

World Cancer Congress 2012



Presenters

- **Heather Bryant, MD, PhD, CCFP, FRCPC**
Vice President, Cancer Programs, Clinical & Population Health
Canadian Partnership Against Cancer
- **Rami Rahal, BSc, MBA**
Director, System Performance & Surveillance
Canadian Partnership Against Cancer

“Analysis and comparison are the midwives of improvement.”

Roy Romanow, Linda Silas, and Steven Lewis
from *The Globe and Mail* (Jan 16, 2012)

Hospital Model

Adapted from Heenan et al, 2010



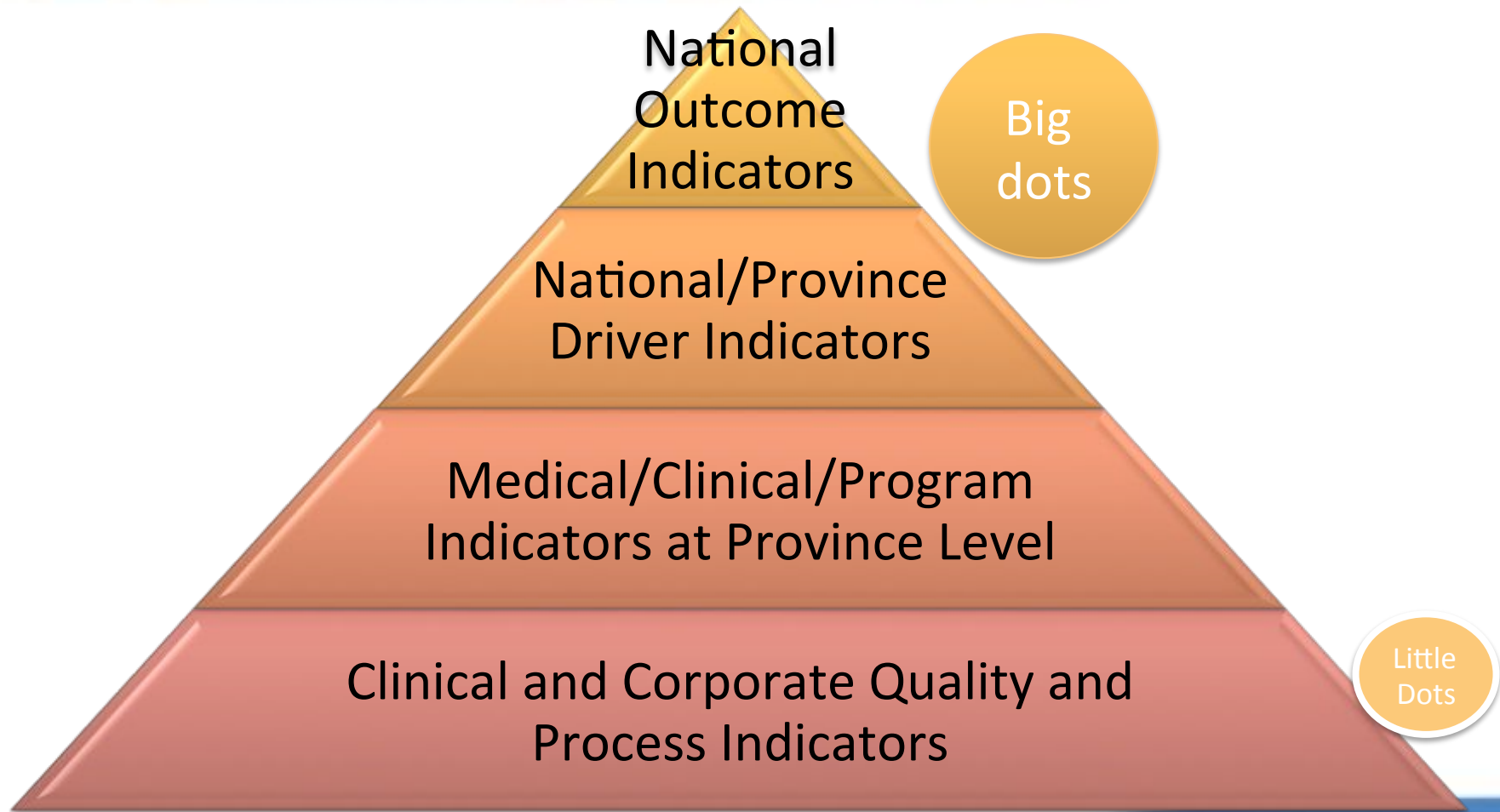
Big
dots



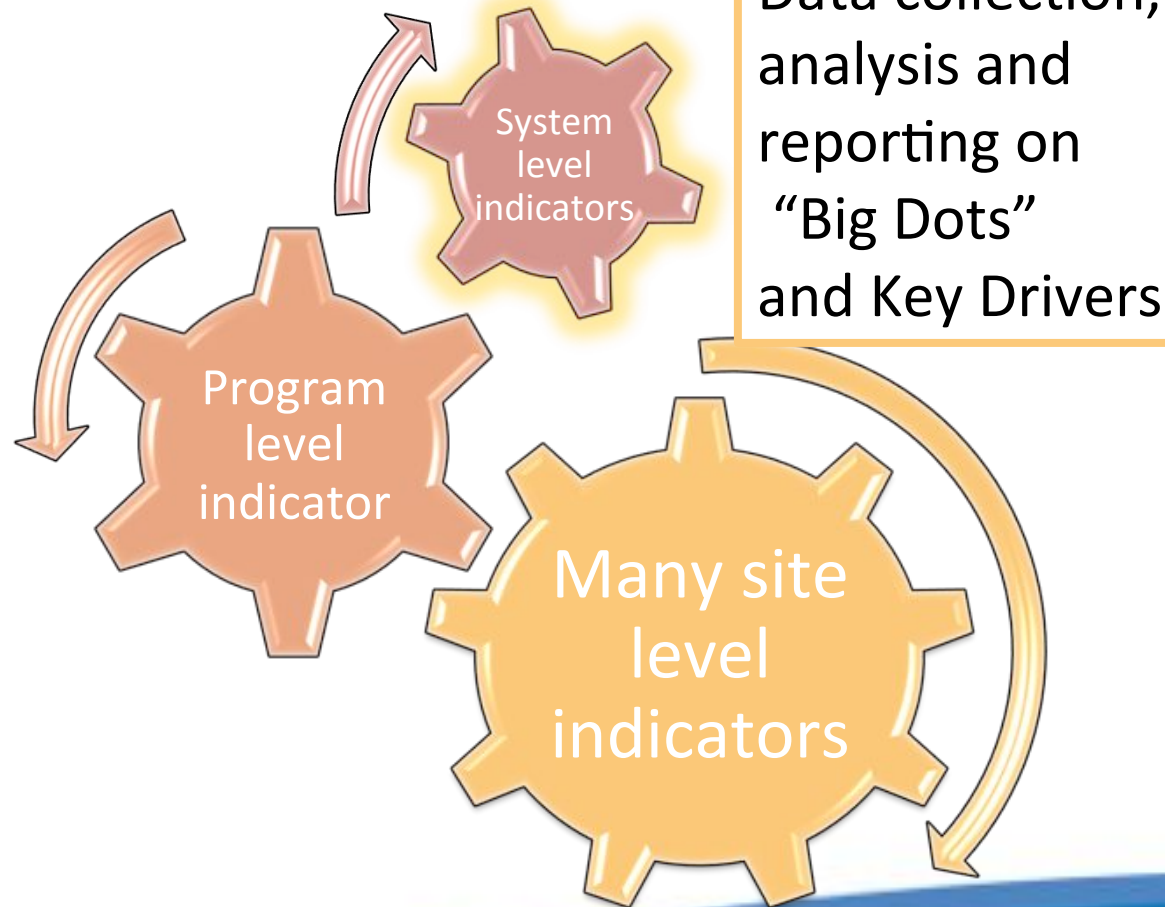
Little
Dots

Heenan, M, Kahn, H & Binkley, D (2010) "From Boardroom to Bedside: How to Define and Measure Hospital Quality" Healthcare Quarterly, 13(1): 55-60.

For National Cancer Control

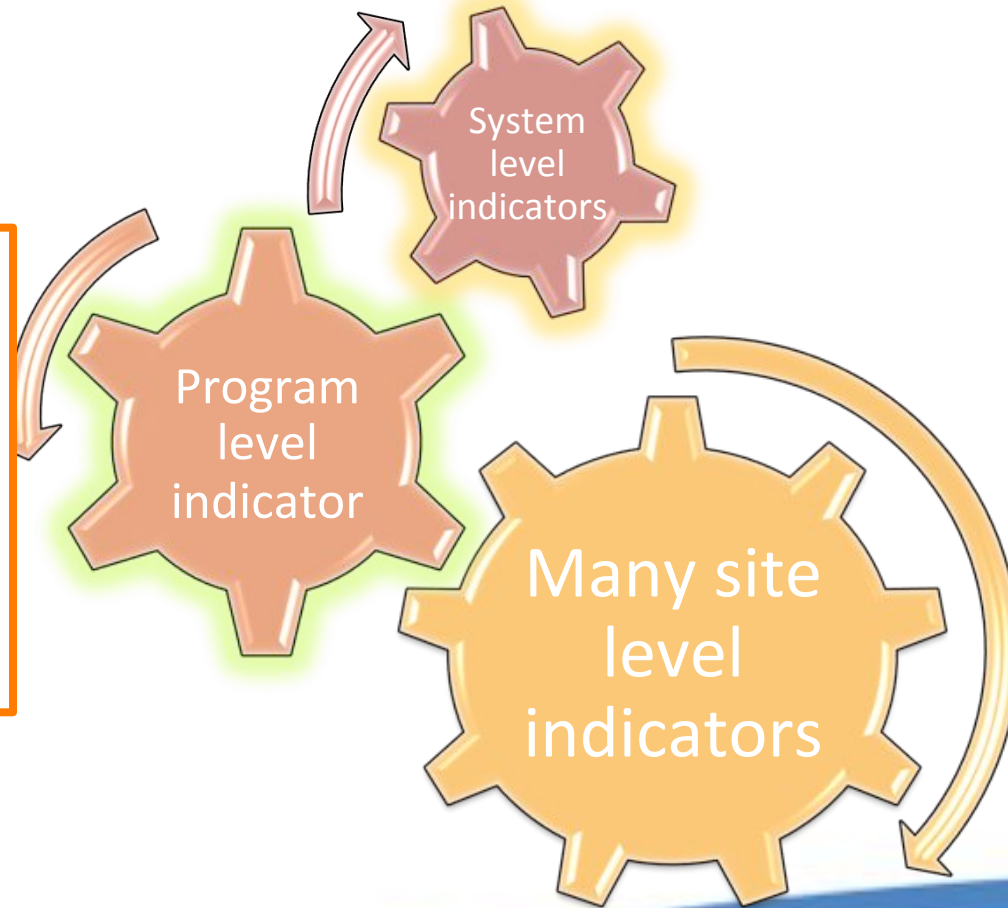


Potential roles for national cancer control organizations: Analysis and reporting



Potential roles for national cancer control organizations

Development of driver indicators, in collaboration with practice leaders, in key areas



The Collaborative Model for System Performance



History of System Performance

2007

Cancer Indicators Conference – 700 Indicators to 50

2008

Steering Committee established – feasibility assessment – 17 indicators

2009

Inaugural Report (partially anonymized results) / Regional Consultations

2010

2nd Report – expansion in Treatment indicators / Special Insert on CRC / Full identification of provinces

History of System Performance

2011

3rd Report, 35 Indicators / 1st Special Focus Report: Lung Cancer



2012

Regional Consultations / Special Report on Breast Cancer / 2012 Report

An Example System Performance Indicators at the National Level: Breast Cancer Control

