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

**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

**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

**Denominator**
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)

2. 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.
<table>
<thead>
<tr>
<th>HSP Framework Dimension</th>
<th>Areas of Need</th>
<th>Targets / Benchmarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health System Outputs: Safe</td>
<td>Getting Better</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**References**


**Availability of Data Sources and Results**

<table>
<thead>
<tr>
<th>Data Sources</th>
<th>DAD</th>
</tr>
</thead>
</table>

**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

**Update Frequency:** Every year

**Web Tool:** [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