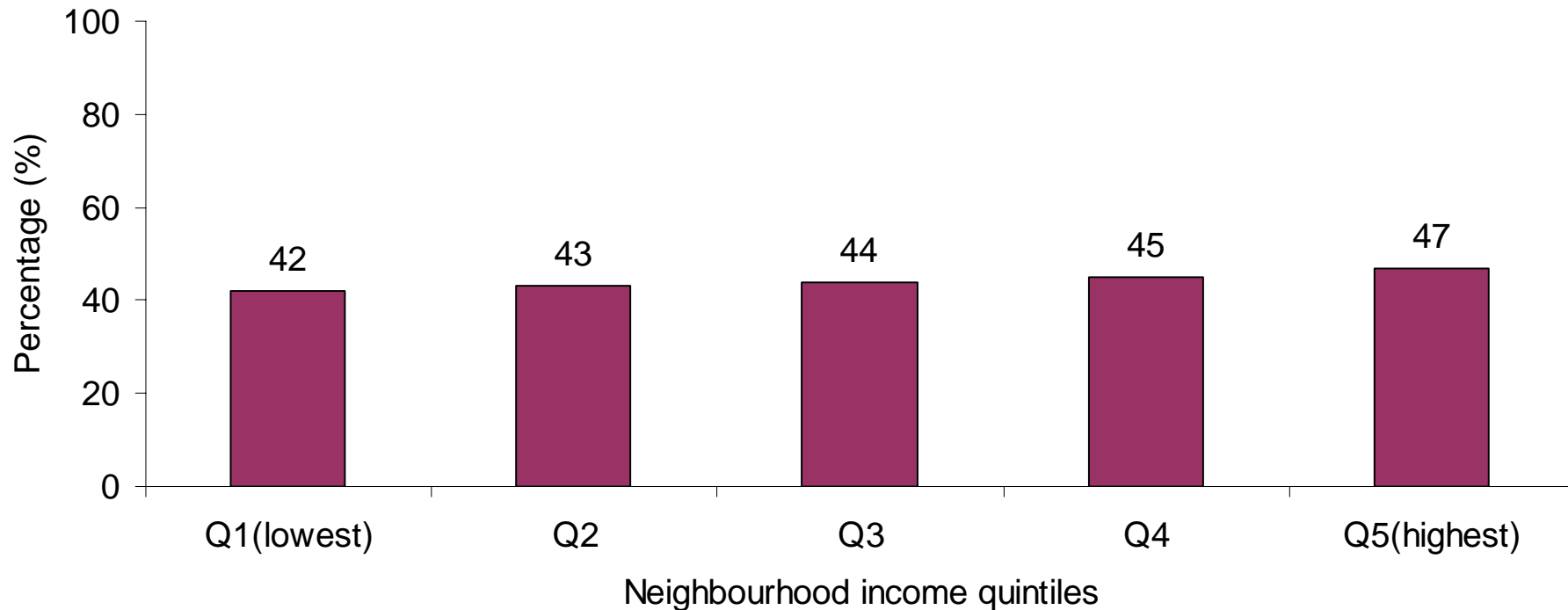
# Age-standardized percentage of colorectal cancer patients who received follow-up colonoscopy within 36 months following surgery, by sex and neighbourhood income quintile, 2002/03 to 2003/04



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- **Follow-up of abnormal or inadequate Pap screening results was suboptimal.**



# Age-standardized percentage of women who had a Pap test that showed a low grade lesion<sup>^</sup> who had a repeat Pap test or colposcopy within 6 months of the initial abnormal test, by neighbourhood income quintile, 2004/05

