Recent and upcoming improvements of the AHRQ quality indicator systems and first experience with Present on Admission

The Agency for Healthcare Research and Quality (AHRQ) is the lead United States Federal agency charged with improving the quality, safety, efficiency, and effectiveness of health care for all Americans. AHRQ supports health services research that will improve the quality of health care and promote evidence-based decision-making.

The AHRQ Quality Indicators (AHRQ QIs), which are based on administrative hospital data, are currently being used in the following manner: 1. Quality assessment and improvement at both a hospital and geographic area level; 2. Public Reporting of hospital performance; and 3. Value based purchasing (also known as pay for performance).

Recently AHRQ has undertaken a number of projects to consider refinements to the existing AHRQ QIs and explore the potential to add additional quality measures. A selection of the projects in each of these domains are briefly discussed below.

Consider refinements to the existing AHRQ QIs

In general, there have been two primary aspects where AHRQ is exploring refinements based on additional data elements: present on admission (POA) and laboratory values. Given the fact Medicare began to require POA for diagnosis codes for most hospitals in the recent past, a number of the AHRQ QIs were subsequently modified to reflect POA in the technical specifications. This requirement of Medicare has resulted in many, but not all, hospital claims containing POA. Thus, a prediction methodology has been developed for claims without POA. For such claims, a Markov chain Monte Carlo method is utilized to predict the likelihood of whether diagnoses are POA.

While POA is currently employed in the AHRQ QIs, laboratory values are being studied for potential future integration into the measures. AHRQ funded recent work to understand the degree to which each given laboratory value at admission is helpful in the risk adjustment for outcome based hospital measures. Having learned the value of these data, a project is underway to link administrative data to numeric laboratory value data to analyze the relationship of each laboratory value to each AHRQ QI included in the study.

Explore adding additional AHRQ QI measures

At the present time, a number of additional measures are being explored, such as readmissions to a hospital, emergency department prevention quality indicators (ED PQIs) and emergency department patient safety indicators (ED PSIs). In regard to readmissions, the objective is to develop a beta set of measures that measure care at the hospital and geographic area level (e.g., a state or county). A literature review has been conducted, which was followed by empirical analysis with linked data sets and facilitation of a modified Delhi panel process. The expectation is to have a beta set of measures in late 2011.

The beta ED PQIs are being developed to reflect emergent care that may be preventable due to quality of, and access to, outpatient care. A literature review has been completed, initial candidate measures have been selected and specifications have been drafted for these measures. While the ED PQIs are measures at a geographic area level, the ED PSIs are in regard to measuring the quality of the emergency department. To date, a set of potential beta ED PSIs have been identified. Aspects of the work in the near future include the development of draft measure specifications and a clinical expert panel review.

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Glossary

AHRQ = Agency for Healthcare Research and Quality
AHRQ QIs = AHRQ Quality Indicators
POA = present on admission
ED PQIs = emergency department prevention quality indicators
ED PSIs = emergency department patient safety indicators