AHRQ Quality Indicators™ Case Study: SUNY Upstate University Hospital

Key Findings

- In 2014, State University of New York (SUNY) Upstate University Hospital began a major patient safety initiative that included implementation of the full set of AHRQ Patient Safety Indicators (PSIs) and significantly improved its performance on several PSIs by the first quarter of 2015.
- Implementation of the AHRQ QIs, resulted in SUNY Upstate University Hospital avoiding financial penalty in 2016 for Healthcare-Acquired Conditions (HACs), eliminating what had been a \$1 million penalty two years earlier.

In 2014, SUNY Upstate University Hospital undertook a multi-faceted initiative to improve patient safety, focused on three goals: 1) eliminate unnecessary harm to patients; 2) improve the

medical center's reputation in relation to safety; and 3) minimize or eliminate any negative financial impact based on its quality scores. To accomplish this, SUNY Upstate implemented the full set of AHRQ PSIs, both as an integral part of the medical center's quality improvement goals, and in acknowledgement of the use of the AHRQ QI measures by payers in their

SUNY Upstate: At a Glance

- University Hospital in Syracuse is part of SUNY Upstate Medical University and is the only academic medical center in central New York, serving 1.8 million people across an area that covers one third of the state.
- University Hospital has 10,000 staff members, 1,400 of whom are credentialed.
- The University Hospital has 735 licensed beds, and 77 hospital-based specialty clinics.

value-based purchasing activities. SUNY Upstate used the PSIs to identify processes that could be reengineered to improve the quality and reliability of care provided at the medical center.

"We believed that we had a significant opportunity to improve patient care through the use of AHRQ's Patient Safety Indicators," stated Dr. Hans Cassagnol, Chief Quality Officer for SUNY Upstate. At the same time, the medical center also began tracking its performance across 22 of the AHRQ Inpatient Quality Indicators (IQIs), which reflect quality of care inside hospitals and include inpatient mortality for certain procedures and medical conditions; utilization of procedures for which there are questions of overuse, underuse, and misuse; and volume of procedures for which there is some evidence that a higher volume of procedures is associated with lower mortality.

'Champions and Core Team' Assigned to Each PSI

To accomplish its patient safety improvement goals, SUNY Upstate assigned a physician lead or 'Champion' to each PSI. This person led a 'Core Team,' which included a unit manager, front line staff, analytic support and a documentation liaison. Each Core Team also included systems engineers and IT staff to ensure that any proposed process redesigns would be practical for



clinicians. SUNY Upstate supported the work of these teams by producing daily and monthly analytic reports, and holding monthly conference calls with medical center leadership. During these calls, each PSI team presented trends and their progress toward improvement. Each physician Champion and Core Team reviewed the results for their PSI to identify opportunities for improvement and process redesign. Each Core Team worked closely with clinical staff, providing feedback to providers on a daily basis. Each department also tracked its performance for the IQIs, identifying opportunities for improvement and implementing a systematic

approach to improving outcomes. SUNY Upstate also dedicated staffing and resources for improving the clinical documentation and coding for PSIs. These additional resources resulted in greater physician

"The AHRQ QIs provide feedback to the entire care chain – from physician lead to IT staff."

—Hans Cassagnol, M.D., Chief Quality Officer

engagement and buy-in for the PSIs, as well as performance improvement work around standardizing diagnosis-specific information.

As a result of these efforts, SUNY Upstate significantly improved its performance on several PSIs between the first quarter of 2015 and the second quarter of 2016. Specifically, SUNY Upstate improved its performance for PSI 11, decreasing its rate of post-operative respiratory failure from an observed to expected rate of 0.8 during the first quarter of 2015 to 0.13 during the second quarter of 2016. SUNY Upstate also improved its performance for PSI 13 (Postoperative Sepsis), decreasing from a rate of 2.18 to 0.8 per 1,000 discharges across the same time period. In addition, the medical center's performance for PSI 03 (Pressure Ulcer) improved slightly, decreasing from a rate of 7.0 to 6.4 per 1,000 discharges. Dr. Hans Cassagnol indicated that the medical center is focusing on its performance for these last two PSIs, for which significant opportunity for improvement remains.

SUNY Upstate Reduces Expenses by \$1Million by Eliminating CMS HAC Penalty

In 2014, SUNY Upstate paid a reimbursement penalty of \$1 million due to poor performance on its Hospital Acquired Conditions (HACs) score, which is based on performance on a number of PSIs, in addition to other measures of patient safety. In just two years, as a result of its patient safety initiative, SUNY Upstate incurred zero financial penalty in 2016 for HACs, protecting patients and the hospital's bottom line. Over that same time period, SUNY was able to hire additional staff in both its patient safety and infection control departments.



Interview Participants

SUNY Upstate Medical Center: Hans Cassagnol, MD; StollenWerks, Inc.: Diane Stollenwerk, 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/.

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