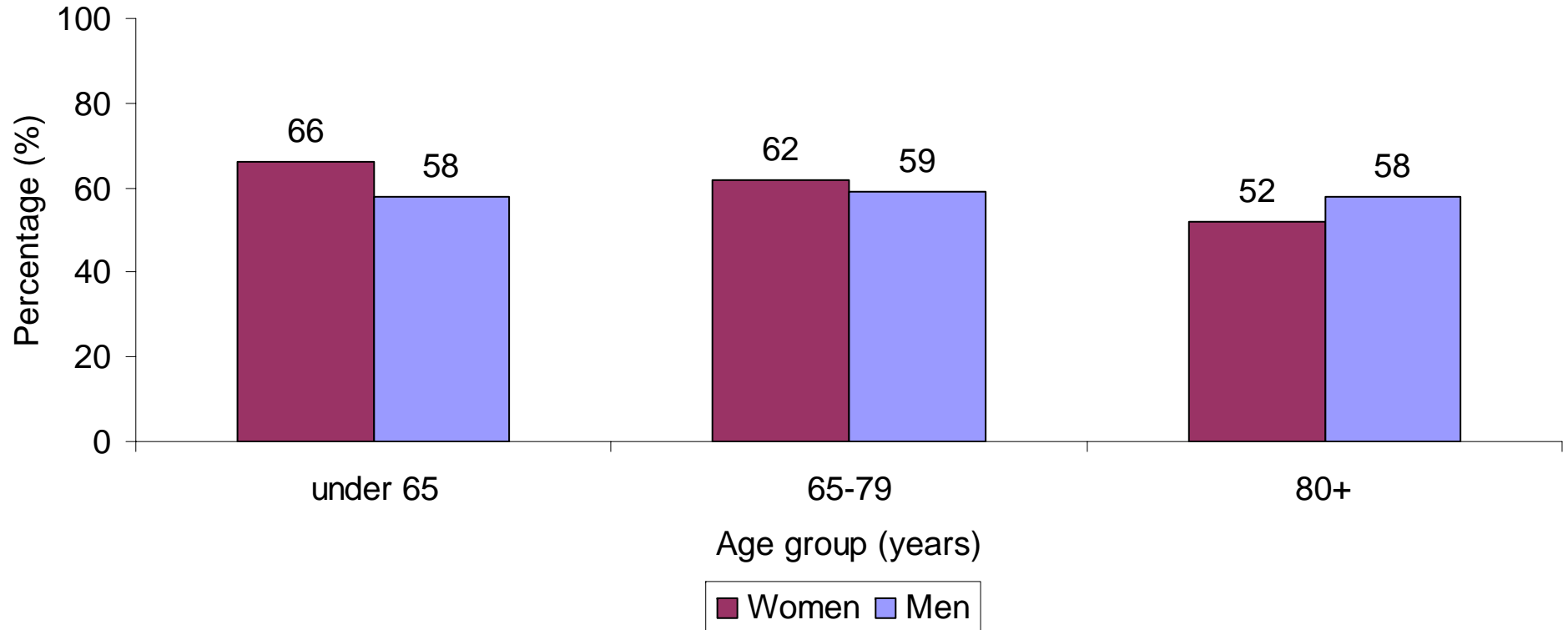


Data sources: CytoBase; OCR; OHIP; RPDB; CIHI-DAD; Statistics Canada 2001 Census

<sup>^</sup>Atypical squamous cells of undetermined significance (ASCUS) or low-grade squamous intraepithelial lesion (LGSIL)

- 
- **Some sex differences exist but these are not pronounced.**

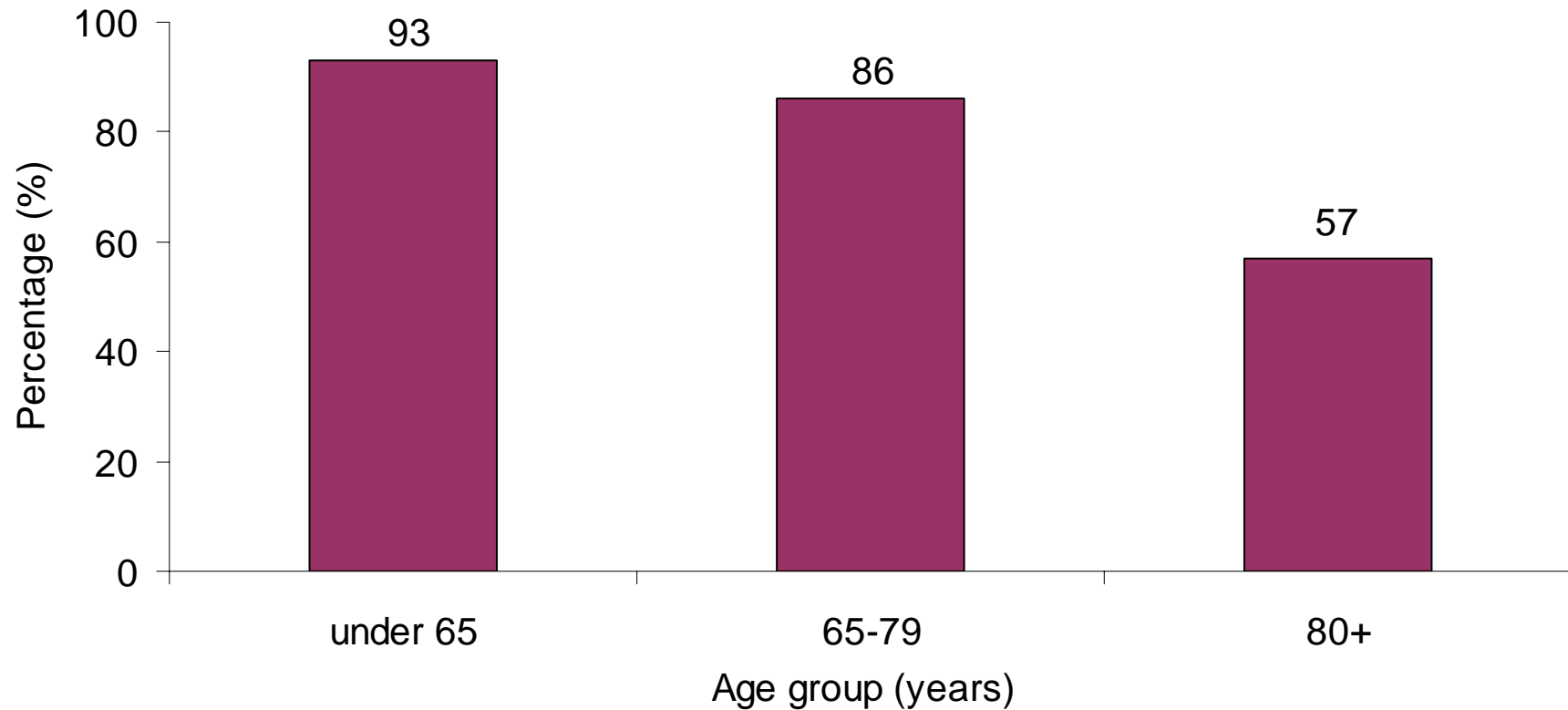
# Percentage of patients with rectal cancer who received a sphincter-sparing procedure at the time of surgery, by sex and age, 2002/03 to 2003/04



