



The Leapfrog Group's November Market Insights Report

This month's Market Insights explores the performance of the five largest U.S.

health systems in patient safety and adverse events as measured by [CMS PSI 90](#).

PSI 90 is the heaviest weighted measure in the Leapfrog Hospital Safety Grade program, accounting for nearly 15% of the overall grades.

Developed by the Agency for Healthcare Research and Quality (AHRQ), CMS PSI 90 scores summarize hospital performance across ten Patient Safety Indicators (PSIs) using standardized morbidity ratios. Each component is weighted based on the volume of the event and the associated harm, with more serious and frequent events driving the composite score. Four of the PSIs—**Pressure Ulcer Rate (PSI 3)**, **Postoperative Respiratory Failure Rate (PSI 11)**, **Perioperative Pulmonary Embolism (PSI 12)**, and **Postoperative Sepsis Rate (PSI 13)**—carry the most weight in the calculation, reflecting their significant impact on patient outcomes. The individual indicators highlight where hospitals are succeeding, and where there's room for improvement in patient safety.

Progress in Patient Safety, with Ongoing Fluctuations Across Health Systems

For this analysis, Leapfrog identified five systems with the highest number of graded hospitals and averaged all available PSI 90 scores over the past four years. Among the five largest health systems, HCA Healthcare demonstrates the lowest average composite scores across all four years. It's important to note that a lower PSI 90 score indicates better performance, meaning fewer preventable adverse events, and the measure is centered around 1.

All health systems experienced an overall drop in PSI 90 scores in Fall 2023, when a risk adjustment for COVID-19 diagnoses that were present on admission (POA) was [added for all PSIs](#). This was also the first year that the reporting period included post COVID-19 outbreak data. The following year, all health systems experienced a notable uptick in PSI 90 scores- pointing to an increase in serious adverse events across the country. This upward trend was curbed by three health systems: Advocate Health, Community Health Systems, and CommonSpirit Health. The specific causes of these fluctuations in PSI 90 scores are not publicly detailed, but possible contributing factors could include:

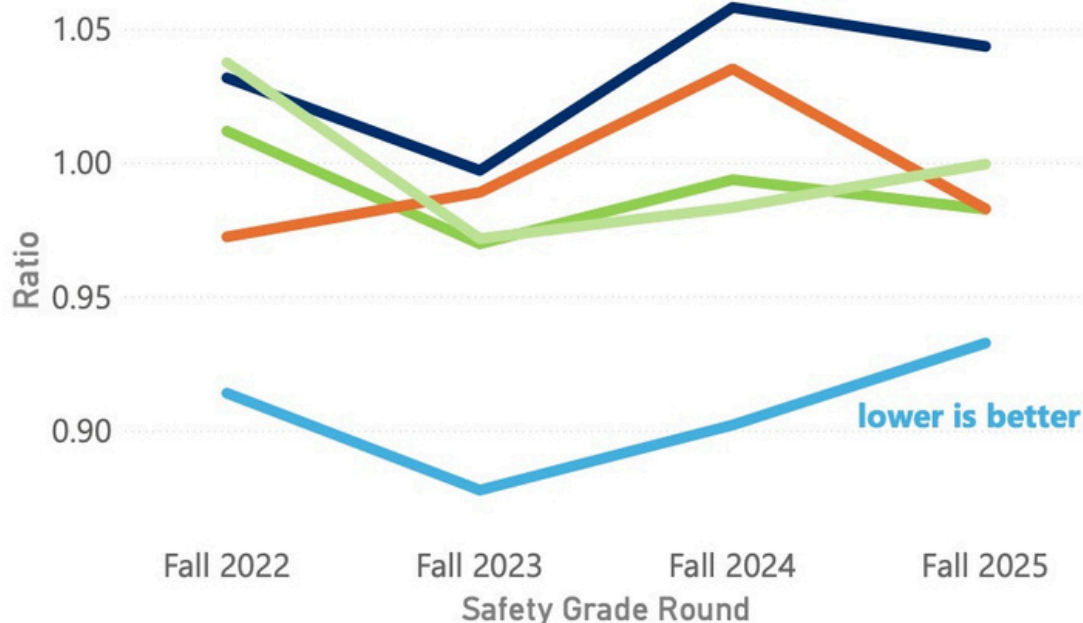
- **Staffing shortages or turnover**, which may affect timely interventions and [adherence to safety protocols](#)
- **Pandemic-related disruptions** lingering in [certain operational areas](#)
- **Changes in patient mix or acuity**, which can [increase observed adverse events](#) relative to expected
- **Measure Specifications** or updates to how component PSIs are calculated
- (including risk adjustments)