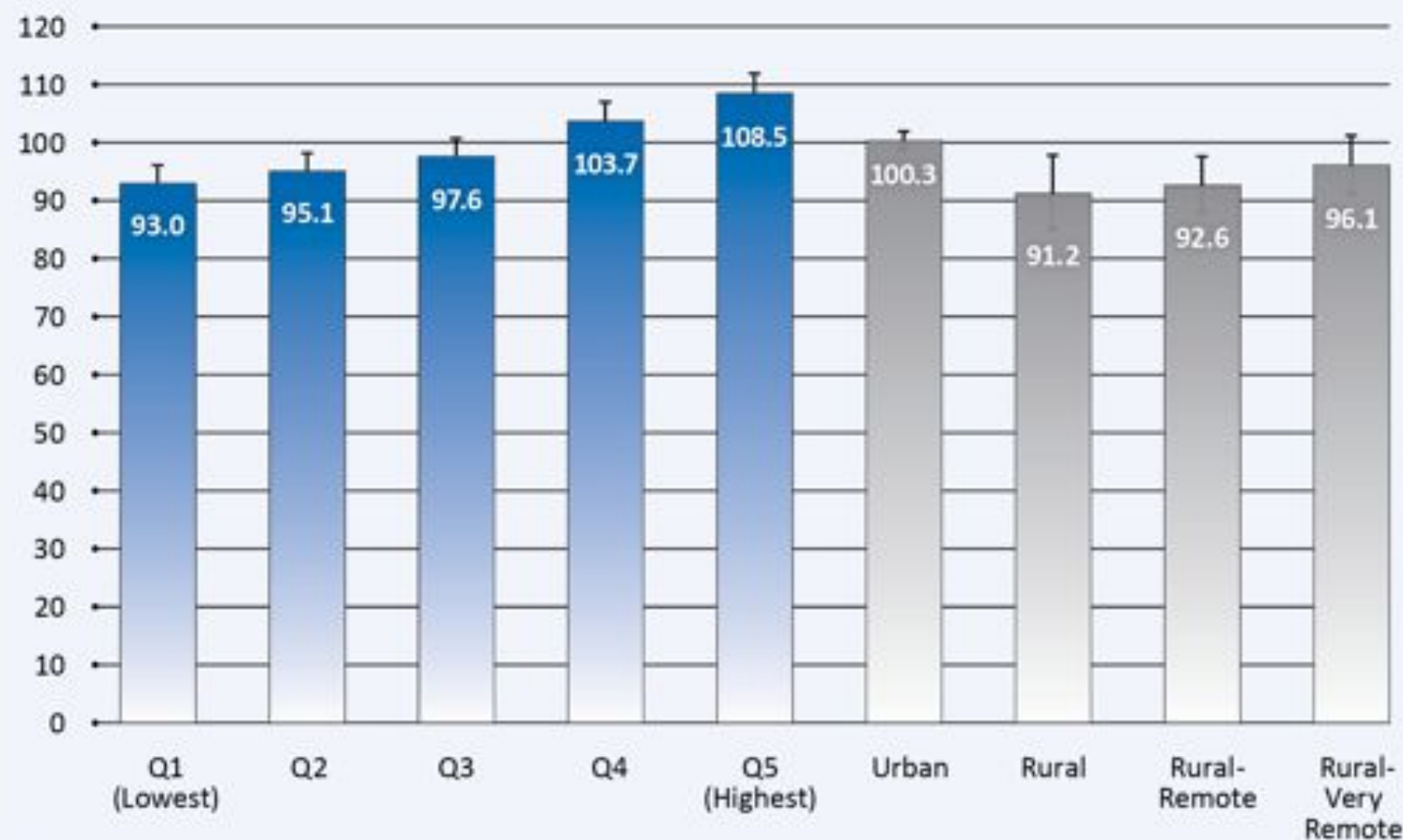
An Example System Performance Indicators

- Upcoming report: *Breast Cancer Control in Canada, a System Performance Special Focus Report*
- 23 indicators (+ breakdowns) addressing prevention, screening, diagnosis, treatment, patient experience, end-of life care, research, and long term outcomes.
- Release: September 28th, on cancerview.ca

Age-standardized incidence rates of breast cancer by income quintile and geography, Canada – 2007

