### 30-Day Acute Myocardial Infarction Readmission

<table>
<thead>
<tr>
<th><strong>Name</strong></th>
<th>30-Day Acute Myocardial Infarction Readmission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short/Other Names</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>This indicator provides the risk-adjusted rate of urgent readmission following discharge for acute myocardial infarction (AMI). For further details, please see the General Methodology Notes.</td>
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<tr>
<td><strong>Interpretation</strong></td>
<td>Lower rates are desirable.</td>
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<td><strong>HSP Framework Dimension</strong></td>
<td>Health System Outputs: Appropriate and effective</td>
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<td><strong>Areas of Need</strong></td>
<td>Getting Better</td>
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<td><strong>Geographic Coverage</strong></td>
<td>All provinces/territories</td>
</tr>
<tr>
<td><strong>Reporting Level/Disaggregation</strong></td>
<td>National, Province/Territory, Region, Neighbourhood Income Quintile</td>
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<td><strong>Indicator Results</strong></td>
<td><a href="http://yourhealthsystem.cihi.ca/epub/?language=en">http://yourhealthsystem.cihi.ca/epub/?language=en</a></td>
</tr>
</tbody>
</table>

**Identification Information**

**Name**
30-Day Acute Myocardial Infarction Readmission

**Short/Other Names**
Not applicable

**Indicator Description and Calculation**

Risk-adjusted readmission rate for each region = Observed number of readmissions for each region ÷ Expected number of readmissions for the region × Canadian average readmission rate

**Geographic Assignment**
Place of residence

**Type of Measurement**
Rate - per 100

**Adjustment**
The following covariates are used in risk adjustment:
For a detailed list of covariates used in the model, please refer to the Model Specification document.

**Method of Adjustment**
Logistic regression
**Denominator**

**Description:**
Number of AMI episodes of care discharged between April 1 and March 1 of the fiscal year

**Inclusions:**
1. a. Acute myocardial infarction (AMI) (ICD-10-CA: I21, I22; ICD-9/ICD-9-CM: 410) is coded as most responsible diagnosis (MRDx) but not also as a diagnosis type (2); or

   b. Where another diagnosis is coded as MRDx and also as a diagnosis type (2), and a diagnosis of AMI is coded as a type (1) [type (C) for Quebec data] or (type (W), (X) or (Y) but not also as type (2)); or

   c. Where coronary artery disease (ICD-10-CA: I25.0, I25.1, I25.8, I25.9; ICD-9/ICD-9-CM: 429.2, 414.0, 414.8, 414.9) is coded as MRDx, AMI as type (1) [type (C) for Quebec data] or type (W), (X) or (Y) but not also as type (2); along with revascularization procedure (percutaneous coronary intervention–CCI: 1.IJ.50^^ ; 1.IJ.57.GQ^^ [this code is used for 2002–2003 to 2017–2018 data only]; 1.IJ.57.GT*; 1.IJ.57.GU*; CCP: 48.02, 48.03; ICD-9-CM: 36.01, 36.02, 36.05; or coronary artery bypass–CCI: 1.IJ. 76^^ ; CCP: 48.1^; ICD-9-CM: 36.1^).

2. Episodes involving inpatient care. An episode may start or end in a day surgery setting. Episodes that both start and end in day surgery settings are not included.

3. Discharge between April 1 and March 1 of the following year (period of case selection ends March 1 to allow for 30 days of follow-up)

4. Age 18 and older

5. Sex recorded as male or female

6. Urgent/emergent episodes (Admission Category Code = U in any records within an episode)

**Exclusions:**
1. Records with an invalid health card number

2. Records with admission category of cadaveric donor or stillbirth (Admission Category Code = R or S)

3. Records with an invalid code for province issuing health card number

4. Records with an invalid admission date or time

5. Records with an invalid discharge date or time

6. Episodes with discharge as death (DAD Discharge Disposition Code = 07, 72*, 73*, 74*; NACRS Visit Disposition Code = 10, 11, 71*, 72*, 73*, 74*)

7. Episodes with length of stay less than 24 hours

8. AMI episodes that are within 30 days of a previous AMI episode

**Note**

**Numerator**

**Description:**
Cases within the denominator with a readmission for any reason within 30 days of discharge after the index episode of care

**Inclusions:**
1. Emergent or urgent (non-elective) readmission to an acute care hospital (Admission Category Code = U)

**Exclusions:**
1. 2018–2019 data onward: Medical assistance in dying (MAID) (Discharge Disposition Code = 73)

**Background, Interpretation and Benchmarks**

**Rationale:**
Readmissions to acute care facilities are increasingly being used to measure institutional or regional quality of care and care coordination.

Readmission rates after AMI can be influenced by a variety of factors, including the quality of inpatient and outpatient care, effectiveness of the care transition and coordination, or the availability of appropriate diagnostic or therapeutic technologies during the initial hospital stay. While not all urgent readmissions are avoidable, interventions during and after a hospitalization can be effective in reducing readmission rates.

**Interpretation:**
Lower rates are desirable.

**Health System Outputs:** Appropriate and effective

**Areas of Need:** Getting Better

**Targets:** Not applicable


Availability of Data Sources and Results

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>DAD, HMDB, NACRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Year:</td>
<td>Fiscal</td>
</tr>
<tr>
<td>First Available Year:</td>
<td>2007</td>
</tr>
<tr>
<td>Last Available Year:</td>
<td>2018</td>
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</table>

Geographic Coverage
All provinces/territories

Result Updates
Update Frequency Every year

Web Tool:
Health Indicators e-Publication
URL: [http://yourhealthsystem.cihi.ca/epub/?language=en](http://yourhealthsystem.cihi.ca/epub/?language=en)

Quality Statement
Caveats and Limitations
Patients can appear in the denominator more than once if they have multiple episodes of care between April 1 and March 1 of the fiscal year.

Planned readmissions reported as urgent admissions are included in the readmission rate.

Trending Issues
Not applicable

Comments
Not applicable