

Patients With Repeat Hospitalization for Mental Illness, Age 15+ (General Hospital Only)

Name	Patients With Repeat Hospitalization for Mental Illness, Age 15+ (General Hospital Only)
Short/Other Names	Not applicable
	Risk-adjusted percentage of individuals who had three or more episodes of care for a selected mental illness* among all those who had at least one episode of care for a selected mental illness in general hospitals within a given year.
	An episode of care refers to all contiguous hospitalizations and same-day surgery visits in general hospitals.
Description	<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 General Methodology Notes.</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
Indicator Results	Accessing Indicator Results on Your Health System: In Depth

Identifying Information

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Short/Other Names Not applicable

Indicator Description and Calculation

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Description

Note

*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](#).

(Total number of individuals who had at least three episodes of care for a selected mental illness in a one-year period ÷ Total number of individuals who had at least one episode of care for a selected mental illness in a one-year period) × 100

Calculation:

Description The risk-adjusted percentage for each region was calculated by dividing the observed number of repeat hospitalizations in each region by the expected number of repeat hospitalizations in the region and multiplying by the Canadian average repeat hospitalizations percentage.

Calculation:

Geographic Assignment Place of residence

Calculation:

Type of Measurement Percentage or proportion

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:

Total number of individuals who had at least one episode of care for a selected mental illness in a one-year period

Inclusions:

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

2. Diagnosis codes for selected mental illness:

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

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

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

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

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.

Denominator

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)

4. Age at admission is 15 years or older

5. Sex recorded as male or female

6. Admission to a general hospital (Facility Type Code = 1)

Exclusions:

1. Records with an invalid health card number

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

3. Records with an invalid admission date

4. Records with an invalid discharge date

5. Discharges as deaths (Discharge Disposition Code = 07 for DAD/NACRS records; Discharge Reason Code = 2 or 3 for OMHRS)

6. Cadaveric donor or stillbirth records (Admission Category Code = R or S)

7. Records that are dead on arrival (Discharge Disposition = 11 for NACRS)

Description:

Total number of individuals who had at least three episodes of care for a selected mental illness in a one-year period. After the first episode of care, all individuals have one year of follow-up; the second and other subsequent episodes of care are identified within a year of discharge of the first episode of care. Therefore, two fiscal years are necessary to obtain the data for the numerator.

Numerator

An episode of care for a mental illness is identified using the same inclusion and exclusion criteria as for the denominator.

Background, Interpretation and Benchmarks

This indicator is considered an indirect measure of appropriateness of care, since the need for frequent admission to hospital depends on the person and the type of illness.

Challenges in getting appropriate care/support in the community and/or the appropriate medication often lead to frequent hospitalizations.

Rationale

Variations in this indicator across jurisdictions may reflect differences in the services that help individuals with mental illness remain in the community for a longer period of time without the need for hospitalization.

This indicator may help to identify a population of frequent users; further investigation could provide a description of the characteristics of this group. Understanding this population can aid in developing/enhancing programs that may prevent the need for frequent rehospitalization.

Interpretation

Lower rates are desirable.

HSP Framework Dimension

Health System Outputs: Person-centred

Areas of Need

Living With Illness, Disability or Reduced Function

Targets/Benchmarks

Not applicable

References

Lin E, Durbin J, Zaslavska N, et al. Hospital Report 2007: Mental Health; Briefing Pages. Toronto ON: HSPRN; 2008. <http://www.oha.com/KnowledgeCentre/Library/HospitalReports/Documents/Hospital%20Reports%202007/Mental%20Health.pdf>.

Availability of Data Sources and Results

Data Sources

DAD, HMDB, NACRS, OMHRS

Type of Year:

Fiscal

Available Data Years

First Available Year:
2008

Last Available Year:

2014

Geographic Coverage All provinces/territories
Reporting Level/Disaggregation National, Province/Territory, Region
Result Updates
Update Frequency Every year

Web Tool:

Indicator Results Your Health System: In Depth

URL:

[Accessing Indicator Results on Your Health System: In Depth](#)

Updates Not applicable

Quality Statement

Each individual has a 12-month follow-up after his or her first episode of care in a given year. Repeat hospitalizations over a 12-month period can occur at more than one facility.

Caveats and

When building episodes of care, the exclusion of psychiatric hospitals might introduce a bias.

Limitations

It is possible that the wrong discharge date might be used to track repeat hospitalizations, 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 Issues

Not applicable

Indicator results are also available in

Comments

–The Health Indicators e-publication (<http://yourhealthsystem.cihi.ca/epub/?language=en>); updated annually starting from 2008–2009

–Your Health System: In Brief (<http://yourhealthsystem.cihi.ca/inbrief/?lang=en#!/indicators/007/repeat-hospital-stays-for-mental-illness>)