

AHRQ Quality Indicators (QIs) Case Study: Tampa General Hospital's Adoption of AHRQ QIs Yields Performance Improvements

Key Findings

- In 2014, Tampa General Hospital began tracking its performance across the full set of AHRQ Patient Safety Indicators, both as a means of improving the quality and safety of patient care, and in response to the incentives underlying CMS' value-based purchasing programs.
- Tampa General Hospital substantially reduced its Pressure Ulcer Rate (PSI 03) after implementing a nutrition program aimed at patients whose poor nutrition impacted the healing of skin injuries.
- Tampa General Hospital substantially reduced its Deep Vein Thrombosis Rate (PSI 12) after instituting an education campaign aimed at both nurses and patients.

Urged by its Board of Directors, Tampa General Hospital leadership initially selected the AHRQ Patient Safety Indicators (PSIs) to monitor performance because leadership wanted to improve the hospital's standing under CMS' value-based purchasing and incentive programs. Starting in 2014, Tampa General Hospital analyzed its performance using the full set of AHRQ PSIs. Tampa General also established the position of Chief Quality Officer as a strong signal regarding the hospital's commitment to improving safety and quality of patient care.

Laura Haubner, MD, Tampa General Hospital's inaugural and current Chief Quality Officer, described the improvement of clinical care

experienced by patients of Tampa General Hospital following implementation of the AHRQ PSIs.

Tampa General Hospital: At a Glance

- 1000+ bed single facility teaching hospital with an affiliated ambulatory surgery center
- 1,500 medical staff members
- Affiliated with University of South Florida medical school, and their residency program (750 residents)
- Serves as the community hospital referral facility for the Tampa Bay area

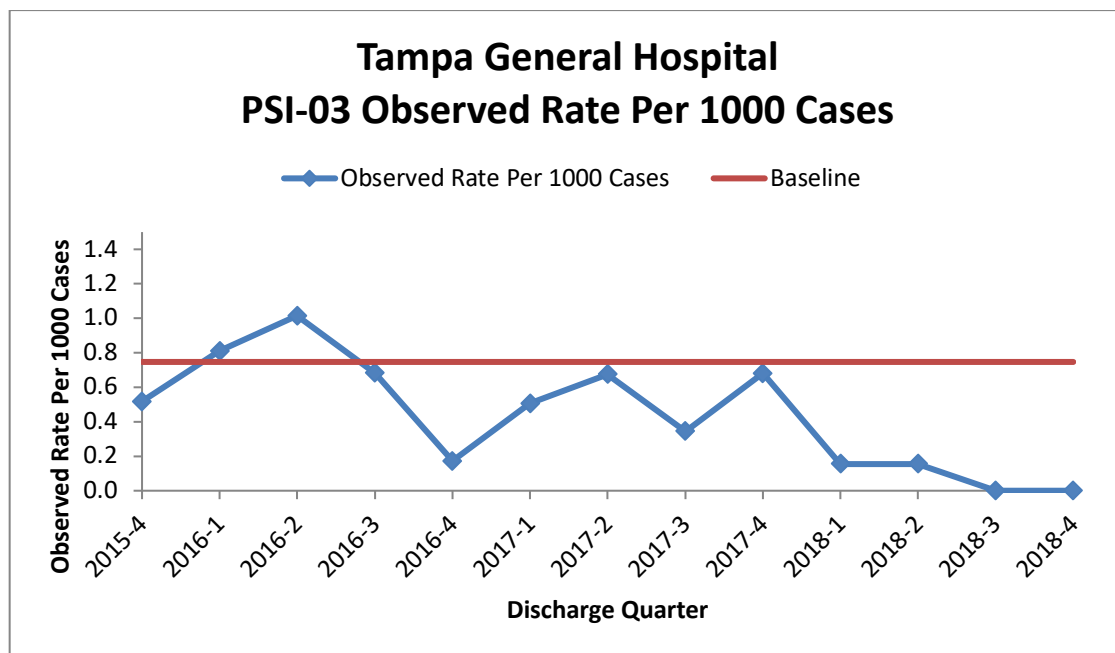
Focus on Nutrition Lowers Tampa General Hospital's Pressure Ulcer Rate (PSI 03)

After comparing its Pressure Ulcer Rate (PSI 03) to that of peer facilities in other parts of the country, Tampa General Hospital committed to substantially reducing its rate of pressure ulcers. The hospital's research identified poor nutrition as a significant contributor to the incidence of pressure ulcers. As a result of this finding, Tampa General Hospital developed a nutrition program targeted to undernourished patients at high risk for pressure ulcers. After implementing the nutrition program, Tampa General Hospital's PSI 03 rate improved significantly, dropping from an observed rate of .518 per 1,000 discharges for the fourth quarter of FY 2015 to zero incidents in the third and fourth quarters of FY 2018.

Beverly Hernandez, PhD, RD, LD/N, Director, Clinical Nutrition Services, explained that Tampa General Hospital took a three pronged approach to addressing malnutrition in these patients.

