Percutaneous Coronary Intervention Rate

Name: Percutaneous Coronary Intervention Rate
Short/Other Names: PCI Rate

Description: 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.

For further details, please see the General Methodology Notes.

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://www.cihi.ca/hirpt/?language=en

Identifying Information
Name: Percutaneous Coronary Intervention Rate
Short/Other Names: PCI Rate

Indicator Description and Calculation

Description: 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.

For further details, please see the General Methodology Notes.

Calculation: (Total number of discharges for PCI for patients age 18 and older ÷ total mid-year population age 18 and older) × 100,000 (age adjusted)

Unit of Analysis: Single admission

Geographic Assignment: Place of residence

Calculation: Type of Measurement: Rate - Per 100,000

Calculation: Adjustment Applied: Age-adjusted


Denominator Description: Total mid-year population age 18 and older

Numerator Description: Total number of discharges for PCI for patients age 18 and older

Inclusions:
1. PCIs performed on patients in acute care hospitals or same-day surgery facilities
   CCP: 48.02 or 48.03
   CCI: 1.IJ.50^^, 1.IJ.57.GQ^^, 1.IJ.54.GQ-AZ (this code is used for 2006–2007 to 2008–2009 only)
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)

Exclusions:
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).

**Background, Interpretation and Benchmarks**

**Rationale**

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.

**Interpretation**

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.

**HSP Framework Dimension**

Health System Inputs and Characteristics: Health system resources

**Areas of Need**

Not applicable

**Targets/Benchmarks**

Not applicable

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**Availability of Data Sources and Results**

**Data Sources**

DAD, NACRS

**Type of Year:**

Fiscal

**First Available Year:**

2010

**Last Available Year:**

2016

**Geographic Coverage**

All provinces/territories except Quebec

**Reporting Level/Disaggregation**

National, Province/Territory, Region

**Result Updates**

Update Frequency: Every year

**Web Tool:**

Health Indicators E-Publication

**URL:** [http://www.cihi.ca/hirpt/?language=en](http://www.cihi.ca/hirpt/?language=en)

**Updates**

Not applicable

**Quality Statement**

Rates for Quebec are not available due to differences in data collection.

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**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.

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**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.