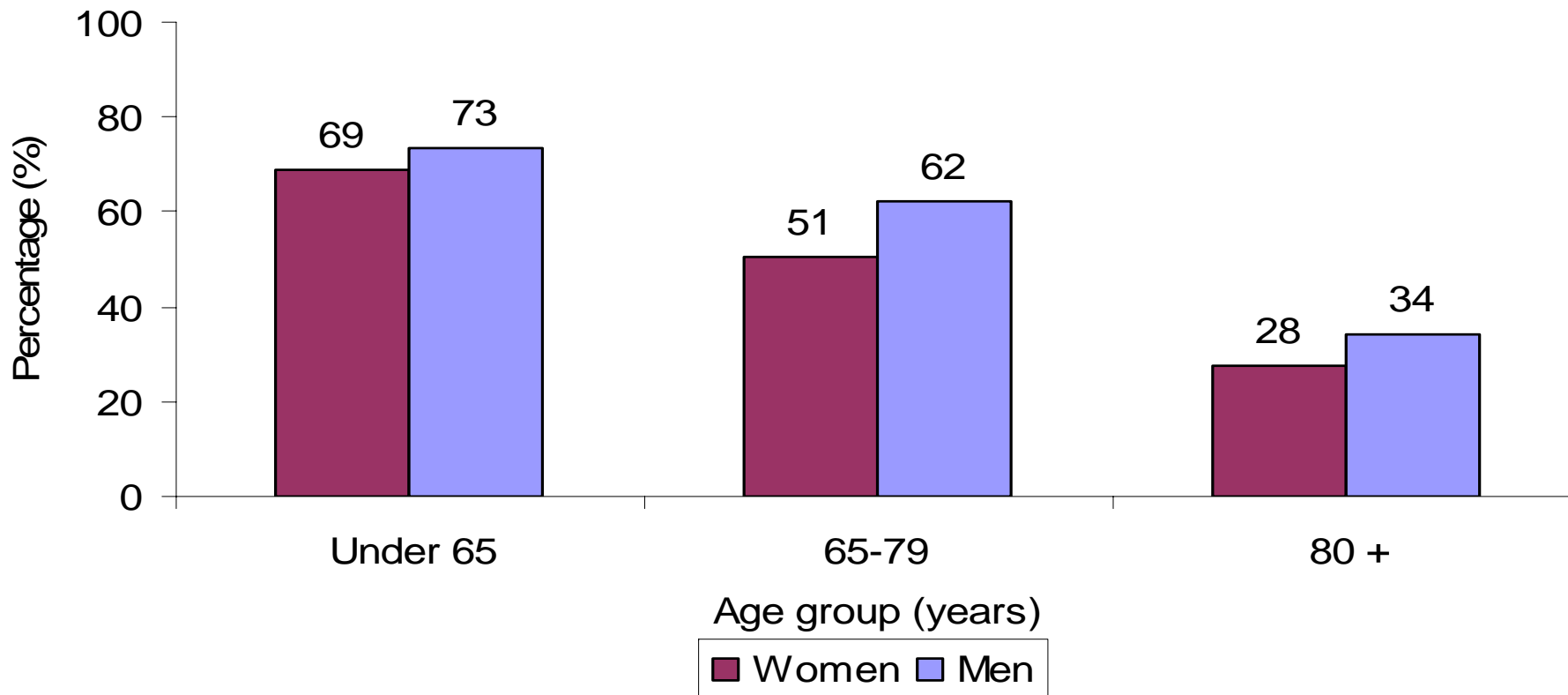
Data sources: OCR; OHIP; RPDB; CIHI-DAD; ICES Physician Database (IPDB);  
Statistics Canada 2001 Census

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- **Age is an extremely important determinant of treatment.**