Rate Per 100,000 Population

Income Geography



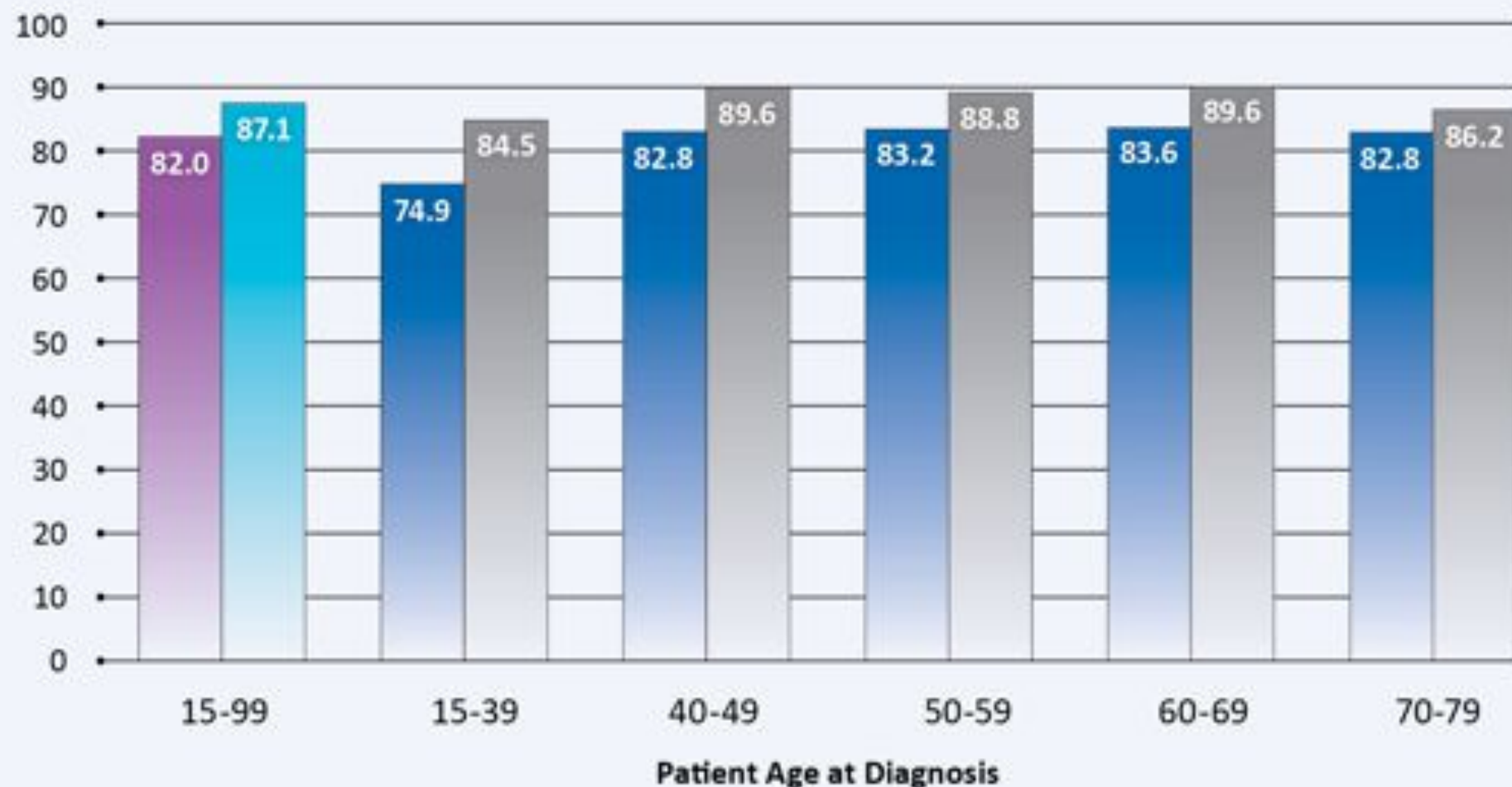
95% confidence intervals are indicated on figure.

Data source: Statistics Canada, Canadian Cancer Registry.

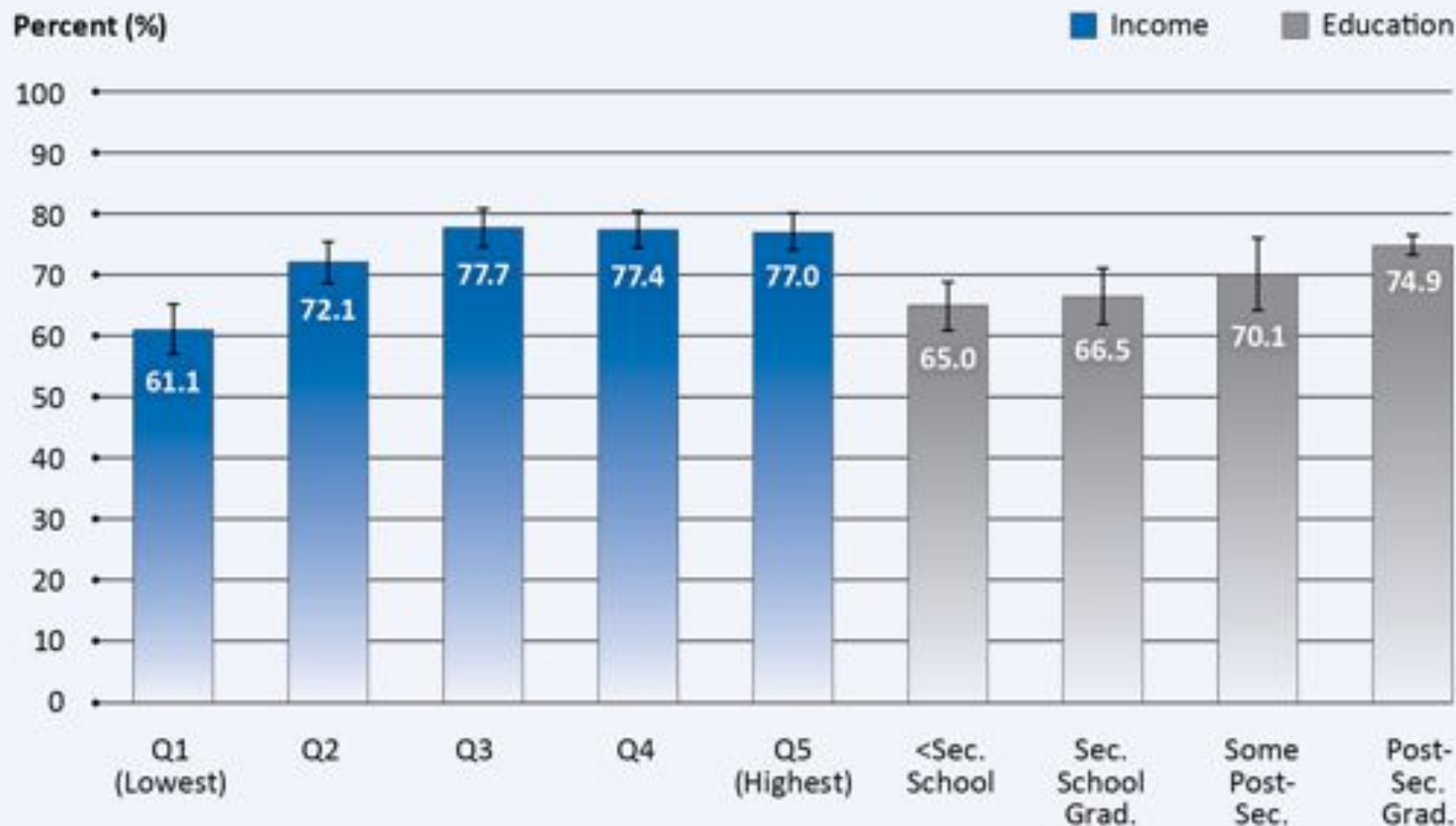
Five-year relative survival for breast cancer in women by age group, Canada – 1992 to 1994 and 2005 to 2007