1. **Utilized technology to identify patients at risk for pressure sores.** The hospital adopted a computerized malnutrition screen to assist nurses with early identification of patients suffering from malnutrition.
2. **Standardized clinical protocols for at-risk patients.** The hospital combined early identification of patients at risk for pressure sores with more aggressive protocols for clinical staff, including a requirement that staff must see patients flagged by the malnutrition screen within 24 hours, and an automatic referral to a nutritionist for a poor score on the Braden Scale for Predicting Pressure Ulcer Risk. In addition, at-risk patients are visited by a hospital social worker who helps identify community resources (food banks, meals on wheels) for when patients return home.
3. **Increased interdisciplinary collaboration.** Tampa General Hospital instituted a Medical Nutrition Committee comprised of physicians, pharmacists and dietitians. This committee instituted changes that now allow nurses to write nutrition-based orders, instead of waiting for a physician to do so. A Wound Care Committee works aggressively to deter skin wounds during hospital stays, and the Nurse Nutrition Council meets regularly to review cases and identify opportunities for continuous improvement.

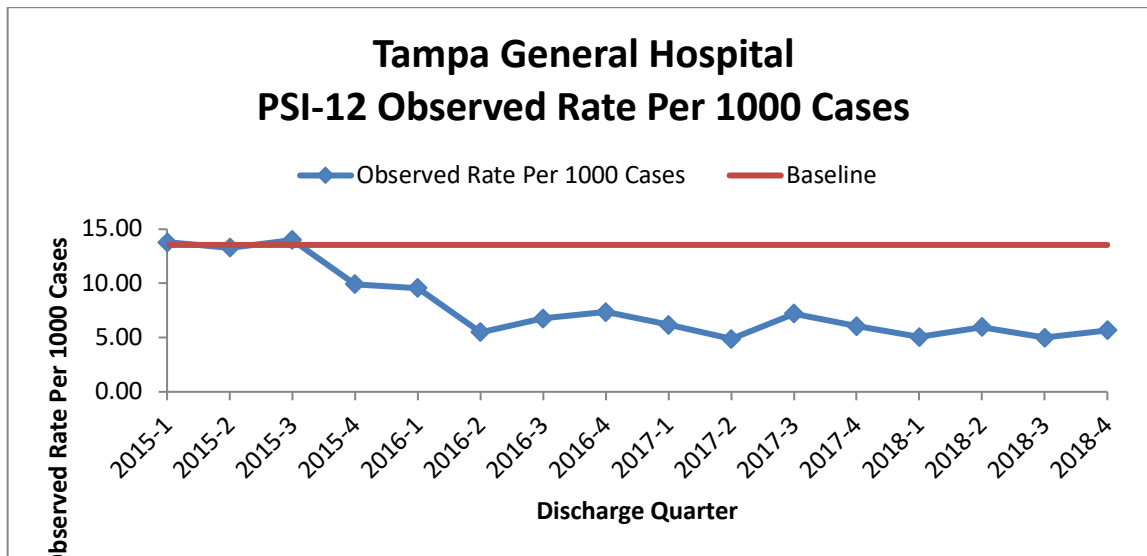
“The AHRQ PSIs awakened in all of us an awareness that we need to improve the hospital’s performance rate of pressure ulcers and that nutrition could be a key means of achieving that,” said Ms. Hernandez.



Clinical Tools and Education Improve Tampa General Hospital’s DVT Rate (PSI 12)

Tampa General Hospital’s Quality Department determined that its rate for Postoperative Pulmonary Embolism or Deep Vein Thrombosis (PSI 12) placed the institution in the bottom quartile among its peer facilities. As a result of this finding, Tampa General Hospital’s Quality Department closely examined several underlying clinical practices to identify factors that contribute to the hospital’s PSI 12 results.

The Quality Department discovered that at-risk patients did not receive prophylactic anti-coagulation on a consistent basis, either because staff delayed administering the anti-coagulant or missed doses, or patients declined the medication. Quality Department staff found that nurses’ perceptions influenced whether or how consistently patients received prophylactic medication. To address this issue, Tampa General Hospital’s unit-based pharmacist in the Surgery Department began to educate nurses and patients about deep vein thrombosis, its clinical presentation, the importance of consistently using anti-coagulants, and how to prevent deep vein thrombosis from happening in the future. Tampa General Hospital’s Quality Department also developed tools to help providers identify at-risk patients and trigger best practice alerts. Following implementation of the program, Tampa General Hospital’s improved its PSI 12 observed rate from 13.8 per 1,000 in the first quarter of FY 2015 to 5.67 per 1,000 in the fourth quarter of FY 2018. Due to the success of this program, Tampa General Hospital expanded the responsibility of unit-based pharmacists across all departments.



