In-Hospital Hip Fracture in Elderly (65+) Patients

Name: In-Hospital Hip Fracture in Elderly (65+) Patients
Short/Other Names: In-Hospital Hip Fracture (65+)

Description: This indicator measures the rate of in-hospital hip fractures among acute care inpatients age 65 and older.

Interpretation: Lower rates are desirable.

HSP Framework Dimension: Health System Outputs: Safe

Areas of Need: Getting Better

Geographic Coverage: All provinces/territories except Quebec

Reporting Level/Disaggregation: National, Province/Territory, Region, Facility, Peer Group

Indicator Results: https://www.cihi.ca/en/cihi-health-indicators

Identifying Information
Name: In-Hospital Hip Fracture in Elderly (65+) Patients
Short/Other Names: In-Hospital Hip Fracture (65+)

Indicator Description and Calculation

Description: This indicator measures the rate of in-hospital hip fractures among acute care inpatients age 65 and older. For further details, please see the General Methodology Notes.

Calculation: Description
Risk-adjusted rate = Observed cases ÷ Expected cases × Canadian average

Unit of analysis: Single admission

Calculation: Geographic Assignment
Place of service

Calculation: Type of Measurement
Rate - per 1,000

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
Poisson regression

Description:
Acute care discharges of patients age 65 and older
Inclusions:
1. Admission to an acute care institution (Facility Type Code = 1)
2. Age at admission 65 years and older
3. Sex recorded as male or female

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

Description:
Cases within the denominator with a post-admission hip fracture
Inclusions:
1. One of the following ICD-10-CA codes, coded as type 2:
   - Fracture of neck of femur (S72.0)
   - Intertrochanteric fracture (S72.10)
   - Unspecified trochanteric fracture (S72.19)
   - Subtrochanteric fracture (S72.2)

Exclusions:
1. Other specified misadventures during surgical and medical care (one of the above S codes and Y65.8 coded as type 9)
OR
2. Fracture of bone following insertion of orthopedic implant, joint prosthesis or bone plate (M96.6 coded as type 2 or T81.88 coded as type 2)

Background, Interpretation and Benchmarks

In-hospital hip fractures are largely preventable and represent a patient safety concern.

Rationale
In addition to the profound impact hip fractures can have on the independence and quality of life of elderly patients, such injuries occurring within hospital are also associated with longer lengths of stay and increased health care costs.

This indicator is intended to help hospitals monitor prevention efforts; high rates should be used to identify areas for improvement.

Interpretation
Lower rates are desirable.
### HSP Framework
**Dimension: Health System Outputs: Safe**

**Areas of Need:** Getting Better

**Targets / Benchmarks:** Not applicable

**References**

### Availability of Data Sources and Results
- **Data Sources:** DAD
- **Type of Year:** Fiscal
- **Available Data Years**
  - **First Available Year:** 2012
  - **Last Available Year:** 2016
- **Geographic Coverage:** All provinces/territories except Quebec
- **Reporting Level/Disaggregation:** National, Province/Territory, Region, Facility, Peer Group
- **Result Updates**
  - **Update Frequency:** Every year
  - **Web Tool:** CIHI Health Indicators
  - **URL:** [https://www.cihi.ca/en/cihi-health-indicators](https://www.cihi.ca/en/cihi-health-indicators)
  - **Updates:** Not applicable

### Quality Statement
- **Caveats and Limitations:** Rates for Quebec are not available due to differences in data collection.
- **Trending Issues:** Not applicable
- **Comments:** Not applicable