AHRQuality Indicators™

Quarterly Newsletter

February 4, 2013 ISSUE 1

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1. Feature Story
AHRQ QI™ Software Redesign
AHRQ is engaged in the redesign of the AHRQ Quality Indicators (QI) software. The planned conversion from ICD-9-CM to ICD-10-CM/PCS will require re-specification of the AHRQ QI and development of new software to compute them. AHRQ is taking this opportunity to explore adding new features to the software that will improve its performance and enhance its functionality for our diverse community of users.

AHRQ's goals for the software redesign are to:
- Implement QI specifications using ICD-10-CM/PCS diagnosis and procedure codes
- Improve the reliability of the software and its output
- Add new features to address users' needs for analyzing healthcare quality
- Reduce the cost of routine maintenance of the software
- Improve runtime performance
- Ensure that the software is accessible and usable for the widest community of stakeholders possible

The software redesign will occur over a number of QI software releases and will include beta testing. Information on who will perform the beta testing will be provided over the coming issues of the QI Newsletter (if you have suggestions for beta testers please email support@qualityindicators.ahrq.gov with "Software Redesign Beta Testing" in the subject line).

Tentative Release Schedule for the Redesigned AHRQ QI Software:

- **Quality Indicators Software, Version 5.0.6 (Beta 1), projected release July 2014**

    Version 5.0.6 will support all ICD-10-CM/PCS Quality Indicators, including the composites. It will have all of the functionality of the legacy (pre-5.0) software and will

incorporate use and calculation enhancements, as well as bug fixes and feedback from select users.

- **Quality Indicators Software, Version 5.0.7 (Beta 2), projected release November 2014**

  Version 5.0.7 will incorporate feedback from beta users and provide bug fixes.

- **Quality Indicators Software, Version 5.0.8 (Beta 3), projected release February 2015**

  Version 5.0.8 will add the ability to accept input from Excel, Access, or a relational database and send output to that database. It will incorporate feedback from beta users and bug fixes.

- **Quality Indicators Software, Version 5.0.9 (Final), projected release May 2015**

  Version 5.0.9 will incorporate feedback from beta users and bug fixes.

A report titled "ICD-9-CM to ICD-10-CM/PCS Conversion of AHRQ Quality Indicators, March 2011" is also available on the QI website and details the challenges of the coding conversion process.

Please provide your feedback on the AHRQ QI software and documentation by completing our online survey! The survey (OMB control number: 0935-0179) is accessible through the following link: https://www.research.net/s/qisoftware. If you have specific suggestions for new features that should be added to the AHRQ QI software, please email us at support@qualityindicators.ahrq.gov. Look to this newsletter to stay informed on our progress as we work to provide you with the latest products for analyzing healthcare quality.

2. User Spotlight
Using the Patient Safety Indicators (PSI) to Improve Healthcare Quality
Anderson Regional Medical Center is a 260 bed acute care facility that has made use of the PSI to identify potential patient safety concerns and implement a quality improvement program. Currently, Medical Center staff review Patient Safety Indicators (PSI) #02 – PSI #19 (see the specifications for each PSI here) with mini root cause analysis on each case by a team that includes their Chief of Staff, Director of Performance Improvement, Director of Coding, Director of Clinical Documentation, and Director of Accreditation. This analysis has been very helpful to their organization by allowing them to modify processes and initiate tailored education. Specifically, they were able to implement a process change after realizing that admission priority was being assigned incorrectly. Nearly all of the admissions were being entered as "elective" instead of with the appropriate designations. Designation errors were resulting in failures being reflected by PSI #11- Postoperative Respiratory Failure Rate. After a collaborative meeting with the Admissions Department, the team was able to provide education to staff and implement a new process in which admissions from the emergency department were to be designated "emergent", direct admissions were to be designated "urgent", and scheduled admissions were

to be designated "elective". Along with the revised approach to admission assignment, case management staff began auditing admission priority information.

Anderson Regional Medical Center's PSI team continues to drill down on each case flagged by the PSI to understand why the case failed and forward such cases to the appropriate medical staff specialty meeting for review in order to identify any additional areas to further improve the healthcare provided. (Submitted by Anderson Regional Medical Center; contact person is Donna Hemphill).