Performance for Select PSIs Reported Publicly on Hospital’s Website

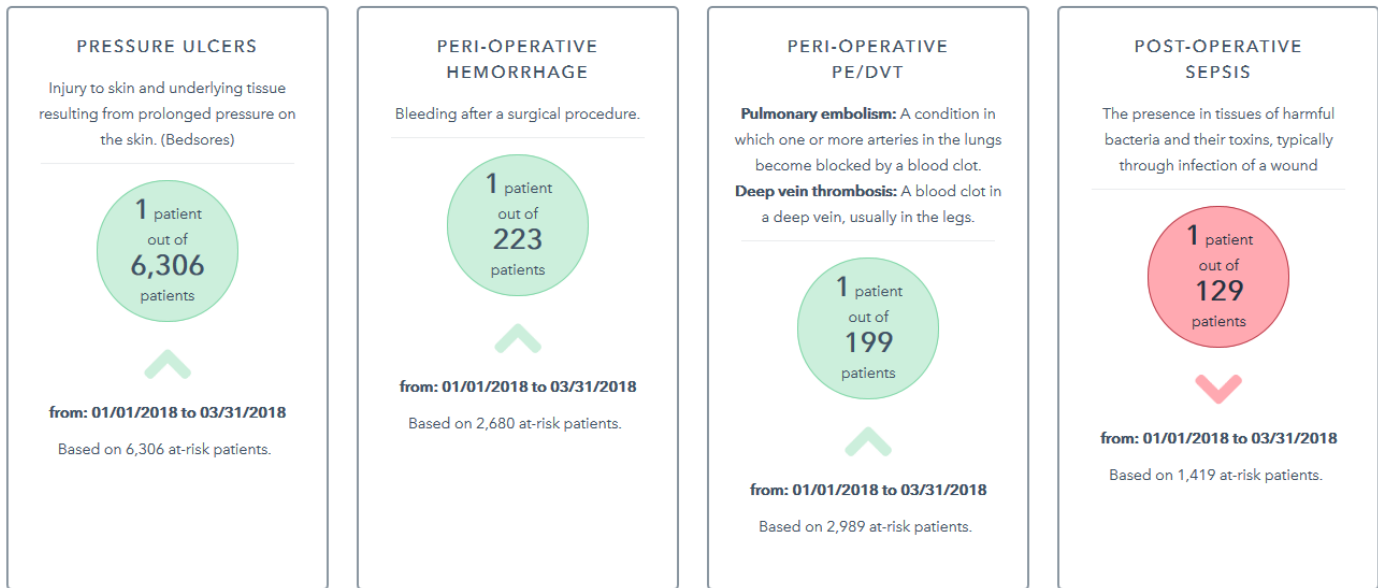
The Tampa General Hospital’s Patient Advisory Committee provided guidance regarding the most relatable format for publicly reporting the hospital’s results on key quality indicators. The committee selected priority metrics for inclusion on the hospital’s [website](http://www.tgh.org/patients-visitors/patients/quality-metrics), (www.tgh.org/patients-visitors/patients/quality-metrics) and also offered advice on the most understandable format for reporting the results. The hospital shows the result for the last quarter, color coded to indicate whether that rate is an improvement when compared to the prior year’s results (see Figure 1 below).

“Our goals is always world-class performance, which we define as the top 20th percentile performance among comprehensive academic medical centers. Our vision is to be the safest and most innovative academic health system in America,” says Dr. Haubner. “In fact, our mission statement specifically states ‘our services are delivered in an exceptional manner, with benchmark performance in clinical outcomes, care processes, cost-effectiveness, and patient experience.’ The AHRQ PSIs are helping us achieve this.”

Figure 1: Tampa General Hospital Website Snapshot

PATIENT SAFETY INDICATORS

The Patient Safety Indicators (PSIs) are a set of measures that screen for adverse events patients experience as a result of exposure to the health care system. These events are likely amenable to prevention by changes at the system or provider level.



● Worse than 2017
 ● No Change
 ● Better than 2017

Interview Participants

Tampa General Hospital: Laura Haubner, MD, Chief Quality Officer

StollenWerks, LLC.: Margaret Trinity, Suzanne Sherif

About the AHRQ Quality Indicators (QIs)

The AHRQ QIs include four sets of measures—Patient Safety Indicators, Inpatient Quality Indicators, Prevention Quality Indicators, and Pediatric Quality Indicators—which address quality of care for patients hospitalized for a broad range of procedures or conditions that are high risk, problem prone, and/or high volume. The AHRQ QIs represent a national standard and are publicly available at no cost to the user. Many of the indicators are endorsed by the National Quality Forum (NQF), suggesting that stakeholders across the healthcare enterprise view the measures as “best in class.” They can be used to support quality improvement efforts, public reporting, and accountability programs, and ultimately to help provide safe, effective care to patients. Many of the AHRQ QIs are used by the Centers for Medicare and Medicaid Services (CMS) and other payers for quality monitoring, pay-for-performance, and value-based purchasing initiatives. Hospitals and health systems can use AHRQ QIs as part of an overall performance initiative to improve the quality of care. For more information about the AHRQ QIs visit <http://www.qualityindicators.ahrq.gov/>.