

## AHRQ Quality Indicators (QIs) Case Study: CHRISTUS Health Leadership Sets Patient Safety Goals with Help of AHRQ QIs

### Key Findings

- Since late 2015, CHRISTUS Health has achieved a 22 percent reduction in overall harm events after the system began to use 14 AHRQ Patient Safety Indicators (PSIs).
- CHRISTUS Health created a composite Harm Index using the AHRQ PSIs, and used this Index to motivate the organization’s leaders and clinical staff to achieve significant reductions in system-wide harm events.
- Notably, CHRISTUS Health achieved significant improvements in its results for Central Venous Catheter-related Blood Stream Infections (PSIs 07) with a 53.8 percent improvement, and for Postoperative Respiratory Failure (PSI 011) with a 41.3 percent reduction for 2016 through 2017.

New senior leadership in 2012 helped usher in CHRISTUS Health’s renewed focus on patient safety, and on its performance across the AHRQ

Patient Safety Indicators (PSIs). With the backing of its C-suite executives, CHRISTUS Health worked with clinical leadership at each of the system’s facilities to build awareness and support for tracking its performance using a subset of the AHRQ PSIs. In general, CHRISTUS Health’s providers felt adoption of the AHRQ QIs was logical and straight forward. “While there have

been pockets of push back, physicians view the selected AHRQ PSI measures as sensible,” noted John Gillean, MD, CHRISTUS Health’s Executive Vice President and Chief Clinical Officer.

CHRISTUS Health leaders selected the AHRQ QIs because they are widely accepted by clinicians and payers, and are a reliable means of advancing the organization’s quality improvement goals – more specifically, its goal of reducing harm events. CHRISTUS Health’s work in tracking its AHRQ QI performance was also motivated by its desire to improve performance under CMS’ value-based purchasing and penalty programs.

“We really believe that the AHRQ QIs we’ve selected are sensible measures for CHRISTUS Health to be working on, as they will help us continue to improve quality and match what payers are interested in as well,” said Dr. Gillean. “We saw an opportunity in that the AHRQ QI measures matched those that payers were selecting.”

### CHRISTUS Health: At a Glance

- CHRISTUS Health is an international Catholic, faith-based, not-for-profit health system comprising more than 60 hospitals and long-term care facilities, 175 clinics and outpatient centers.
- CHRISTUS Health’s 26 hospitals are found domestically in Louisiana, New Mexico and Texas, and 9 hospitals in Mexico, Chile and Columbia.
- In the United States, CHRISTUS Health has 1,200 physicians employed primarily in the Tyler, Texas and Santa Fe, New Mexico areas.

## AHRQ PSIs Key to Operational Scorecard Performance on “Harm Index”

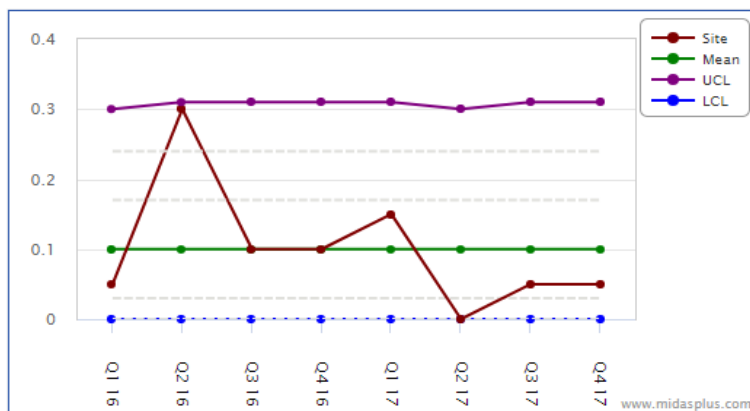
AHRQ Patient Safety Indicators Included in CHRISTUS Health’s Harm Index
PSI 03: Pressure Ulcer
PSI 06: Iatrogenic Pneumothorax
PSI 07: Central Venous Catheter-related Blood Stream Infection (BSI)
PSI 08: In-Hospital Fall with Hip Fracture
PSI 09: Perioperative Hemorrhage or Hematoma
PSI 10: Postoperative Acute Kidney Injury
PSI 11: Postoperative Respiratory Failure
PSI 12: Perioperative Pulmonary Embolism or Deep Venous Thrombosis
PSI 13: Postoperative Sepsis
PSI 14: Postoperative Wound Dehiscence
PSI 15: Unrecognized Abdominopelvic Accidental Puncture/Laceration