Overall, these fluctuations highlight variation and the importance of focused efforts on patient safety and harm reduction across large, complex health systems.

Average Performance by System

PSI 90: Patient safety and adverse events composite

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Top Five Largest Health Systems

- Advocate Health (46 hospitals)
- CommonSpirit Health (94 hospitals)
- Community Health Systems (55 hospitals)
- HCA Healthcare (163 hospitals)
- Kaiser Permanente (51 hospitals)

Data Source: The Leapfrog Hospital Safety Grade

PSI 90 Definition: PSI 90 combines the smoothed (empirical Bayes shrinkage) indirectly standardized morbidity ratios (observed/expected ratios) from selected AHRQ Patient Safety Indicators (PSIs). The weights of the individual component indicators are based on two concepts: the volume of the adverse event and the harm associated with the adverse event.

Definition Source: [AHRQ Quality Indicators \(AHRQ QI\) ICD-10-CM/PCS Specification v2024](#).

Top Quartile Performance on Key Patient Safety Indicators

Across the four most heavily weighted PSI 90 component measures, several health systems demonstrate notable strength, with a high share of their hospitals performing in the top quartile nationally. These results highlight where systems are leading in preventing the most serious and costly forms of patient harm.

PSI 3: Pressure Ulcer Rate

- HCAHealthcare** has **44%** of hospitals in the top quartile, the highest among the five systems

CommonSpirit Health also shows strong performance with **32%** in the top quartile

PSI 11: Postoperative Respiratory Failure Rate

Advocate Health leads this measure, with **46%** of hospitals achieving top quartile performance

Community Health Systems follows closely at **44%**

PSI 12: Perioperative Pulmonary Embolism Rate

HCA Healthcare again ranks at the top, with **50%** of its hospitals in the highest quartile

CommonSpirit Health shows meaningful progress with **29%** of hospitals performing at top quartile levels

PSI 13: Postoperative Sepsis Rate

Advocate Health demonstrates the strongest performance on this critical harm measure, with **54%** of hospitals in the top quartile

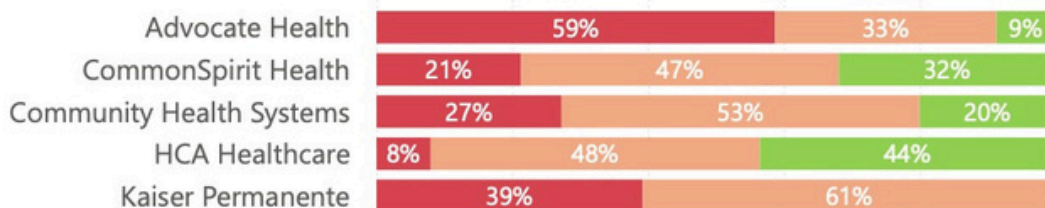
Community Health Systems also performs well, with **36%** of hospitals in the top quartile, reflecting strong consistency in postoperative care

Together, these results emphasize that while overall PSI 90 performance varies, each system has areas of excellence where targeted clinical practices, consistent protocols, and strong system-level oversight can drive measurable reductions in preventable harm.

