Release of AHRQ Quality Indicators[TM] Software for SAS QI v 7.0 ICD-10-CM/PCS, September 2017

The Agency for Healthcare Research and Quality (AHRQ) announces the release of the AHRQ Quality Indicators (QI) software for SAS QI version 7.0. This software applies to all four modules: the Prevention Quality Indicators (PQI), Inpatient Quality Indicators (IQI), Patient Safety Indicators (PSI), and Pediatric Quality Indicators (PDI).

All of the relevant AHRQ QI[TM] software and documentation regarding v7.0 ICD-10-CM/PCS can be found on the AHRQ QI Web site at http://www.qualityindicators.ahrq.gov.

The following sections summarize the major changes from Technical Specifications and QI Software v6.0 to v7.0 ICD-10-CM/PCS.

1.0 Fiscal Year 2017 Coding Updates

The AHRQ QI software v7.0 ICD-10-CM/PCS reflects major coding changes based on fiscal year 2017 coding updates to the *International Classification of Diseases, Tenth Revision, Clinical Modification / Procedure Coding System* (ICD-10-CM/PCS). These coding changes impact all software modules.

2.0 Specification Changes

The SAS QI v7.0 ICD-10-CM/PCS software implements specification and programming changes that were developed through a detailed deliberation and assessment process with AHRQ personnel and other AHRQ stakeholders. Importantly, the v7.0 ICD-10-CM/PCS software reflects the retirement of selected IQI and PSI measures (IQI 23- IQI 29, PSI 21-PSI 27), as detailed below

Specification and programming changes were implemented across all modules, and are detailed in the Log of Coding Updates and Revisions for each AHRQ QI module. These are available at the following web address:

- PQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V70/ChangeLog_PQI_v70.pdf
- IQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/IQI/V70/ChangeLog_IQI_v70.pdf
- PSI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V70/ChangeLog_PSI_v70.pdf
- PDI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V70/ChangeLog_PSI_v70.pdf

3.0 Population Files

The SAS QI software v7.0 ICD-10-CM/PCS includes population estimates through 2015. The population data, which are based on the 2010 Census and intercensal estimates, are used to calculate the denominators for the area-level QIs. For additional information on the population file, see the document titled *2015 Population File for Use With AHRQ Quality Indicators[TM]*.

4.0   Calculating Rates for Specific Measures

The AHRQ SAS QI v7.0 ICD-10-CM/PCS software includes the ability to calculate numerators, denominators, and observed rates. It does not include risk adjusted or smoothed rates. Risk and reliability adjustment are not available at this time, because a full year of ICD-10-CM/PCS-coded data are required to derive the risk models and calculate the risk adjusted and smoothed rates in the all-payer reference population.

5.0 Retirement of Area Level IQI and PQI

Beginning in QI software v7.0 ICD-10-CM/PCS, several indicators have been retired. These measures are retired due to shifts in surgical practice to outpatient settings, technical issues or reducing the portfolio to focus on more frequently utilized measures. The retired measures include:

- IQI 23: Laparoscopic Cholecystectomy Rate (provider-level)
- IQI 24: Incidental Appendectomy in the Elderly Rate (provider-level)
- IQI 25: Bilateral Cardiac Catheterization Rate (provider-level)
- IQI 26: Coronary Artery Bypass Graft (CABG) Rate (area-level)
- IQI 27: Percutaneous Coronary Intervention (PCI) Rate (area-level)
- IQI 28: Hysterectomy Rate (area-level)
- IQI 29: Laminectomy or Spinal Fusion Rate (area-level)
- PSI 21: Retained Surgical Item or Unretrieved Device Fragment Rate (area-level)
- PSI 22: Iatrogenic Pneumothorax Rate (area-level)
- PSI 23: Central Venous Catheter-Related Blood Stream Infection Rate (area-level)
- PSI 24: Postoperative Wound Dehiscence Rate (area-level)
- PSI 25: Accidental Puncture or Laceration Rate (area-level)
- PSI 26: Transfusion Reaction Rate (area-level)
- PSI 27: Postoperative Hemorrhage or Hematoma Rate (area-level)

The retirement of each measure is further described the following announcements:
- IQI Area Level Indicators:
  https://www.qualityindicators.ahrq.gov//News/IQI_Area_Level_Retirement_Notice.pdf
- IQI Provider Level Indicators:
  https://www.qualityindicators.ahrq.gov//News/IQI_Hospital_Level_Retirement_Notice.pdf
- PSI Area Level Indicators: https://www.qualityindicators.ahrq.gov//News/PSI_Retirement_Notice.pdf

6.0   Omitted Indicators PDI 06 and PDI 07 and Provider-Level Composite Measures

QI software v7.0 ICD-10-CM/PCS omits two PDI measures: PDI 06 and PDI 07. In FY2017, the ICD-10-CM/PCS system incorporated numerous changes to the cardiovascular procedure system. The complexity of these changes is still being considered for identifying and stratifying congenital heart procedures ICD-10-CM/PCS. ICD-10-CM/PCS versions of these measures are expected to be included in future versions of the QI software.

Provider-level composite measures in the IQI, PSI and PDI software require risk-adjustment and signal variances in order to calculate the observed to expected ratios used to calculate the composite score. The composites will be reintroduced in a future version as risk adjustment is incorporated into the ICD-10-CM/PCS software. Area-level composites are calculated as rates and QI software v7.0 ICD-10-CM/PCS includes observed area level composite rates (PQI and PDI).

9.0   Enhancements and Fixes to Software Bugs Found in Version 6.0

The QI v7.0 ICD-10-CM/PCS software includes enhancements and issue resolution from the v6.0 ICD-10-CM/PCS software. To learn more about changes made to the QI software, access the Log of Changes document:

- PQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V70/ChangeLog_PQI_v70.pdf
- IQI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/IQI/V70/ChangeLog_IQI_v70.pdf
- PSI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V70/ChangeLog_PSI_v70.pdf
- PDI: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PDI/V70/ChangeLog_PSI_v70.pdf

For questions, please contact qisupport@ahrq.hhs.gov or (301) 427-1949.