If you or your organization uses the QI, please feel free to share your story at support@qualityindicators.ahrq.gov. It may be featured in an upcoming newsletter!

3. QI Program Updates
AHRQ QI™ Toolkit for Hospitals
AHRQ recently developed the AHRQ QI toolkit to help hospitals understand the QIs and use them successfully to improve quality of care and patient safety. Created by the RAND Corporation and the University HealthSystem Consortium (UHC) with funding from AHRQ, the Toolkit is available for all hospitals to use free of charge. The Toolkit is a general guide to using improvement methods, with a particular focus on the QIs. For more information, select the following link: http://www.ahrq.gov/qual/qitoolkit/qifactsheet.htm

> **For further questions about the AHRQ QI Toolkit**
> Contact the AHRQ QI Support Team:
> E-mail: support@qualityindicators.ahrq.gov
> Voice mailbox (toll free): 888-512-6090

Northwestern Memorial Hospital Uses the AHRQ QI™ Toolkit in Making Dramatic System-wide Improvement in Patient Safety
At Northwestern Memorial Hospital in Chicago, Illinois, hospital leadership implemented an innovative approach to integrating the AHRQ QI Toolkit at the organization level to improve quality of care and patient safety. The Northwestern Memorial Hospital story is of particular interest because Hospital leaders developed an integrated, organization-wide structure and conceptual framework for improvement. Northwestern Memorial Hospital is a complex 894-bed Academic Medical Center affiliated with Northwestern Lake Forest Hospital, a community hospital serving northern Illinois. In line with the AHRQ QI toolkit, their framework for QI Improvement includes clinical documentation, coding, and clinical practice. Patient Safety Indicators #2-7, #10-12, and #15-16 are routinely monitored. To see the specifications for each PSI, click here. These data are compared against the AHRQ target and UHC observed mean.

Toolkit use to improve patient safety at Northwestern Memorial Hospital starts with assessment of clinical documentation during the hospital stay to confirm its accuracy. This assessment is followed by a review of the chart at the time of coding to ensure that coding is fully consistent with the clinical documentation. Any identified coding or documentation issues along with any

confirmed clinical events are sent electronically to one of four expert committees for detailed review.

Hospital administration uses the Adaptable AHRQ QI Prioritization matrix, part of the AHRQ QI Toolkit, to select quality measures for improvement strategically. The Prioritization Matrix includes benchmark performance, cost implications, strategic initiatives, external mandates (such as public perception of care), and a measure of how likely the initiative is to succeed, based on current barriers. For each selected project, a project team is assembled that includes an executive sponsor, clinical sponsor, improvement leader, process owner, and representative team members representing the various clinical constituencies associated with the QI. The team uses the DMAIC (Define, Measure, Analyze, Improve, and Control) Process Improvement Methodology to solve problems by identifying and addressing the root causes of a problem, with a focus on evidence-based process of care.

AHRQ QI improvement software is used to measure improvement efforts over time. A project is considered successful when sustainability of the target goal is achieved. Northwestern Memorial was able to show improvement in Patient Safety Indicator (PSI) #12- Postoperative Deep Vein Thrombosis and Pulmonary Emboli Rate by reducing its rate from 26.3 --at the end of 2008-- to 14.2 at the start of 2010 when implementation strategies focusing on the root cause of the problem (such as the lack of postoperative prophylaxis) were addressed. Through this integrated partnership structure, informed by use of the AHRQ QI, Northwestern Memorial Hospital continues to change its safety culture.

4. Plans for the Next Issue
Focus on the Prevention Quality Indicators
In the next QI newsletter (out in Spring 2013), we'll be highlighting the Prevention Quality Indicators (PQI). Information and resources on the PQI are available on the QI website here. If you have experiences with the PQI you'd like to share please let us know at support@qualityindicators.ahrq.gov.

5. Contact Information
To remove your e-mail address from this list, send a message from the respective e-mail account to: LISTSERV@QUALITYINDICATORS.AHRQ.GOV

In the subject line place the following: SIGNOFF QUALITY_INDICATORS-L
Also - In the body of the message put: SIGNOFF QUALITY_INDICATORS-L

Thank you.
If you have any questions you may contact support via email at:
support@qualityindicators.ahrq.gov
Or call toll free (US only) 1-888-512-6090