

Percutaneous Coronary Intervention Rate

Name	Percutaneous Coronary Intervention Rate
Short/Other Names	PCI Rate
Description	<p>This indicator measures the age-standardized rate of percutaneous coronary interventions (PCIs) performed on patients in acute care hospitals, same-day surgery facilities or catheterization laboratories, per 100,000 population age 18 and older.</p> <p>For further details, please see the General Methodology Notes (PDF).</p>
Interpretation	Does not apply to this measure (i.e., there is no predefined preference for the measure score)
HSP Framework Dimension	Health System Inputs and Characteristics: Health system resources
Areas of Need	Not applicable
Geographic Coverage	All provinces/territories except Quebec
Reporting Level /Disaggregation	National, Province/Territory, Region
Indicator Results	http://yourhealthsystem.cihi.ca/epub/?language=en
Identifying Information	
Name	Percutaneous Coronary Intervention Rate
Short/Other Names	PCI Rate
Indicator Description and Calculation	
Description	<p>This indicator measures the age-standardized rate of percutaneous coronary interventions (PCIs) performed on patients in acute care hospitals, same-day surgery facilities or catheterization laboratories, per 100,000 population age 18 and older.</p> <p>For further details, please see the General Methodology Notes (PDF).</p> <p>(Total number of discharges for PCI for patients age 18 and older ÷ total mid-year population age 18 and older) × 100,000 (age adjusted)</p>
Calculation: Description	Unit of Analysis: Single admission
Calculation: Geographic Assignment	Place of residence
Calculation: Type of Measurement	Rate - Per 100,000
Calculation: Adjustment Applied	Age-adjusted
Calculation: Method of Adjustment	<p>Direct Standardization</p> <p>Standard Population: Canada 2011</p>
Denominator	<p>Description: Total mid-year population age 18 and older</p> <p>Description: Total number of discharges for PCI for patients age 18 and older</p>
Numerator	<p>Inclusions:</p> <ol style="list-style-type: none"> 1. PCIs performed on patients in acute care hospitals or same-day surgery facilities <ul style="list-style-type: none"> • CCP: 48.02 or 48.03 • CCI: 1.IJ.50^, 1.IJ.57.GQ^^ (this code is used for 2017–2018 and earlier), 1.IJ.54.GQ-AZ (this code is used for 2006–2007 to 2008–2009 only), 1.IJ.57.GT (from 2018–2019), 1.IJ.57.GU (from 2018–2019) 2. Age at admission 18 and older 3. Sex recorded as male or female 4. Admission to an acute care institution or same-day surgery facility (Facility Type Code = 1 or A) <p>Exclusions:</p> <ol style="list-style-type: none"> 1. Newborn, stillbirth or cadaveric donor records (Admission Category Code = N, R or S) 2. PCI can be performed in designated cardiac centres only; therefore, procedures reported by facilities without on-site PCI services were excluded from the indicator calculation. 3. Procedures coded as out of hospital or abandoned after onset (Intervention Status Attribute = A or OOH Indicator Flag = Y). 4. 2018–2019 data onward: Discharges with medical assistance in dying (MAID) (Discharge Disposition Code = 73)

Background, Interpretation and Benchmarks

	In many cases, PCI serves as a non-surgical alternative to coronary artery bypass graft (CABG) surgery and is undertaken for the purpose of opening obstructed coronary arteries. While PCI encompasses several techniques, angioplasty is the procedure most frequently provided.
Rationale	The choice of revascularization mode (PCI or CABG) depends on numerous factors, including physician preferences, availability of services and referral patterns, as well as differences in population health.
Interpretation	Does not apply to this measure (i.e., there is no predefined preference for the measure score)
HSP	
Framework Dimension	Health System Inputs and Characteristics: Health system resources
Areas of Need	Not applicable
Targets /Benchmarks	Not applicable
	Cardiac Care Network of Ontario Consensus Panel on Target Setting. Final Report and Recommendations (PDF) . 2004.
	Faris, P. D. et al. "Diagnostic Cardiac Catheterization and Revascularization Rates for Coronary Heart Disease." Canadian Journal of Cardiology 20 (2004): pp. 391-397.
	Institute for Clinical Evaluative Sciences. Cardiovascular Health and Services in Ontario. Toronto, Ont.: ICES, 1999.
References	King, S. B. 3rd et al. "2007 Focused Update of the ACC/AHA/SCAI 2005 Guideline Update for Percutaneous Coronary Intervention: A Report of the American College of Cardiology/ American Heart Association Task Force on Practice Guidelines." Journal of the American College of Cardiology 51 (2008): pp. 172-209.
	Smith, S. C. Jr. et al. "A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee to Revise the 1993 Guidelines for Percutaneous Transluminal Coronary Angioplasty)." Journal of the American College of Cardiology 37 (2001): pp. 2215-2239.
Availability of Data Sources and Results	
Data Sources	DAD, NACRS
	Type of Year: Fiscal
Available Data Years	First Available Year: 2010 Last Available Year: 2019
Geographic Coverage	All provinces/territories except Quebec
Reporting Level/Disaggregation	National, Province/Territory, Region
Result Updates	
Update Frequency	Every year
	Web Tool:
Indicator Results	Health Indicators e-Publication
	URL: http://yourhealthsystem.cihi.ca/epub/?language=en
Updates	Not applicable
Quality Statement	
	Rates for Quebec are not available due to differences in data collection.
Caveats and Limitations	Some residents in New Brunswick's Zone 4 and Zone 5 receive cardiac procedures in Quebec under a referral agreement between the 2 provinces. Due to differences in data collection in Quebec, data for New Brunswick residents undergoing PCI in Quebec is not available; thus the rates for these 2 regions are suppressed.
Trending Issues	Not applicable
Comments	PCI can be performed in designated cardiac centres only; therefore, procedures reported by facilities without on-site PCI services were excluded from the indicator calculation.