In 2012, CHRISTUS Health developed an operational scorecard to measure its progress in five critical areas, one of those being patient safety as measured by a composite “Harm Index.” CHRISTUS Health’s Harm Index is a composite or roll-up of 14 separate AHRQ PSI measures. CHRISTUS Health tracks the results of its Harm Index at an

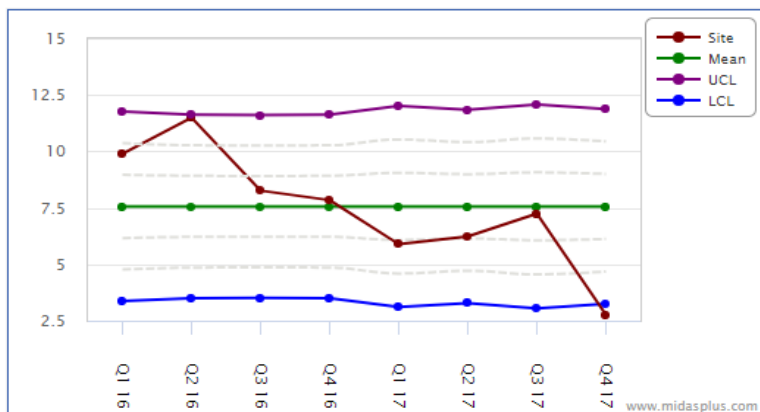
aggregated level in a scorecard updated monthly. The scorecard provides system-wide and facility-specific data at a composite level for the 14 PSIs that comprise the Harm Index, and also provides performance trends for each individual measure.

CHRISTUS Health shares this operational score card on a regular basis with its system Board of Directors. “The Board wants to know which CHRISTUS Health facilities are hitting their performance improvement goals, what the quality improvement team is

**PSI 07 Central Venous Catheter-related BSI - Per 1000 ACA**



**PSI 11 Postoperative Respiratory Failure - Per 1000 ACA**



doing to help them, if they are falling short, and when they will hit their goals,” explained Dr. Gillean.

Recently, CHRISTUS Health focused on the system’s performance on the Central Venous Catheter-related BSI (PSI 07) and Postoperative Respiratory Failure (PSI 11) indicators. CHRISTUS Health’s improvements in its performance for PSI 07 and PSI 11 are depicted in the graphs on this page. The top graph above

illustrates the 53.8 percent reduction in Central Venous Catheter BSI (PSI 07) experienced by CHRISTUS Health from 2016 to 2017; and the next graph depicts the 41.3 percent reduction in Postoperative Respiratory Failure (PSI 11) over the same time period.

The improvement activities for Central Venous Catheter-related BSI included the use of Curoso™ caps on all central lines, and reducing variation of the technique of dressing changes by having the peripherally inserted central catheter (PICC) nurses change these dressings. Only when a dressing becomes wet or loose will a floor nurse change these dressings. Clinical management changes resulting in significant improvement for Post-operative Respiratory Failure included early post-op ambulation and aggressively weaning patients off opioids. Also, CHRISTUS Health is ensuring the admission type is accurate so only elective cases are counted.

After starting to track performance on the 14 PSIs that comprise the system’s Harm Index, CHRISTUS Health has set zero harm as its long-term goal. Once the monthly score card analysis identifies where a facility needs to improve, the quality improvement team works with that facility to address improvement practices.

As CHRISTUS Health has gone about standardizing adoption of the Harm Index, the pace of efforts aimed at improving PSI performance has varied by CHRISTUS facility location, and by staffing resources available at each facility location. Nevertheless, the overall culture of safety is evidenced by daily safety huddles among clinicians at individual facilities, and weekly meetings to discuss shared learnings. The safety huddles “put names and faces to events,” explained Dr. Gillean. He went on to note that clinicians and departmental staff are taking pride in the patient safety culture, and are celebrating milestones such as 30 days since the last catheter-associated urinary tract infection (CAUTI) event.

### **Zero Harm Goal Captures Attention System-Wide**

Overall, the goal of zero harm has captured the attention of clinical leaders at each CHRISTUS Health facility. Each ministry knows that the Board reviews performance data at both the system level and the facility level. The use of common metrics across the system has helped build the culture of patient safety. “Our facilities are taking pride in making these harm events go away,” says Dr. Gillean. “Over the past two years, we’ve seen a 22 percent reduction in our overall harm events. The AHRQ QIs have been an integral part of our ongoing work in quality improvement and patient safety.”

#### Interview Participants

*CHRISTUS Health: John Gillean, MD, Executive Vice President and Chief Clinical Officer; Reggie Allen, Vice President, Clinical and Business Operations Transformation; and Susan Willmann, System Director, 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/>.