AHRQ Quality Indicators™ Case Study: Cleveland Clinic

Key Findings

- Cleveland Clinic has improved its performance on the AHRQ Patient Safety Indicators (PSIs) from the lowest quartile in 2010 to the best quartile as of June 2015.
- Cleveland Clinic has prioritized implementation of AHRQ's PSIs because payers—both public and private—use these measures to set performance targets.
- Cleveland Clinic focused on improving its coding practices to ensure that the care provided is accurately reflected in its coding system; this also increases clinicians' trust and comfort level in using the PSI measures for clinical quality improvement.

Cleveland Clinic's AHRQ QI Experience: Intense Focus on PSIs

Cleveland Clinic first began working with the AHRQ Quality Indicators (QIs) in 2010, choosing to implement the PSI module. Cleveland Clinic's focus on the PSIs is directly connected to Federal payment programs and private payers that use these quality indicators in their reimbursement programs. "**We focus on Patient Safety because it's the right thing to do for our patients. Our attention to PSIs complements our patient safety strategy and directly impacts how performance is judged externally and by the government,"** explained Anthony Warmuth, Administrator for Enterprise Quality.

Cleveland Clinic: At a Glance

- Nearly 54,000 discharges in 2014, generating more than $13 billion in patient revenues
- 1,400 beds on Cleveland Clinic's main campus and 4,450 beds systemwide, including 10 affiliated hospitals, with additional hospitals in Florida, Nevada, and Abu Dhabi
- 43,000 employees, including 3,200 professional staff and 1,700 residents and fellows
- 90 outpatient care locations in Northern Ohio

Coding Accuracy Smooths Implementation

The Cleveland Clinic team first tackled documentation and coding issues to ensure that the full range of care being provided was accurately reflected in the organization's health records and coding system. Cleveland Clinic's initial focus on documentation completeness and coding accuracy resulted in other benefits: thorough coding increased reliability of the PSI scores, which also increased clinicians' comfort and confidence with using the PSI scores for quality measurement. Cleveland Clinic focused on making sure that all care and treatments were appropriately captured in the administrative and coding data and subsequently in its AHRQ QI scores as well. This effort paid off, ensuring clinicians' trust in Cleveland Clinic's coding activities and smoothing implementation of the PSIs.

Warmuth recounted that implementing the PSIs uncovered technical questions that Cleveland Clinic shared with AHRQ, resulting in revisions to the technical specifications for certain indicators including PSI 12 (Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate), which now excludes some uses of particular highly specialized technologies.

Rigorous Implementation Achieves Results

"Clinicians are deeply interested in immediately learning when a patient safety problem occurs—then they have the opportunity to reduce variability in the care Cleveland Clinic provides," Warmuth said. Initially, after it began using the PSIs, Cleveland Clinic detected some clear opportunities to improve quality of care and used those opportunities to allocate resources. For example, for PSI 15 (Accidental Puncture or Laceration), Cleveland Clinic's rate was worse than its peer institutions—both for documentation and clinical reasons, explained Warmuth. Using the PSI specifications and partnering with its providers, the Clinic made dramatic improvements and now its PSI 15 results are in the best quartile.

On a daily basis, the quality improvement team partners with the coding department to identify each individual case that triggers a patient safety event as measured by one or more PSIs; these results are then aggregated into monthly management goals. One of Cleveland Clinic's enterprise (systemwide) goals was to translate these results into quarterly scorecard reviews. As a result, leadership is able to review scorecard results and use their PSI performance results to guide quality improvement activities. PSI 12 was identified as result of such an effort. Working with coding staff, the quality improvement team communicated with clinicians to ensure both proper coding and real time interventions to improve patient care.

> ***"Our latest 9-month report places Cleveland Clinic in the best decile of performance for all of the PSIs. When we first implemented the PSIs, our scores were in the lowest quartile."***
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> ***—Anthony Warmuth, Administrator for Quality Enterprise***

In its PSI implementation, Cleveland Clinic used rigorous processes to monitor and achieve results. This routinely involves senior leadership. Because PSI performance is classified by Cleveland Clinic as a system-wide enterprise goal, the Cleveland Clinic Board of Directors receives regular updates on the Clinic's PSI performance. In addition, the Clinic's PSI performance scores are posted on Cleveland Clinic's public website (http://www.clevelandclinic.org), enabling the public to know how the Clinic is performing on each measure.

Cleveland Clinic recently started flagging PSIs in real time using 3M's 360 Encompass platform. As a result, members of the quality team are able to communicate with clinicians, review clinical quality pathways, and address any issues concurrently before a patient is discharged. The 3M Encompass tool calculates PSI results and sends real time alerts when it detects a clinical issue that might affect the safety of a current patient, providing Cleveland

Clinic with data *while patients are still in the hospital to ensure "each patient gets the best care possible."* By tracking PSIs in real time, we "know while the patient is in the hospital if there is a possible safety issue," explained Warmuth. "That's when we have the potential to intervene; it's the proactive piece we want to get our arms around." The 3M platform also bridges clinical documentation with coding workflows, enabling Cleveland Clinic staff to review patient clinical records while conducting accurate DRG coding.

In addition to implementing the PSIs in house, Cleveland Clinic relies on the University HealthSystem Consortium (UHC), an alliance of the leading academic medical centers, to generate the Prevention Quality Indicators, Inpatient Quality Indicators, and Pediatric Quality Indicators, and to share benchmarking data. "We have too many balls in the air right now to run the other three AHRQ QI modules on our own, we must rely on UHC to generate these reports," stated Dr. Shannon Phillips, Cleveland Clinic's Associate Chief Quality Officer.

Interview Participants

Cleveland Clinic: Lisa Knowles, Anthony Warmuth, Kathleen Kravitz, Chrystel Barron, Linda Edwards, Dr. Shannon Phillips; StollenWerks, Inc.: Diane Stollenwerk, Margaret Trinity; Pantheon: Rob Timmons

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), which is considered the gold standard for health care measurement in the United States. 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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