

# 30-Day Readmission for Mental Illness, Age 15+ (General Hospital Only)

Name	30-Day Readmission for Mental Illness, Age 15+ (General Hospital Only)
Short/Other Names	Not applicable
Description	<p>The indicator measures the risk-adjusted rate of readmission following discharge for a mental illness.*</p> <p>Note</p> <p>*The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.</p> <p>For further details, please see the <a href="#">General Methodology Notes</a>.</p>
Interpretation	Lower rates are desirable.
HSP Framework Dimension	Health System Outputs: Person-centred
Areas of Need	Living With Illness, Disability or Reduced Function
Geographic Coverage	All provinces/territories
Reporting Level/Disaggregation	National, Province/Territory, Region, Neighbourhood Income Quintile
Indicator Results	<a href="http://yourhealthsystem.cihi.ca/epub/?language=en">http://yourhealthsystem.cihi.ca/epub/?language=en</a>

## Identifying Information

Name 30-Day Readmission for Mental Illness, Age 15+ (General Hospital Only)

Short/Other Names Not applicable

### Indicator Description and Calculation

The indicator measures the risk-adjusted rate of readmission following discharge for a mental illness.\*

#### Note

Description \*The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behaviour.

For further details, please see the [General Methodology Notes](#).

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

Unit of Analysis: Episode of care

#### Calculation:

##### Description

An episode of care refers to all contiguous inpatient hospitalizations in general hospitals (excluding free-standing psychiatric facilities) and all day surgery visits regardless of diagnoses. To construct an episode of care, a transfer is assumed to have occurred if the following condition is met:

– Admission to a general hospital/day surgery facility occurs on the same day as discharge from another general hospital

#### Calculation:

##### Geographic Assignment

Place of residence

#### Calculation:

##### Type of Measurement

Rate - per 100

#### Calculation:

##### Adjustment Applied

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.

#### Calculation:

##### Method of Adjustment

Logistic regression

#### Description:

Number of episodes of care for selected mental illness discharged between April 1 and March 1 of the fiscal year