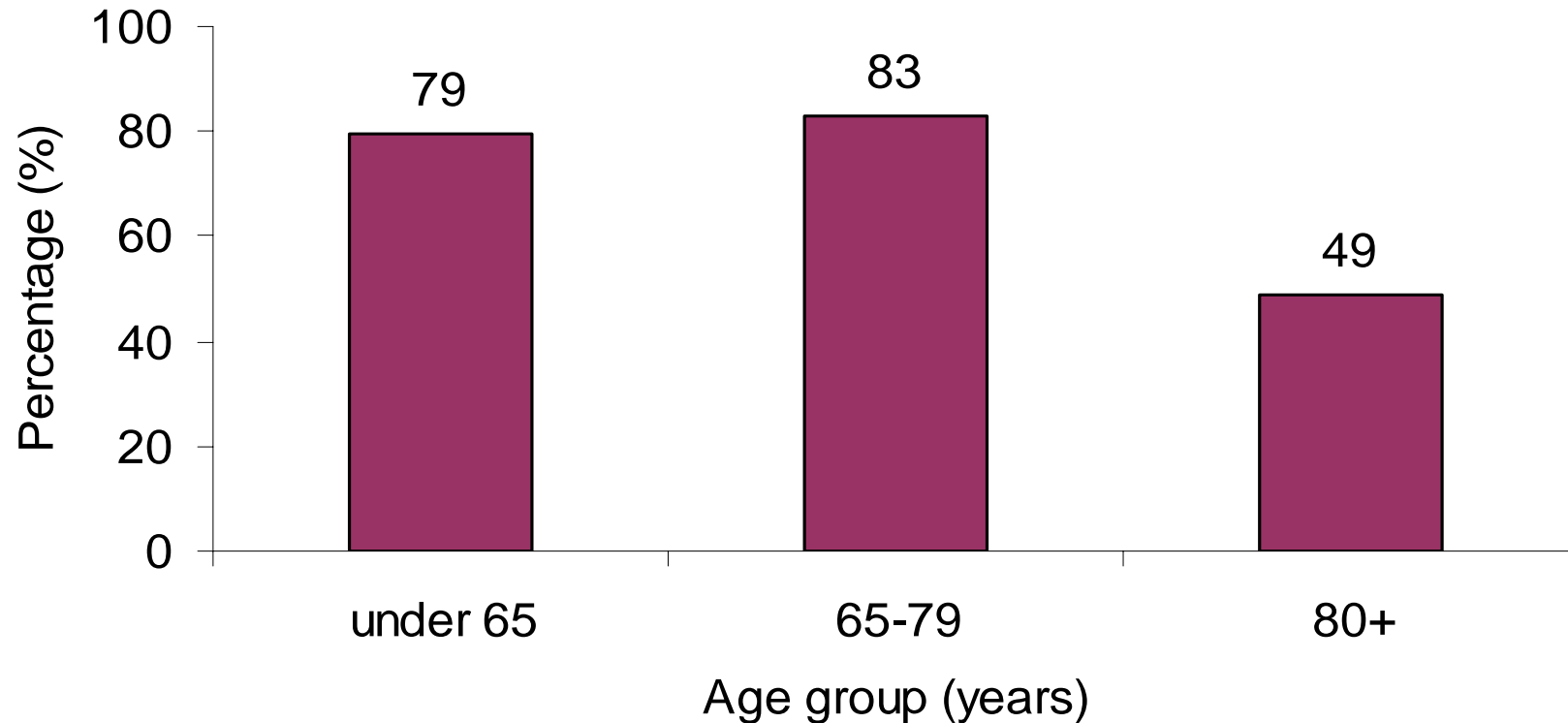
# Percentage of women who had breast cancer surgery who had an axillary lymph node dissection, by age, 2003/04 to 2004/05



# Percentage of patients who underwent surgery for rectal cancer who had a consultation with a radiation oncologist within six months of diagnosis, by sex and age, 2002/03 to 2003/04



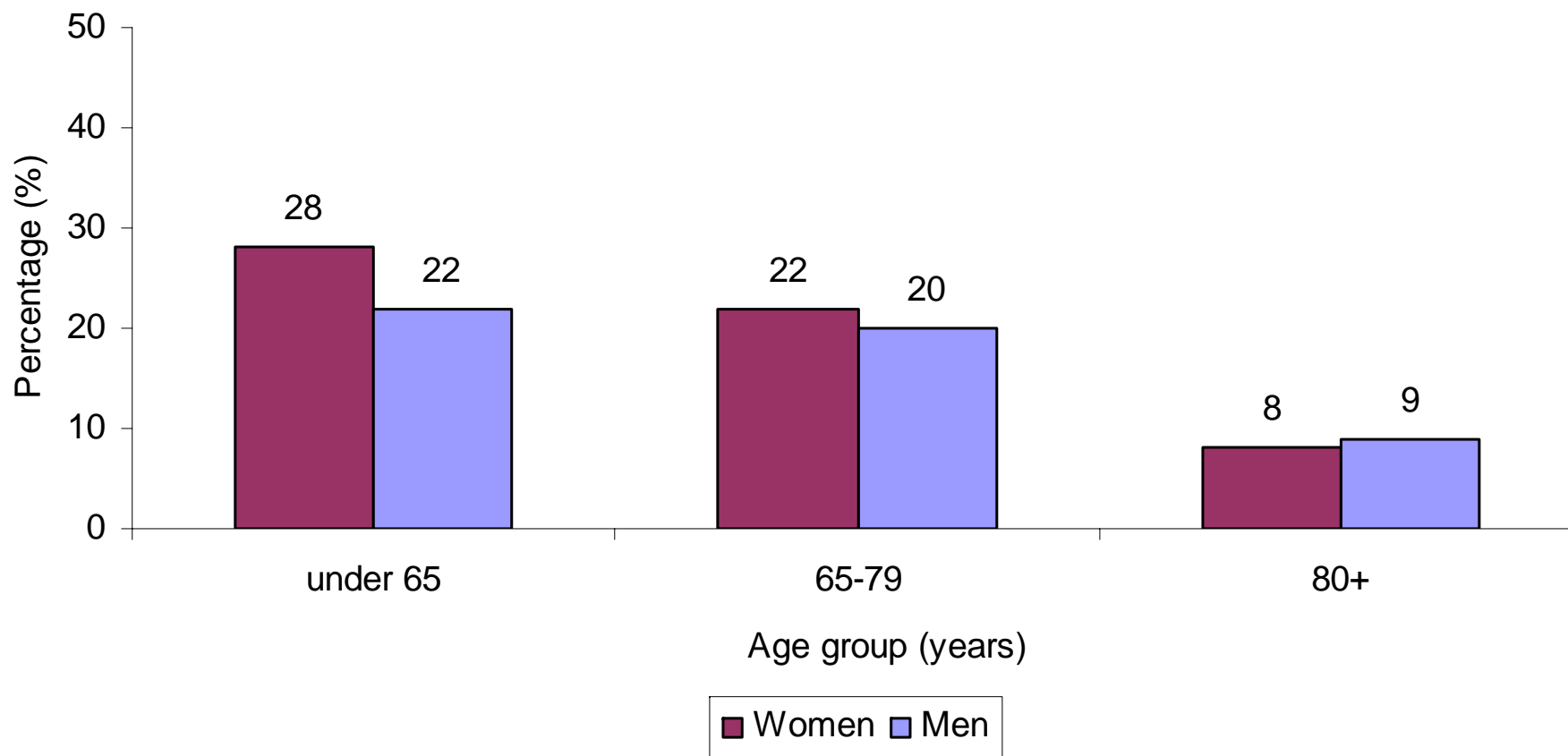
# Percentage of women with ovarian cancer who received postoperative chemotherapy within four months after surgery, by age, 2003/04 to 2004/05