Relative Survival Ratio (%)

1992-1994 2005-2007



Percentage of eligible women (aged 50–69) reporting a screening mammogram in the past 2 years by income quintile and household education, Canada – CCHS 2008

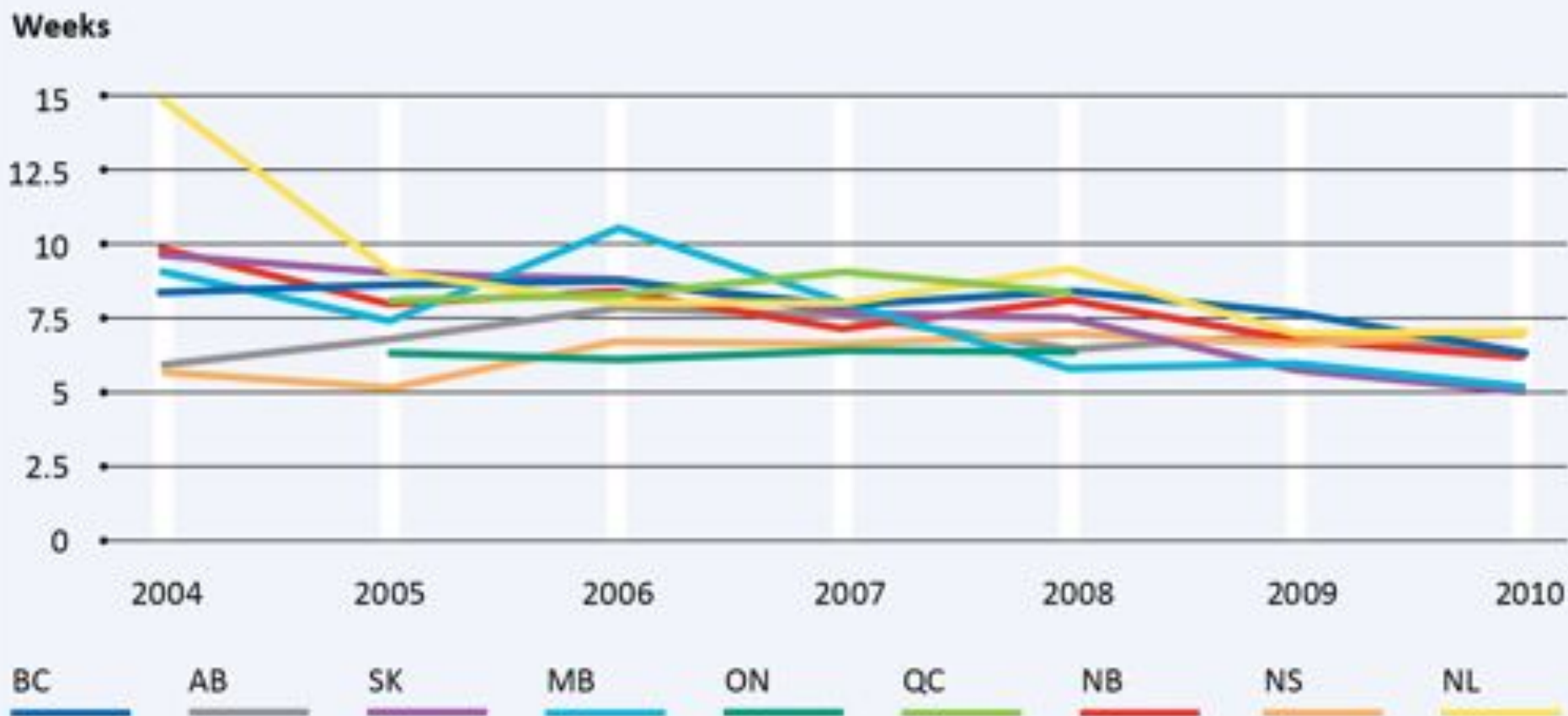


Note: A woman was deemed 'eligible' for screening mammography if her reason for going for mammography was NOT one of the following: to investigate a previously detected lump or breast problem, as a follow-up to breast cancer treatment.

95% confidence intervals are indicated on figure.

Data source: Statistics Canada, Canadian Community Health Survey.

Median wait time for resolution of abnormal breast screen for women (aged 50–69) requiring a tissue biopsy by province – 2004 to 2010



Note: Alberta wait time data are from the Screen Test program only. Screen Test is an organized program that conducts approximately 10%–12% of screening mammograms in the province, about 65% of which are performed on mobile screening units in rural areas.

