

Background Information

Review of Proposed Changes with ICD–10–CM/PCS Conversion of Quality Indicators™ (QI)

Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QI): The AHRQ QI are a unique set of measures of healthcare quality that make use of readily available hospital inpatient administrative data. The AHRQ QI are provider- and area-level quality indicators and currently consist of four modules: the Prevention Quality Indicators (PQI), the Inpatient Quality Indicators, the Patient Safety Indicators (PSI), and the Pediatric Quality Indicators (PDI). The AHRQ QI serve multiple purposes, including research; needs assessments for planning at the local, state, and national levels; hospital quality improvement initiatives; performance assessment for public reporting to enable consumers to make more informed choices about their sites of care; public reporting to reward favorable outcomes and encourage changes in provider behavior; and information to be used by healthcare purchasers that link performance with payment. Users of the AHRQ QI vary and include researchers, State data organizations, hospital systems and networks, hospital associations, State Medicaid agencies, Centers for Medicare & Medicaid Services (CMS), large private purchasers and public-private purchaser coalitions, and consumer groups.

AHRQ is committed to converting the AHRQ QI from *International Classification of Diseases, 9th Edition, Clinical Modification* (ICD–9–CM) to *International Classification of Diseases, 10th Edition, Clinical Modification/Procedure Coding System* (ICD–10–CM/PCS) in an accurate and transparent manner, taking advantage of the additional specificity of ICD–10–CM/PCS to improve the validity and usefulness of the QI from October 2014 onward.

PROPOSED CHANGES:

Each current AHRQ QI technical specification with ICD-9-CM codes must be converted to ICD-10-CM/PCS codes. For each AHRQ QI technical specification, there can be one

or more clinical concepts of selected ICD-9-CM codes for the numerator, denominator, and exclusion specifications. These clinical concepts are called 'set names,' and they represent the basic foundation or building blocks in the construction of the AHRQ QI. Every set name, whether diagnosis or procedure, must be mapped and reviewed for its clinical relationship to the clinical concept used within the current QI technical specification.

Following [consensus guidance from the National Quality Forum](#), AHRQ's process for QI conversion in 2012 and 2013 included the following components:

1. "Convene Clinical and Coding Experts: ...use a team approach that involves experts in the code sets and the appropriate clinical domain. The team should be used to identify specific areas where questions of clinical comparability exist, evaluate consistency of clinical concepts, and ensure appropriate conversion. Experts are needed in both the source and the target code set (e.g., ICD-9-CM and ICD-10-CM/PCS). Clinical expertise should be in the care setting represented by the clinical domain for the measure and may require specialized knowledge in some clinical areas." To this end, AHRQ contracted with clinical and coding experts at the University of California Davis and convened ten workgroups with a total of 27 physicians, 22 nurses, 26 coding professionals, and 9 QI data users in the following domains: Cancer, Cardiac, Critical Care/Pulmonary, Infection, Internal Medicine, Neonatal/Pediatric, Neurology, Obstetrics and Gynecology, Orthopedic, General and Trauma Surgery. Work group members were trained on the ICD-10 code sets and supported by at least two American Health Information Management Association (AHIMA)-approved ICD-10-CM/PCS Trainers.
2. "Determine Intent: When converting a quality measure from ICD-9-CM to ICD-10-CM/PCS, rather than doing a code-to-code conversion, a measure developer may choose to take advantage of the added granularity and specificity [that] ICD-10-CM/PCS offers, potentially making the updated measure inherently different...

[T]he most ideal way to convert code sets for quality measures would be to examine the original intent of the measure and select codes directly from the target code set to define the concepts rather than relying on mapping alone... (1) The measure steward's goal was to convert this measure to a new code set, fully consistent with the intent of the original measure; (2) The measure steward's goal was to take advantage of the more specific code set to form a new version of the measure, but fully consistent with the original intent; (3) The measure steward has changed the intent of the measure." AHRQ adopted approaches (1) and (2) in the current conversion effort. Specifications consistent with (1) are called "legacy specifications" and are offered for historical analyses that require maximal comparability over time. Specifications consistent with (2) are called "enhanced specifications" and are offered for use in analyses of current health care quality, including public reporting and other accountability applications.

3. "Use Appropriate Conversion Tool: When converting from ICD-9-CM to ICD-10-CM/PCS, for example, maps such as General Equivalence Mappings (GEMs) can be useful for narrowing the choice of target codes..." GEM files were the foundation of AHRQ's code mapping effort.
4. "Assess for Material Change: Measure developers should determine during the process whether the measure has materially changed based on the intent of the updated measure and any testing that has been performed... This step is intended to address the comparability of the converted measure (using ICD-10-CM/PCS) to its predecessor (using ICD-9-CM)... Measure sponsors also should assess, if possible, whether the conversion results in rates that are similar within defined tolerances..." This work will be undertaken over the next year as dual coded data becomes available for testing. AHRQ welcomes suggestions regarding dual-coded (ICD-9-CM and ICD-10-CM/PCS) data that may be available for testing purposes in early 2014.

5. “Solicit Stakeholder Comments: Conversion to new code sets requires involvement of many stakeholders; measure developers should solicit comments from a wide audience for additions and deletions, and with specific attention to new codes.” This notice represents one component of AHRQ’s comprehensive effort to solicit and respond to stakeholder comments.

6. “Version the Updated Measure: Measures with coding updates should be identified by version. Different versions of measures may be used longitudinally for various purposes but may not be exactly comparable.” This final step will be implemented when the updated AHRQ QI specifications have been tested and are ready for public use, not later than October 2014.

For additional information about the AHRQ QI, please visit the AHRQ Web site at <http://www.qualityindicators.ahrq.gov/default.aspx>.