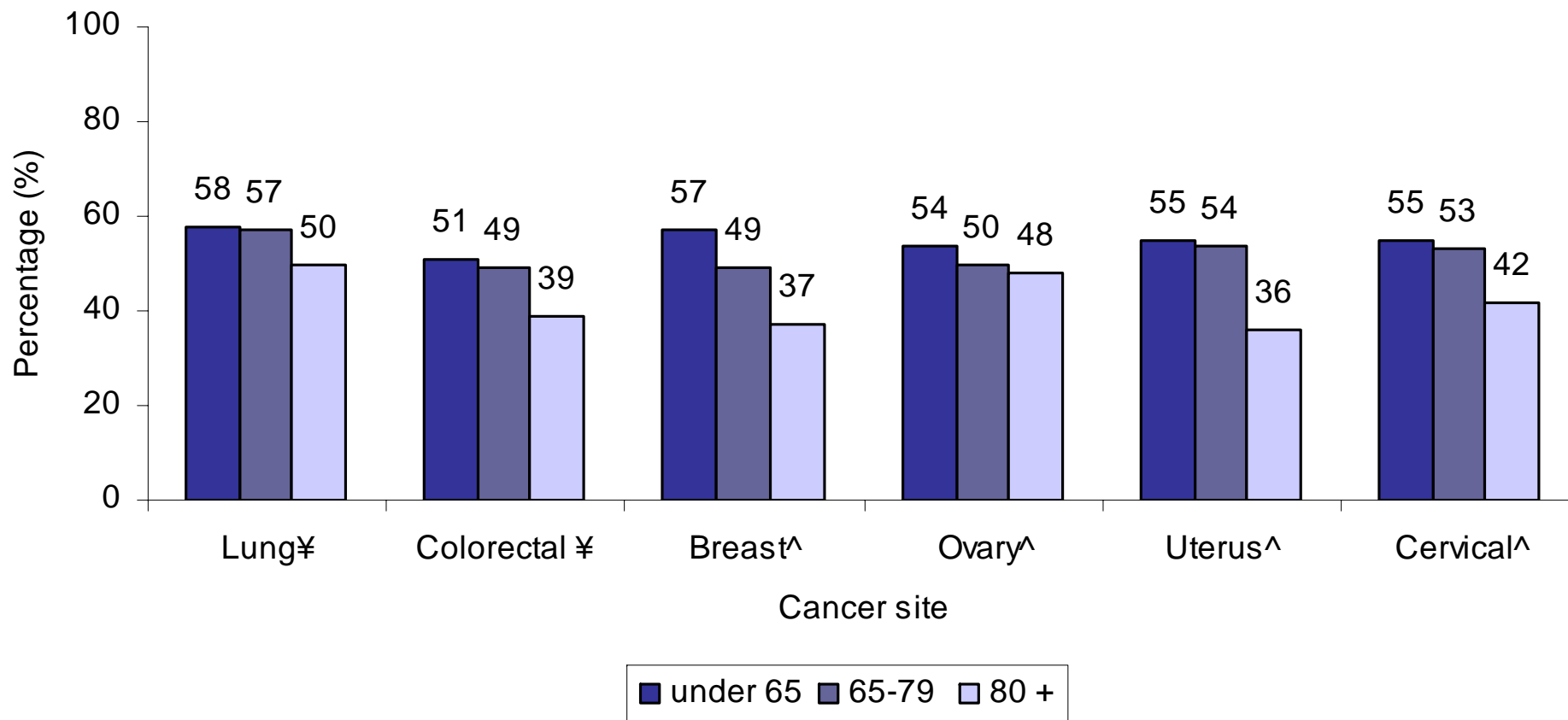
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- **Lung cancer places a heavy burden on the population and the healthcare system and outcomes for lung cancer are especially poor.**



# Percentage of patients with non-small cell lung cancer who underwent lung resection, by sex and age, 2003/04 to 2004/05