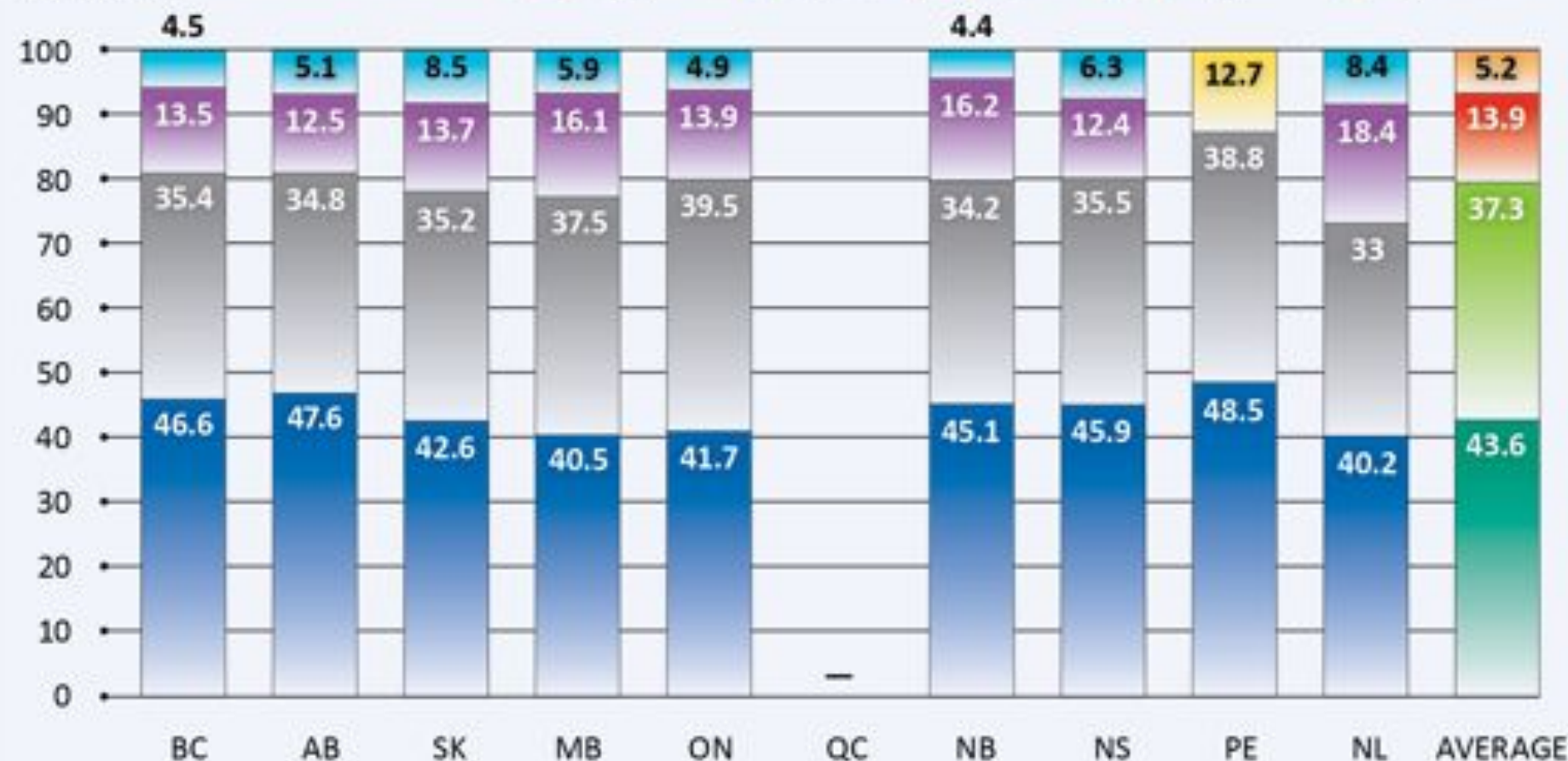
Data source: Canadian Breast Cancer Screening Database for 2004. Provincial breast cancer screening programs for 2005 and onward.

Data for QC and ON are not available for 2004. Data for ON and QC are not available from 2009 onward. Data for PE are not available.

Distribution by stage at diagnosis of women diagnosed with invasive breast cancer in Canada in 2010 by province

Percent (%)

Stage I Stage II Stage III Stage IV Stage III & IV



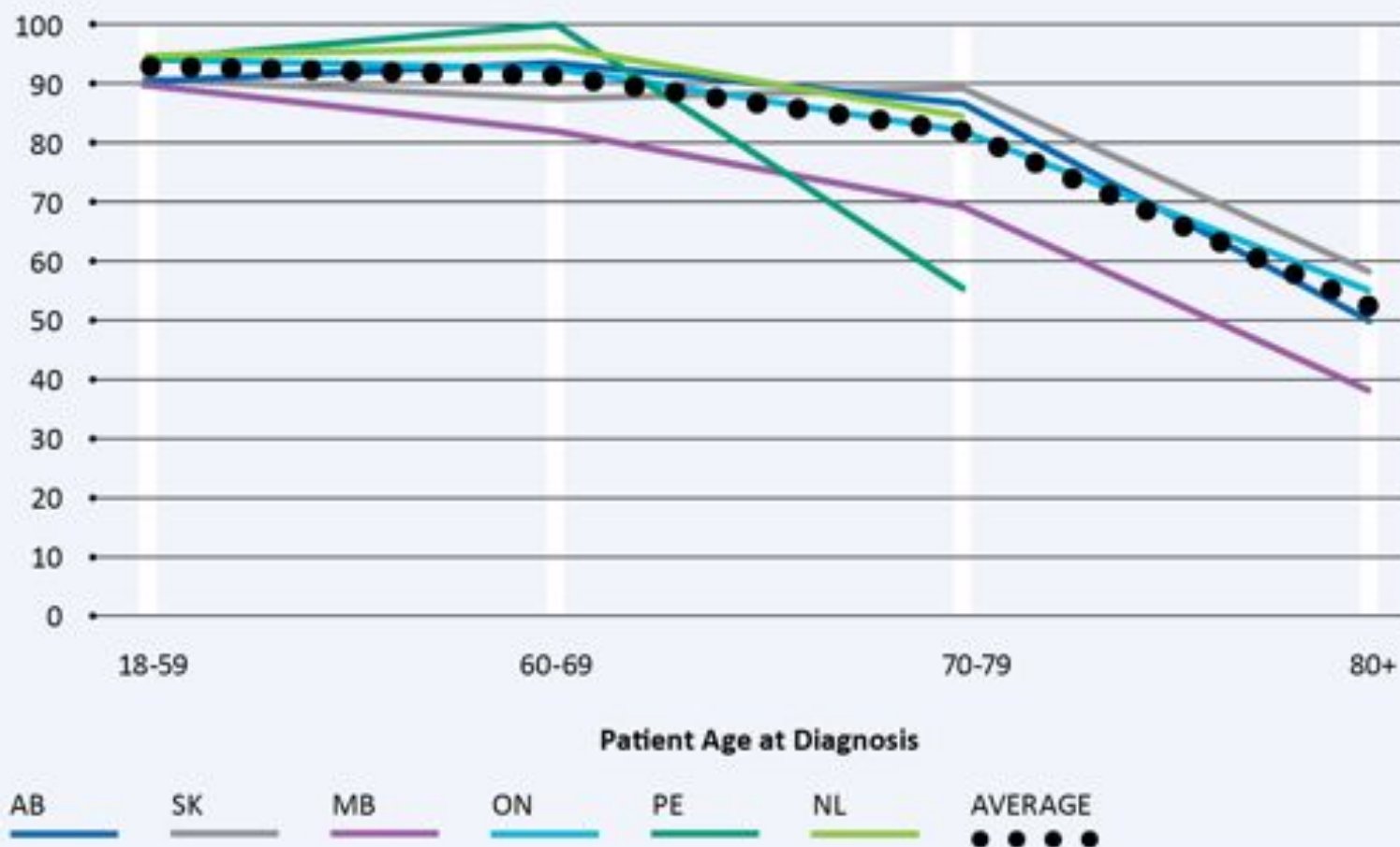
Note: Stage III and IV are combined for PE due to small case volumes.

