

August 24, 2011 – Release of AHRQ Quality Indicators Software for Windows and SAS Version 4.3

The Agency for Healthcare Research and Quality (AHRQ) announces the release of the AHRQ Quality Indicators software for Windows and SAS Version 4.3 for the Prevention Quality Indicators (PQI), Inpatient Quality Indicators (IQI), Patient Safety Indicators (PSI) and Pediatric Quality Indicators (PDI) modules.

All of the relevant AHRQ QI software and documentation regarding Version 4.3, such as technical specifications and SAS and WinQI software documentation, can be found on the AHRQ QI website at: <http://www.qualityindicators.ahrq.gov>

AHRQ QI software testing results regarding Version 4.3 can be found on the AHRQ QI website at: <http://www.qualityindicators.ahrq.gov/software/default.aspx>

Summary of Major Changes from Version 4.2 to 4.3

1. FY 2011 Coding Updates

The numerator, denominator and covariate specifications have been updated to incorporate the ICD-9-CM and DRG codes for FY2011 (effective October 1, 2010). See the 'Fiscal year coding changes' document for each AHRQ QI module for specific changes to affected AHRQ QI (see each QI resource page: <http://www.qualityindicators.ahrq.gov/modules/Default.aspx>).

2. Specification Changes

A number of specification changes were implemented due to input from a variety of sources, such as expert panels, user queries, published literature and harmonization with other measures. One of the specifications changes appears below (#3). See the 'Log of changes made to the measure software' document for each AHRQ QI module for specific changes to affected AHRQ QIs (see each QI resource page: <http://www.qualityindicators.ahrq.gov/modules/Default.aspx>).

3. Asthma and Chronic Obstructive Pulmonary Disease Prevention (COPD) Related Prevention Quality Indicators (PQI)

COPD admissions are rare among younger adults and the diagnostic distinction between COPD and asthma is not clinically material among older adults. In turn, PQI-5 (COPD Admission Rate) has been respecified to add numerator inclusion for asthma (while retaining COPD) and to modify the denominator from age 18 years and older to age 40 years and older. The measure title is modified accordingly to "Chronic Obstructive Pulmonary Disease or Asthma in Older Adults Admission Rate".

Given the change in PQI-5 discussed above, PQI-15 (Adult Asthma Admission Rate) has been respecified to modify the denominator from age 18 years and over to age less than 40 years. The measure title is modified accordingly to "Asthma in Younger Adults Admission Rate".

4. 3M™ All Patient Refined™ DRG (APR-DRG) Grouper

Updated 3M APR DRGs from Version 27 to Version 28.

5. Population, Comparative, Risk Adjustment

Updated data are used for population (i.e., estimated through 2011), comparative data and risk adjustment coefficients and parameters [i.e., used the 2008 Healthcare Cost and Utilization Project (HCUP) Nationwide Inpatient Sample (NIS) and State Inpatient Databases (SID), which represent 42 states, respectively].

The population data are used in the area level QI.

The comparative data present nationwide rates for each QI. See the 'Comparative Data' document for each AHRQ QI module for updated data (see each QI resource page:

<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>).

The risk adjustment data present coefficients for each risk adjustment covariate, reference population rates and signal variance parameters used for each QI.

See the 'Risk Adjustment Coefficient Tables' document for each AHRQ QI module for updated data (see each QI resource page:

<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>).

In the 2008 SID, there are 22 states that report present on admission (POA) data, which are used to estimate the parameters in the Prediction Module that predict whether the outcome of interest or covariates are present on admission for discharge data without POA data.

6. Empirical Methods: Present on Admission (POA) Prediction

The AHRQ QI Prediction Module was modified to estimate whether the outcome of interest was POA for discharge data that does not include POA data. These estimates are used to subtract the predicted number of POA cases from the numerator and denominator for indicators that have such an exclusion. The discharge level weight used in Version 4.2 no longer applies.

Users have the option not to use POA data (either actual POA data or predicted data). In that case, neither the outcome of interest nor the covariates are calculated or predicted based on POA status.

7. Miscellaneous Software Related

Various AHRQ QI software issues noted by users were corrected.

Zero Variability in Smoothed Rates for IQI-11, IQI-14, NQI-01 and PSI-08

In Version 4.3 of the SAS and WinQI software, the smoothed rates for four provider-level indicators, IQI-11, IQI-14, NQI-01 and PSI-08, are constant for all providers and are equal to the reference population rate. In other words, no variation in hospital performance can be seen in these four measures using the smoothed rate.

This lack of variation in smoothed rates is due to the parameter estimation step performed during software development. As calculated from 2008 SID data, the estimated signal variance for these indicators is equal to zero. The constant smoothed rates for these indicators are not due to a software error; they represent a limitation in current parameter estimation procedures as applied to the most recent national data.

For questions, please contact support@qualityindicators.ahrq.gov or leave a voicemail at (888) 512 – 6090.