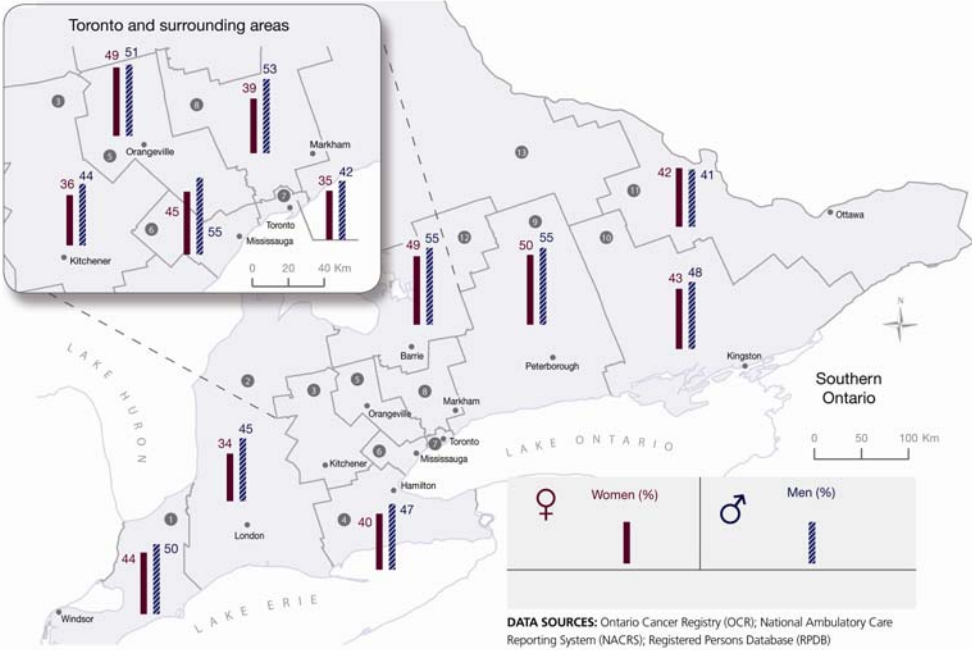
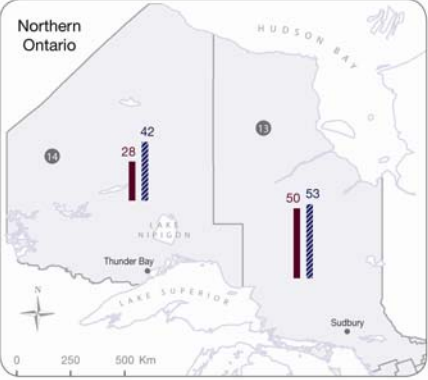
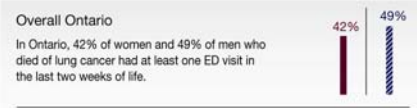
# Percentage of patients with cancer who died in acute care beds, by age and cancer site, 2003 to 2004



