



## Version 2023 PSI 08 Expansion - Frequently Asked Questions (FAQs)

### 1. How is the new PSI 08 different from the old version?

AHRQ has expanded PSI 08 from the previous indicator, "In-Hospital Fall with Hip Fracture Rate" to an updated indicator, "In-Hospital Fall-Associated Fracture Rate."

While the previous PSI 08 indicator captured just hip fractures, the updated PSI 08 indicator captures both hip fractures and a range of other fall-associated fractures. The updated PSI 08 indicator still excludes fractures that aren't typically associated with falls.

The updated indicator is now a combination of two components: a "hip fracture" component (which captures just hip fractures, like the previous PSI 08) and an "other fracture" component (which captures the new group of non-hip fractures that are associated with falls). Users can output the overall PSI 08 indicator **or** the individual components. The overall PSI 08 indicator is risk-adjusted, but the individual components are not.

The new PSI 08 uses a slightly different denominator than the previous version. In the previous version, discharges were excluded from the denominator if hip fracture was the principal diagnosis or a secondary diagnosis present on admission. In the new version, discharges are excluded if any qualifying fracture is a principal diagnosis or secondary diagnosis present on admission.

For specific types of fractures that were added and other details, please see the document, "[Scientific Rationale and Empirical Testing: Expanding PSI 08 to Capture In-Hospital Fall-Associated Fractures.](#)"

### 2. How should users view trend data for PSI 08?

The QI software is backward compatible, and AHRQ recommends using the most recent software version on all years of data when examining trends. Users who wish to examine the updated PSI 08 indicator over multiple years should input all years of data into the v2023 software to view these trends with the new, expanded version of PSI 08.

If desired, users may also output the new PSI 08 indicator's "hip fracture" component. While the individual hip fracture component is not risk-adjusted, it includes only hip fractures, like the previous PSI 08 version. Users may compare this component to the observed and expected rates from the v2022 PSI 08 specification, or they may view trends in this component over multiple years using v2023 software and multiple years of input data.

### 3. Why is this change being made?

AHRQ is expanding the PSI 08 indicator to include a wider range of fall-associated fractures because the previous definition of “In Hospital Fall with Hip Fracture Rate” is narrower than clinically accepted definitions of fall-related major injuries. For example, due to the potential for serious harm associated with patient falls, “patient death or serious injury associated with a fall while being cared for in a health care setting” is considered a Serious Reportable Event by the National Quality Forum (NQF). NQF’s definition of “serious injury” includes “but is not limited to fractures, head injuries, and intracranial hemorrhage.”<sup>1</sup> Similarly, the National Database of Nursing Quality Indicators (NDNQI) developed by the American Nurses Association (currently maintained by Press Ganey) defines major fall-associated injury as having “resulted in surgery, casting, traction, required consultation for neurological (e.g., basilar skull fracture, small subdural hematoma) or internal injury (e.g., rib fracture, small liver laceration), or patients with any type of fracture regardless of treatment...”<sup>2</sup>

The updated measure will support hospitals, systems, and quality improvement entities to track fall-associated in-hospital fractures and ultimately reduce the frequency of inpatient falls resulting in major injury.

For more details, please see the document, “[Scientific Rationale and Empirical Testing: Expanding PSI 08 to Capture In-Hospital Fall-Associated Fractures.](#)”

### 4. Why aren’t the individual components of the expanded PSI 08 indicator risk-adjusted?

Risk adjusting the expanded PSI 08 indicator’s two components, in addition to the “overall” measure, would require three separate risk adjustment models. When used in isolation, the “hip fracture” and “other fracture” components do not capture the full range of clinically important fall-associated fractures, as suggested by guidelines from entities such as NQF and NDNQI. The updated PSI 08 indicator will encourage monitoring a broader range of fall-associated fractures.

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<sup>1</sup> [https://www.qualityforum.org/Publications/2011/12/SRE\\_2011\\_Final\\_Report.aspx](https://www.qualityforum.org/Publications/2011/12/SRE_2011_Final_Report.aspx), page A-11; accessed July 20, 2023.

<sup>2</sup> [https://members.nursingquality.org/NDNQIPortal/Documents/General/Guidelines\\_-\\_PatientFalls.pdf](https://members.nursingquality.org/NDNQIPortal/Documents/General/Guidelines_-_PatientFalls.pdf), page 7; accessed July 20, 2023.

**5. How are the expanded PSI 08 indicator’s numerator, denominator, and rates different from v2022?**

Testing showed that compared with the v2022 PSI 08 indicator (just hip fractures), the updated PSI 08 indicator (hip fractures plus other fall-associated fractures) captures 3.64 times more cases in the numerator and 3.1% fewer cases in the denominator, increasing its observed rate by a ratio of 3.76.

The large increases in the updated PSI 08 numerator and observed rate were expected, given its broadened definition from only hip fractures to all fall-associated fractures. The small decrease in PSI 08’s denominator was also expected, because PSI 08 now excludes records with a principal diagnosis or secondary diagnosis present on admission of any qualifying fracture, rather than just hip fracture.

For more details, please see the document, “[Scientific Rationale and Empirical Testing: Expanding PSI 08 to Capture In-Hospital Fall-Associated Fractures.](#)”

**6. How does the new PSI 08 indicator impact PSI 90 results?**

The frequency weight of PSI 08 indicator in AHRQ’s PSI 90 composite increased from 1.5% to 4.9%, but it will remain a small component of PSI 90 (<5%). Therefore, this change will have a very slight impact on PSI 90, and all users are anticipated to be impacted similarly.

**7. Why does the new PSI 08 indicator have the same indicator number as the previous version, even though it is specified differently?**

AHRQ’s established precedent is to keep the indicator numbering and naming for the quality indicators consistent, even when the indicators undergo large changes. Similar refinements and changes to PSIs 11, 13, and 15 occurred without relabeling the indicator or introducing a new PSI number. PSI 90 (Patient Safety and Adverse Events Composite) was also extensively revised to drop PSI 7 and add PSIs 9 through 11.