— Data are not available for QC.

Data source: Provincial cancer agencies.

Percentage of Stage I or II breast cancer patients receiving radiation therapy following breast conserving surgery, radiation therapy started within 270 days following surgery by age group and province – patients diagnosed in 2009

Percent (%)

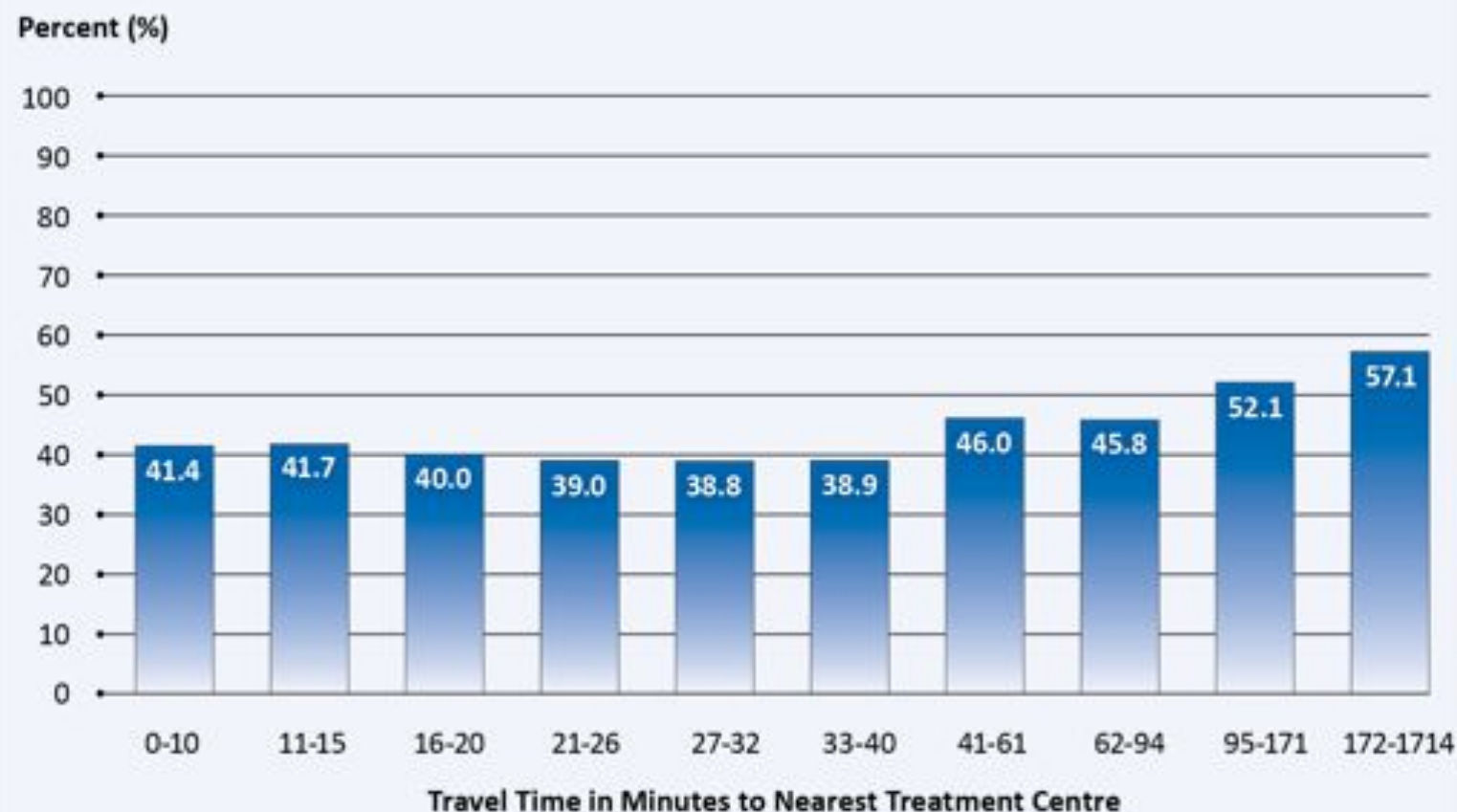


Data are not available for BC, NB, NS and QC.

PE value at 70-79 is 70+ for privacy considerations.

Data source: Provincial cancer agencies.

