Technical Notes for Angioplasty/Percutaneous Coronary Intervention

Definition
Age-standardized rate of percutaneous coronary interventions (PCI) performed on patients in acute care hospitals, same day surgery facilities or catheterization laboratories, per 100,000 population age 20 years and over.

Method of Calculation
(Total number of PCI performed on patients 20 years and over/Total mid-year population age 20 years and over) * 100,000 (Age adjusted)

**CCP***
48.02, 48.03

**CCI***
1.IJ.50**, 1.IJ.57.GQ**

* Code may be recorded in any position. Procedures coded as cancelled, previous, and “abandoned after onset” are excluded.

Interpretation
In many cases, PCI is 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. The choice of revascularization mode (i.e. PCI or CABG) depends on numerous factors including physician preferences, availability of services, referral patterns, as well as differences in population health and socio-economic status.

Standards/Benchmarks
In 1995, the Ontario Ministry of Health and the Cardiac Care Network (CCN) set a provincial benchmark rate for PCI of 100 per 100,000 adults. In 2004, CCN proposed a benchmark of 221 interventions per 100,000 adults.

Data Source
Discharge Abstract Database (DAD), CIHI
Hospital Morbidity Database (HMDB), CIHI
National Ambulatory Care Reporting System (NACRS), CIHI

Availability
April 1, 2004–March 31, 2005 for all provinces/territories except Quebec (DAD/NACRS)
April 1, 2003 - March 31, 2004 for all provinces/territories (HMDB/NACRS)
Comprehensiveness
Available for all provinces and territories unless otherwise noted.

Data Quality Issues
This indicator has not undergone re-abstraction analysis to determine the consistency of coding of these procedures. The accuracy and completeness of coding may affect rates.

References


Comments
Inclusion of same day surgery visits was possible for those provinces submitting day surgery data to the DAD or the NACRS database. Note that Alberta did not submit any SDS data to CIHI over the period of observation. The completeness of SDS data from Quebec has not been evaluated by CIHI.

PCI is generally provided in a day surgery facility or catheterization laboratory after which the patient will be admitted to acute care for an overnight or longer stay. In order to prevent double counting of PCI procedures reported by both day surgery and acute care facilities, PCI discharges were first sorted by health card number and admission date. In cases where the admission date of a second record overlapped with admission and discharge dates of an earlier record, the second record was considered a duplicate and excluded.