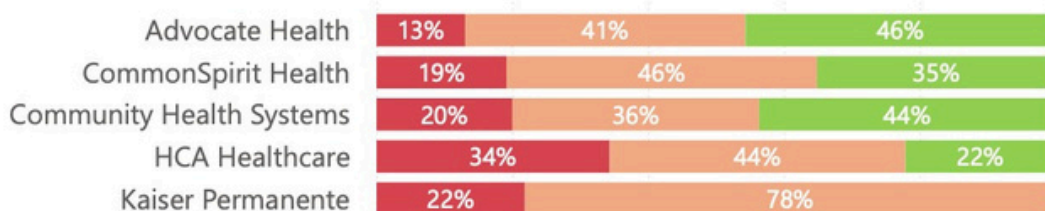
Quartile Performance by System

Four Most Heavily Weighted PSI 90 Component Measures

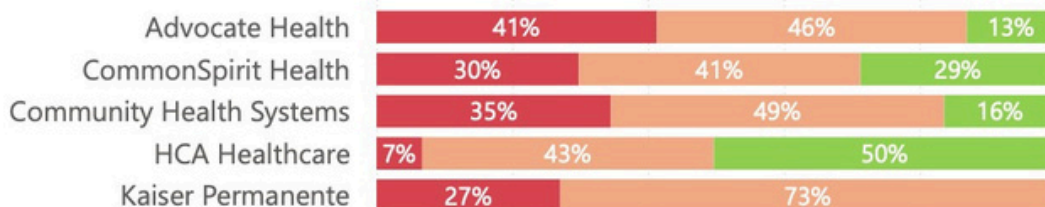
PSI 3: Pressure Ulcer Rate



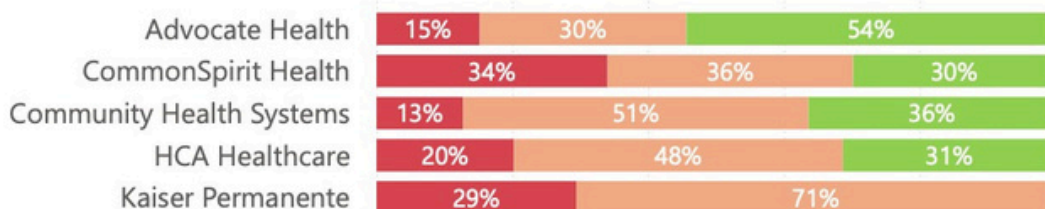
PSI 11: Postoperative Respiratory Failure Rate



PSI 12: Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate



PSI 13: Postoperative Sepsis Rate



Percentage of Hospitals

Quartiles ● Bottom Quartile ● Interquartile Range ● Top Quartile

Data Source: The Fall 2025 Leapfrog Hospital Safety Grade

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Looking Ahead: Building on Progress

While U.S. hospitals are making meaningful improvements in PSI 90, continued focus is required to address variability across hospital types and high-impact adverse events. Reducing preventable harm will depend on sustained investment in staff training, evidence-based protocols, and promoting early intervention.

CMS PSI 90 data not only highlights where hospitals are excelling but also where opportunities exist to improve patient safety, reinforcing that consistent measurement, transparency, and accountability are essential to delivering high-quality care.

Explore Full Results

To view the complete Fall 2025 Hospital Safety Grade results, visit Leapfrog's Hospital Safety Grade website:

[Leapfrog Hospital Safety Grade](#)

[Contact Leapfrog](#) for tips on how to get started and more information about the Hospital Survey or ASC Survey and Hospital Safety Grades.

Want to do your own trend analysis of hospital or ambulatory surgery center performance? [Contact Leapfrog](#) for more information about licensing our historical data sets.

New Tools to Navigate Leapfrog Data

We've launched new features to make exploring Leapfrog data even easier.

The [Measure Search](#) function is a comprehensive tool that allows users to search measures across the Leapfrog Hospital Safety Grade, the Hospital Survey, and the ASC Survey. Filter by facility type, patient type, dataset, or search for specific measures directly.

Our [Use Cases](#) illustrate how healthcare organizations, researchers, employers, and payors are applying Leapfrog data in the real world—from benchmarking safety performance to informing purchasing decisions and driving quality improvement. Each example shows how data-driven insights can translate into better care, smarter strategies, and meaningful results.

Visit the Hopper to explore these features and discover more ways to apply Leapfrog data:

[The Hopper](#)

New features on the Hopper!

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Giant Leaps for Patient Safety

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