Hospital harm captured by this indicator is defined as the rate of acute care hospitalizations with at least one occurrence of unintended harm during a hospital stay that could have been potentially prevented by implementing known evidence-informed practices. This includes many types of harm at a system level (making it a big dot indicator). It also classifies harm into actionable clinical groups; therefore, improvement efforts in patient safety can be tracked for the overall measure and for each specific clinical group.

While not all instances of harm captured by this indicator can be prevented, adoption of evidence-informed practices can help to reduce the rate of harm.

Harm is captured only when it

- Is identified as having occurred after admission and within the same hospital stay;
- Requires treatment, alters treatment or prolongs the hospital stay; and
- Is one of the conditions from the 31 clinical groups in the Hospital Harm Framework (refer to the Hospital Harm Indicator General Methodology Notes).

The following are not captured:

- Near misses or incidents that did not reach the patient; and
- Reportable incidents or events that reached the patient and could potentially have caused harm or injury but did not.

For further details, please see the document Hospital Harm Indicator: Frequently Asked Questions.
This indicator is expressed as the number of hospital discharges with at least one occurrence of harm per 100 discharges.

Unit of analysis: Hospital discharge

5 patient groups are hierarchically defined in the following order:

1. Newborn patient group: Entry_code = N
2. Obstetric patient group: Major clinical category (MCC) 13
3. Pediatric patient group: Age younger than 18 years
4. Surgical patient group: MCC partition code = I (intervention)
5. Medical patient group: MCC partition code = D (diagnosis)

For further information on the methodology, please refer to the Hospital Harm Indicator General Methodology Notes.

Background, Interpretation and Benchmarks

Rationale
Tracking and reporting harmful events is a vital first step to investigating, monitoring and understanding patient safety improvement efforts. Historically, reporting has been mostly voluntary and focused on particular risks such as infections. Until now, there has been no single measure that provides a broad perspective on patient safety in Canadian hospitals.

This indicator aims to provide a single estimate of the overall rate of hospital harm and to allow for tracking and monitoring of the rate over time.

Interpretation
A lower rate for this indicator is desirable.
HSP Framework Dimension
Areas of Need Targets / Benchmarks

Health System Outputs: Safe Getting Better

Not applicable


Canadian Institute for Health Information. Canadian Classification of Health Interventions (CCI), 2015.

Canadian Institute for Health Information. Canadian Coding Standards for ICD-10-CA and CCI, 2015, 2015.


Canadian Institute for Health Information. Measuring Patient Harm in Canadian Hospitals, 2016.

Classen DC, Resar R, Griffin F, et al. Global Trigger Tool shows that adverse events in hospitals may be ten times greater than previously measured. Health Affairs. April 2011.


Available Data Sources and Results

Data Sources DAD

Type of Year: Fiscal

First Available Year: 2014

Last Available Year: 2018

Geographic Coverage All provinces/territories except Quebec

Reporting Level/Disaggregation National

Result Updates

Update Frequency Every year

Web Tool: Hospital Harm web page

URL: https://www.cihi.ca/en/hospital-harm-project

Updates Not applicable

Quality Statement

The Hospital Harm indicator has the following limitations that may affect interpretation of results and comparison across organizations:

- Differences in processes, documentation and resources across hospitals may result in differences in their ability to capture data about harmful events, so hospitals with better documentation may have higher rates.

Caveats and Limitations

- The results are not risk-adjusted. Hospitals serve different patient populations and it is important to take this into account when comparing health system performance. Given the wide range of harmful events captured by this indicator, a risk-adjustment methodology to account for these differences was not developed.

- All occurrences of harm are considered to be of the same weight in terms of contribution to a hospital's overall rate, regardless of severity.

Trending Issues

In October 2016, CIHI released Measuring Patient Harm in Canadian Hospitals, a national-level report on hospital harm. Since the report was released, there have been changes to the methodology used.

Indicator results are also available in Your Health System: Insight, which is updated monthly (results are available at national, province/territory, regional and facility levels).