#### Inclusions:

1. A selected mental illness is coded as the most responsible diagnosis (MRDx)

2. Diagnosis codes for selected mental illness:

Denominator	<p>a. Substance-related disorders: ICD-10-CA: F55, F10 to F19; DSM-IV: 291.x (0, 1, 2, 3, 5, 81, 89, 9), 292.0, 292.11, 292.12, 292.81, 292.82, 292.83, 292.84, 292.89, 292.9, 303.xx (00, 90), 304.xx (00, 10, 20, 30, 40, 50, 60, 80, 90), 305.xx (00, 10 to 90 excluding 80); Provisional diagnosis: (d) substance-related disorder; or</p> <p>b. Schizophrenia, delusional and non-organic psychotic disorders: ICD-10-CA: F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F53.1; DSM-IV: 295.xx (10, 20, 30, 40, 60, 70, 80, 90), 297.1, 297.3, 298.8, 298.9; Provisional diagnosis: (e) schizophrenia disorder; or</p> <p>c. Mood/affective disorders: ICD-10-CA: F30, F31, F32, F33, F34, F38, F39, F53.0; DSM-IV: 296.0x, 296.2x, 296.3x, 296.4x, 296.5x, 296.6x, 296.7, 296.80, 296.89, 296.90, 300.4, 301.13; Provisional diagnosis: (f) mood disorders; or</p> <p>d. Anxiety disorders: ICD-10-CA: F40, F41, F42, F43, F48.8, F48.9, F93.8; DSM-IV: 300.xx (00, 01, 02, 21, 22, 23, 29), 300.3, 308.3, 309.x (0, 3, 4, 9), 309.24, 309.28, 309.81; Provisional diagnosis: (g) anxiety disorders or (o) adjustment disorders; or</p> <p>e. Selected disorders of adult personality and behaviour: ICD-10-CA: F60, F61, F62, F68, F69, F21; DSM-IV: 301.0, 300.16, 300.19, 301.20, 301.22, 301.4, 301.50, 301.6, 301.7, 301.81, 301.82, 301.83, 301.9; Provisional diagnosis: (p) personality disorders.</p> <p>3. Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 to allow for 30 days of follow-up)</p> <p>4. Age at admission is 15 years or older</p> <p>5. Sex recorded as male or female</p> <p>6. Admission to a general hospital (Facility Type Code = 1)</p> <p><b>Exclusions:</b></p> <p>1. Records with an invalid health card number</p> <p>2. Records with an invalid code for province issuing health card number</p> <p>3. Records with an invalid admission date</p> <p>4. Records with an invalid discharge date</p> <p>5. Discharges as deaths (Discharge Disposition Code = 07 for DAD/NACRS records; Discharge Reason Code = 2 or 3 for OMHRS)</p> <p>6. Cadaveric donor or stillbirth records (Admission Category Code = R or S)</p> <p>7. Records that are dead on arrival (Discharge Disposition = 11 for NACRS)</p> <p><b>Description:</b> Cases within the denominator with a readmission for specific mental illness within 30 days of discharge after the index episode of care</p> <p><b>Inclusions:</b></p>
Numerator	<p>1. An episode of care is considered a readmission if the two following conditions are met:</p> <p>a. It has occurred within 30 days of discharge of an index episode; and</p> <p>b. A diagnosis of mental illness was recorded as the most responsible diagnosis (see Denominator for criteria to select diagnosis).</p>
Background, Interpretation and Benchmarks	<p>Readmission to inpatient care may be an indicator of relapse or complications after an inpatient stay. Inpatient care for a person living with a mental illness aims to stabilize acute symptoms. Once stabilized, the individual is discharged, and subsequent care and support are ideally provided through outpatient and community programs in order to prevent relapse or complications. High rates of 30-day readmission could be interpreted as a direct outcome of poor coordination of services and/or an indirect outcome of poor continuity of services after discharge.</p>
Rationale	<p>Lower rates are desirable.</p>
HSP Framework Dimension	<p>Health System Outputs: Person-centred</p>
Areas of Need	<p>Living With Illness, Disability or Reduced Function</p>
Targets/Benchmarks	<p>Not applicable</p>
References	<p>Canadian Institute for Health Information. Hospital Mental Health Services in Canada 2005-2006. Ottawa, ON: CIHI; 2008.</p> <p>Hermann R, Mattke S. Selecting Indicators for the Quality of Mental Health Care at the Health System Level in OECD Countries (Paris, France: Organisation for Economic Co-operation and Development, 2004).</p> <p>Leslie DL, Rosenheck RA. Comparing Quality of Mental Health Care for Public-Sector and Privately Insured Populations. <i>Psy Serv</i> 2000;(5):650-655.</p> <p>Lin E, Durbin J, Zaslavska M, et al. Hospital Report 2007: Mental Health. Joint Initiative of the Ontario Hospital Association and the Government of Ontario. Toronto ON: HSPRN; 2008. &lt;<a href="http://www.oha.com/KnowledgeCentre/Library/HospitalReports/Documents/Hospital%20Reports%202007/Mental%20Health.pdf">http://www.oha.com/KnowledgeCentre/Library/HospitalReports/Documents/Hospital%20Reports%202007/Mental%20Health.pdf</a>&gt;.</p>
Availability of Data Sources and Results	
Data Sources	<p>DAD, HMDB, NACRS, OMHRS</p>

**Type of Year:**  
Fiscal

Available Data Years **First Available Year:**  
2009

**Last Available Year:**  
2015

Geographic Coverage All provinces/territories

Reporting Level/Disaggregation National, Province/Territory, Region, Neighbourhood Income Quintile

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

Caveats When building episodes of care, the exclusion of psychiatric hospitals might introduce a bias. It is possible that the wrong discharge and date might be used to track readmissions, or that two hospitalizations that belong to the same episode might be erroneously attributed to two different episodes. Further analyses demonstrated that this bias is minimal and does not affect the indicator results.

Trending Not applicable

Issues

A 30-day readmission can occur in the same facility as the index episode or in a different facility. A readmission can be a planned or unplanned admission. Planned versus unplanned admissions cannot be distinguished in all available data sources. For jurisdictions where comprehensive information was available, rates including both planned and unplanned readmissions and only unplanned readmissions were compared, and they were not statistically significantly different. Published work has shown that few planned readmissions for mental illness within 30 days are scheduled by practitioners.

Comments