# 30-day all cause hospital readmission rate for medical and surgical patients

**Alternate Name***

Hospital readmission rate within 30 days of leaving hospital for medical or surgical treatment

## INDICATOR DESCRIPTION

**Description***

This indicator measures the rate, per 100 patient discharges, of unplanned returns to a hospital within 30 days of discharge. It includes medical patients who were hospitalized for non-surgical treatment, and patients who had surgery while in hospital. A lower rate is better.

**Indicator Status***

Active

**HQO Reporting tool/product**

Public reporting

**Dimension***

Effective

**Type***

Outcome

## DEFINITION AND SOURCE INFORMATION

**Unit of Measurement***

Rate per 100 discharges

**Calculation Methods***

The numerator divided by the denominator per 100 patient discharges

**Numerator including inclusion/exclusion***

The number of episodes of care for medical and surgical patients with an urgent readmission within 30 days of previous discharge.

*Inclusions:*
1. Emergent or urgent (non-elective) readmission to an acute care hospital (it does not have to be the same facility as the index hospitalization).
2. When the time between the admission date on readmission record and the discharge date on the last record of the index episode of care is less than or equal to 30 days.

*Exclusions:*
Presence of at least one record in the episode with one of the following:
1. Delivery (ICD-10-CA: O10-O16, O21-O29, O30-O37, O40-O46, O48, O60-O69, O70-O75, O85-O89, O90-O92, O95, O98, O99 with a sixth digit of 1 or 2; or Z37 recorded in any diagnosis field).
2. Chemotherapy for neoplasm (ICD-10-CA: Z51.1) as MRDx.
3. Admission for mental illness (MCC = 17).
4. Admission for palliative care (ICD-10-CA: Z51.5) coded as MRDx.
5. Records with an invalid admission date.

## Denominator including inclusion/exclusion*

The number of episodes of care discharged between April 1 and March 1 of the fiscal year for surgical and medical patients.
- Surgical Group MCC Partition Code = I (intervention)
- Medical Group MCC Partition Code = D (diagnosis) (not an intervention)

*Inclusions:*
1. 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.
2. Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 of the following year to allow for 30 days of follow-up).
3. Sex recorded as male or female.
4. Ontario resident.
5. Age 20 and older.

*Exclusions:*
1. Records with an invalid health card number.
2. Records with an invalid date of birth.
3. Records with an invalid admission date or time.
4. Records with an invalid discharge date or time.
5. Records with an admission category of still birth or cadaveric donor.
6. Episodes with a discharge of death or self sign-out.
7. Presence of at least one record in the episode with MCC 17 (Mental Diseases and Disorders).
8. Presence of at least one record in the episode with palliative care (ICD-10-CA: Z51.5) coded as most responsible diagnosis (MRDx).
9. Presence of at least one record in the episode with MCC 13 (Pregnancy and Childbirth).

## Adjustment (risk, age/sex standardization)- detailed

Risk adjustment factors: Age group, sex, acute care hospitalization in previous six months, urgent admission, Charlson Comorbidity score group* and selected CMG group**

## Data Source

National Ambulatory Care Reporting System (NACRS)

Discharge Abstract Database (DAD)

**Data provided to HQO by**

Canadian Institute for Health Information (CIHI)

**Reported Levels of comparability /stratifications (defined)**

Time

Institution

Region

## OTHER RELEVANT INFORMATION

### Caveats and Limitations

Urgent readmissions to acute care facilities have been widely used to measure institutional or regional quality of care and care coordination. Readmission rates can be influenced by a variety of factors, including the quality of inpatient and outpatient care, the effectiveness of the care transition and coordination, and the availability and use of effective disease management community-based programs. While not all unplanned readmissions are avoidable, interventions during and after a hospitalization can be effective in reducing readmission rates.Sometimes patients have to be hospitalized again shortly after being discharged from a previous hospitalization. Such an event is still referred to as a readmission and is not always avoidable.

### Comments Detailed

The readmission can occur in any acute care facility, it does not necessarily have to be the same location as the index hospitalization.

### Footnotes

*Charlson score group 1 = Charlson score 1-2; Charlson score group 2 = Charlson score 3 or higher (reference category is Charlson score group 0 = Charlson score 0). **CMGs included in the model are those that account for the top 80% of the total number of readmissions among medical patients.

## TAGS

### TAGS*

Acute Care/Hospital

Primary Care

Outcome

Readmission

Effective

National Ambulatory Care Reporting System (NACRS)

Discharge Abstract Database (DAD)

## PUBLISH

### PUBLISH DATETIME*

04/10/2017 14:30:00