Data sources: OCR; CIHI-DAD; RPDB

¥ Rates are in women and men

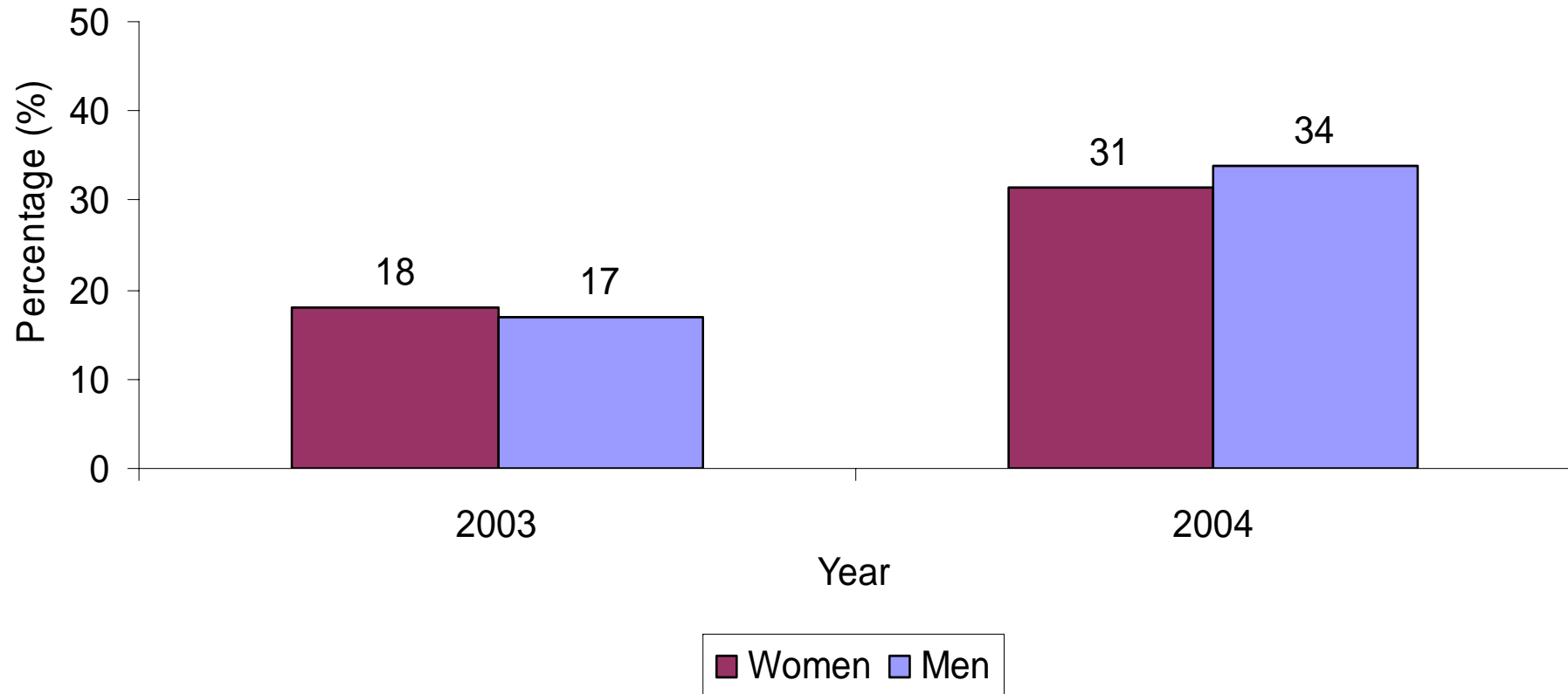
^ Rates are in women only



DATA SOURCES: Ontario Cancer Registry (OCR); National Ambulatory Care Reporting System (NACRS); Registered Persons Database (RPDB)

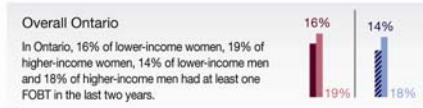
# Age-standardized percentage of patients who died of lung cancer who had at least one emergency department visit in the last two weeks of life, by sex and LHIN

# Percentage of non-small cell lung cancer patients who received chemotherapy within six months after surgery, by sex and year, 2003/04 to 2004/05

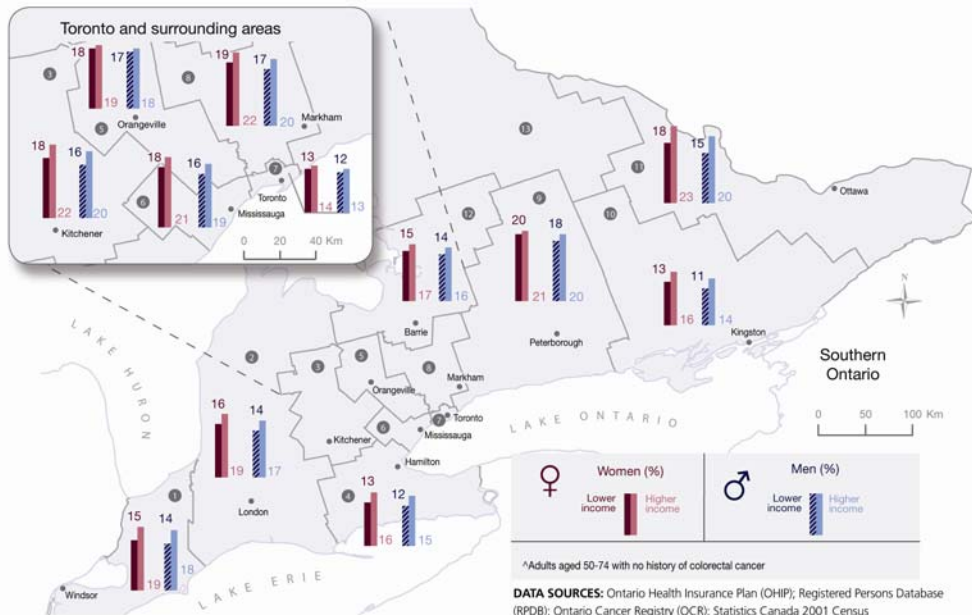
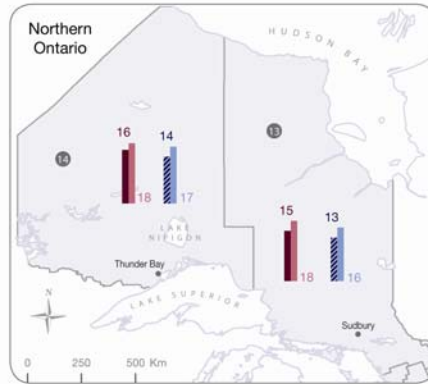


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- **Where you live in Ontario affects many aspects of cancer care.**

# Age-standardized percentage of screen eligible adults who received one or more fecal occult blood tests (FOBT) in the last two years, by sex, neighbourhood income and LHIN



