

# Improving PSI & HAC Reporting Accuracy: A Quality Improvement Initiative

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## BACKGROUND

Improving hospital-acquired conditions (HACs) and patient safety indicators (PSIs) is crucial for enhancing healthcare quality, reducing patient harm, and optimizing organizational performance. Accurate reporting of these metrics is essential, as they have a significant impact on a hospital's financial health and reputation, including its publicly reported data for the Leapfrog Hospital Survey and Safety Grade and CMS Star Rating. According to the CDC, hospital-acquired infections cost U.S. hospitals at least \$28.4 billion each year. They also account for an additional \$12.4 billion in costs to society from early deaths and lost productivity.

## PURPOSE

The project aim was to explore systematic strategies and processes to improve the accuracy of HAC and PSI reporting. It also examines how these improvements can positively impact the reduction of patient harm events, financial outcomes and organizational reputation.

## METHODS

A concurrent review process was implemented in collaboration with Health Information Management (HIM) to enhance the accuracy of HAC and PSI reporting through continuous monitoring and proactive management. The pre-bill concurrent review process was redesigned in July 2022 and further optimized in 2023.

### Process Overview:

- Case Identification:** Cases were identified through an EPIC work queue following coding completion. Accounts flagged for potential HACs and PSIs were placed on a bill hold until a thorough clinical review was conducted by the Quality team.
- Timely Review:** To facilitate a timely and accurate bill release, the Quality team completed a clinical review of flagged events within one day of the cases being added to the Epic work queue.
- Collaborative Workflow:** The workflow was designed to efficiently review all cases with potential HACs and PSIs, requiring close collaboration between Quality and HIM, including coders and clinical documentation improvement (CDI) stakeholders. This ensured that pre-bill reviews were comprehensive and identified any missed opportunities, maintaining accurate documentation and coding.
- Clinical Insight & Re-evaluation:** The Quality team shared Clinical insights with the HIM - CDI Director to re-evaluate potential HAC and PSI events for coding opportunities or to initiate a physician query if necessary.
- Confirmation & Billing Release:** Upon completion of any necessary coding opportunities, documentation clarifications, or physician query the HAC or PSI was either confirmed or overturned. The bill was released once all reviews were finalized.

### Impact on External Reporting

Program	2021	2022	2023
Leapfrog	C	C	B
CMS Star Rating	★	★★	★★★

### 2023 Top 10 PSI & HAC Overturned



## RESULTS

In 2023, the Quality team conducted 229 concurrent reviews, with 84 cases referred to the HIM - CDI Director for potential coding opportunities, documentation clarifications, or physician query. Out of these, 60 cases were overturned from HAC or PSI reporting, with 40 identified as coding opportunities and 20 as documentation opportunities requiring physician query.

Implementation of the concurrent review process led to measurable improvements by reducing associated HAC or PSI financial penalties. These improvements also contributed to reducing patient harm and enhancing organizational reputation, as reflected in higher Leapfrog Hospital Safety Grades and CMS Star Ratings, positioning the organization to attract more patients and partnerships.

Based upon the AHRQ's estimated additional cost for HAC and PSI events, the cost avoidance was calculated utilizing the overturn rate of events. Estimated cost avoidance in the 60 cases overturned amounted to \$1,279,645.

Adverse Event	Overturned	Total Cost Avoidance
HAC 07 VASCULAR CATHETER-ASSOCIATED INFECTION	8	\$ 481,080.00
PSI 07 Central Venous Catheter Related Blood Stream Infection Rate	3	\$ 180,405.00
PSI 12 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate/PSI 90	7	\$ 151,961.25
HAC 04 STAGE III AND IV PRESSURE ULCERS	5	\$ 90,662.50
PSI 03 Pressure Ulcer Rate/PSI 90	5	\$ 90,662.50
HAC 06 CATHETER-ASSOCIATED URINARY TRACT INFECTION (UTI)	5	\$ 86,206.25
PSI 15 Abdominopelvic Accidental Puncture or Laceration Rate/PSI 90	8	\$ 57,460.00
PSI 04 Death Rate among Surgical Inpatients with Serious Treatable Complications	5	\$ 35,912.50
HAC 05 FALLS AND TRAUMA	3	\$ 25,102.50
PSI 11 Postoperative Respiratory Failure Rate/PSI 90	3	\$ 21,547.50
PSI 06 Iatrogenic Pneumothorax Rate/PSI 90	2	\$ 14,365.00
PSI 09 Postoperative Hemorrhage or Hematoma Rate/PSI 90	2	\$ 14,365.00
PSI 08 In Hospital Fall with Hip Fracture Rate/PSI 90	1	\$ 8,367.50
HAC 14 IATROGENIC PNEUMOTHORAX W/ VENOUS CATHETERIZATION	1	\$ 7,182.50
PSI 13 Postoperative Sepsis Rate/PSI 90	1	\$ 7,182.50
PSI 14 Postoperative Wound Dehiscence Rate/PSI 90	1	\$ 7,182.50
<b>Total Overturned</b>	<b>60</b>	<b>\$ 1,279,645.00</b>

## CONCLUSIONS

Accurate reporting, continuous monitoring and proactive management are essential for improving patient safety and hospital performance. This project demonstrates the impact of a systematic, concurrent review process through enhanced reporting accuracy and reducing HACs and PSIs. The 23% overturn rate achieved through this initiative reduced financial penalties, thus improving case reimbursement rates. The organization's Leapfrog Hospital Safety Grade and CMS Star Ratings improved, highlighting the value of rigorous quality review processes, which aims to reduce patient harm, improve financial outcomes, and position the organization for sustained growth.

## REFERENCES

For Access to References Please Scan QR Code