Percentage of breast cancer resections that are mastectomies* by travel time from residence to nearest radiation treatment centre, in minutes, Canada – 2007 to 2009 combined



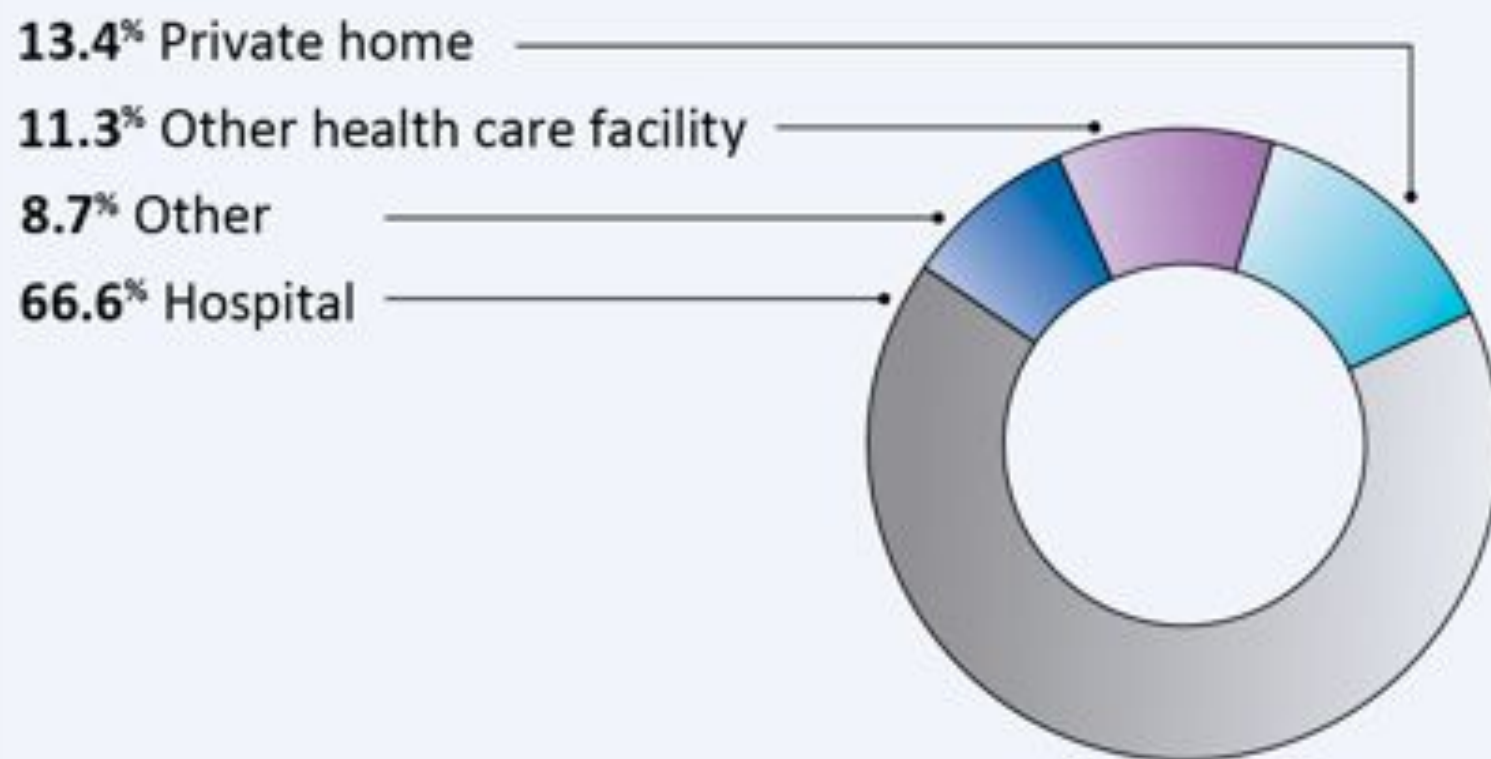
*The mastectomy data includes women who receive a mastectomy first as well as women who receive breast conserving surgery first followed by a mastectomy within one year.

Includes women with unilateral invasive breast cancer whose surgery occurred between April 2007 and March 2010.

The driving time intervals represent decile cut-off points based on the actual driving time data distribution.

Data sources: Hospital Morbidity Database, Canadian Institute for Health Information, National Ambulatory Care Reporting System, Canadian Institute for Health Information, Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux du Québec, Alberta Ambulatory Care Reporting System

Breast cancer patient place of death by location, Canada – 2009



Other includes other specified locality and unknown locality.

Data source: Statistics Canada, Vital Statistics Death Database.

SP Indicator Framework

Treatment and Care									
	Prevention	Screening	Diagnosis	Surgery	Systemic	Radiation	Pt. Experience & Recovery	Research	Long Term Outcomes
Safe				- Mastectomy/BCS complication / infection rates					
Effective	- smoking cessation, prevalence, second hand exposure - HPV vaccination rates	-Cervical screening participation -Breast screening participation -CRC screening participation	- Capture of stage data - Stage distribution - ERPR, HER2/neu rates	- Removal/exam > 12 nodes for colon cancer - Mastectomy/BCS rates	- Adjuvant chemo, resected Stage II, IIIA NSCLC - Adjuvant chemo, resected Stage III colon ca	- Adjuvant RXT after breast conserving surgery, Stage I, II breast ca - Neo-adjuvant RXT for resected Stage II, III rectal ca		- Pediatric and adult clinical trial participation	- Incidence - Mortality - Relative survival - Conditional survival
Patient or population centered	- alcohol - Fruits/vegetables - Physical activity - Overweight and obesity						- Patient reported outcomes - Place of death - Screening for distress - Satisfaction with continuity of care		
Timely/ Responsive			- Wait times: Abnormal breast screen to resolution	- Cancer surgery wait times (with CIHI – by cancer type)		- RXT wait times: Ready to treat to treatment			
Equitable (including accessibility)	- HPV vaccination rates - SES variations in risk factors	-SES and geographic variations in screening rates	- Pet scanner capacity	- Mastectomy/BCS rates, by geography and income	- treatment rates by age and sex	- LINAC capacity and distribution - Treatment rates by age and sex			- Incidence by SES - Survival by SES
Efficient			- PET scanner utilization per machine	- Length of stay following Mastectomy/BCS		- LINAC utilization - RXT utilization		- Research investment	

Where to from here

- Filling in the framework gaps (efficiency, patient experience, etc.)
- Developing performance targets and benchmarks
- Knowledge Translation and Exchange strategies to bridge gap between Knowledge and Action
- Supporting system improvement initiatives