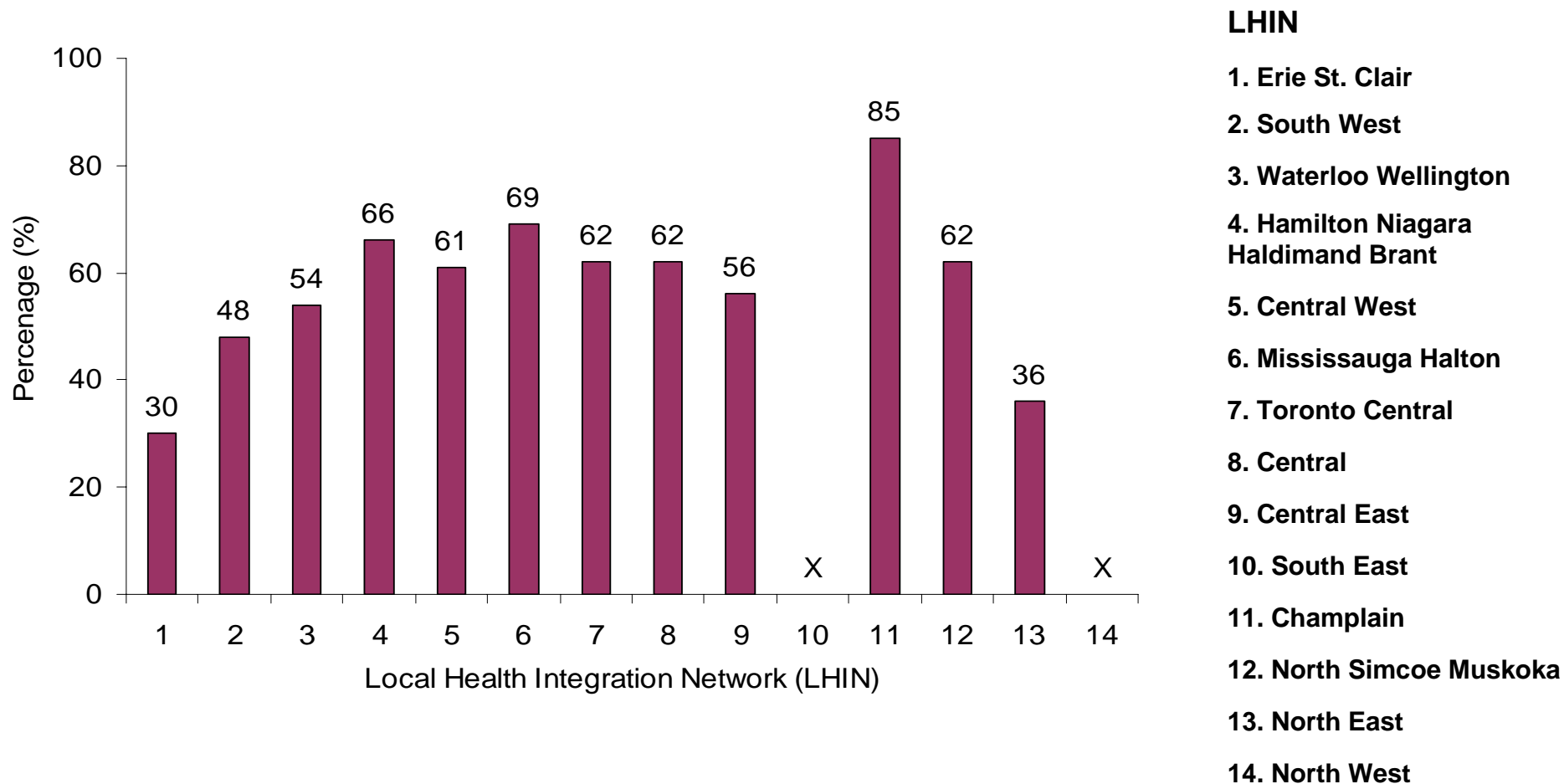
Note: See Appendix 4.3 for details about neighbourhood income quintile calculation



\*Adults aged 50-74 with no history of colorectal cancer

DATA SOURCES: Ontario Health Insurance Plan (OHIP); Registered Persons Database (RPDB); Ontario Cancer Registry (OCR); Statistics Canada 2001 Census

# Age-standardized percentage of women who underwent primary ovarian cancer surgery by a gynecologic oncologist, by LHIN, 2003/04 to 2004/05



Data sources: OCR; CIHI-DAD; OHIP; RPDB; IPDB

X Data not shown due to small sample size

# Study Limitations

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- Data sources created for administrative purposes not research
- Lack of precise staging data and data on patient preferences
- Limited data on outcomes
- Data timeliness
- Ecologic level SES variable



# Conclusions

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- Cancer screening rates in Ontario remain below target and are especially low in low-income communities
- Follow-up of abnormal Pap tests is suboptimal
- It is important to look at differences in care between subgroups of individuals:
  - Income is an important determinant of screening, but is generally less important when it comes to treatment
  - Some sex differences in care were observed, but these were not pronounced
  - Age is the most consistent determinant of cancer treatment
  - Where you live also matters

# Driving Improvement and Equity

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- Reduce Cancer-Related Health Inequities by Focusing on Prevention and Screening
- Screening Programs are Not Enough: A System for Ensuring Follow-up of Abnormal Screening Tests is Necessary
- Address the Unique Needs of an Aging Population in Cancer Care Delivery
- Focus on Prevention and End of Life Issues for Lung Cancer as Prognosis is Poor and Much Lung Cancer is Preventable
- Improve Quality, Availability and Timeliness of Data to Assess Cancer and Cancer Care in the Province
- Routinely Include Gender and Equity Analysis in Health Indicator Monitoring

# Targets for Intervention

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- Interventions:
  - Patient Level
  - Practice Level
  - Health System Level
  - Community Level
- Partnerships with Human Service Providers and Community based Organizations
- Quality Improvement-Target and Monitor Disparities
- Advocacy for Policy and Cross-Sectoral Partnerships to Address Social Determinants of Health

# Thank you to our contributors:

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- Carol Sawka
- David Urbach
- Naira Yeritsyan

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Improving Women's  
Health in Ontario

Pour l'amélioration de la  
santé des Ontariennes

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