

**HIT Policy Committee  
Quality Measures Workgroup**

**METHODOLOGIC ISSUES TIGER TEAM**

October 28, 2010

The Quality Measure Workgroup is one of seven workgroups within the HIT Policy Committee that will provide initial recommendations on quality measure prioritization and the quality measure convergence process pertaining to measure gaps and opportunities for Meaningful Use Stage 2.

The workgroup was divided into six tiger teams, with five focused on a different measure topic or domain. These tiger teams were charged with identifying a set of sub-domains, prioritizing these sub-domains, and identifying key measure concepts within each sub-domain. The sixth team focused on identifying methodologic issues associated with quality measurement.

The Methodologic Issues tiger team members include Helen Burstin, Jon White, Mark Weiner, Ross Lazarus, Bob Dolin, Phil Renner, Danny Rosenthal, Mitra Rocca, Abel Kho, John Moquin, Joanne Cuny, Dan Malone, and Dave Baker.

The group identified the following important methodologic issues–

**1. Longitudinal Measurement**

*Definition: The use of measures that assess patient experience and quality across different settings and providers across time.*

**Methodologic Issues Identified:**

- Difficulties with standardized data collection and harmonization of measures across data platforms
- Consider the need for a shared patient identifier to more accurately track patients across providers
- Difficult to attribute results of care to specific providers for care that occurs over time across multiple settings and providers
- Reliance on the problem list for assessment of conditions/diagnoses over time – concerns with sensitivity and specificity of problem list entries (see separate slide)
- Lack of interoperability will limit ability to track medical issues across medical settings
- Not all measure concepts equally amenable to longitudinal data capture – avoid measure concepts that result in “check box” measures (e.g., medication reconciliation)
- Consider other approaches to measurement of key processes:
  - Structural approaches may provide better information (e.g., exchange of medication lists across providers)
  - Patient experience may be a more practical and valid approach to assess some types of longitudinal information

- Claims data may be a better indicator for some indicators for longitudinal follow-up (e.g., first follow-up after hospitalization)

## 2. Delta Measurement

*Definition: The use of measures that assess change in outcomes across time, rather than only achievement of a threshold.*

### **Methodologic Issues Identified:**

- Need to consider the types of measures most amenable to delta measurement
- Need to determine the appropriate points in time for baseline and follow-up
- Need to consider standards for the degree of change (e.g., % gap to threshold value achieved, % patients achieving any improvement, % patients who improve by 10 mmHg blood pressure)
- Need to ensure completeness of data across different data systems to accurately assess change in performance
- Many outcomes do not have a linear trajectory (e.g., variable intermediate outcomes during the course of treatment) and may include a lower limit associated with harm
- Unclear if delta measures present a valid alternative to threshold measures that assess appropriate levels of performance
- Additional testing required to determine whether delta measures provide more performance information than current measures. Is the added complexity also adding value?
- May be difficult to track untoward clinical effects of improving clinical endpoints (e.g., dizziness resultant from blood pressure medications)
- For population health focus, need to consider how to handle delta measures if the test was not performed for all patients regardless of interaction with healthcare system
- Strong interest in capture of health status before and after preference-sensitive procedures (e.g., cataracts, hip/knee replacement, back surgery)

## 3. Adverse Event Reporting Systems

*Definition: Relates to the use of IT systems for automatic collection and reporting on patient-level adverse events within clinical workflow.*

### **Methodologic Issues Identified:**

- Numerous barriers to routine medication adverse event reporting include:
- Limitations in coding and capture of medication-related adverse events
- May be difficult to link event reporting back to specific drugs.
- Adverse event reporting needs to be integrated into clinician's work flow with attention to the time required to accurately complete and submit the adverse event report
- The development of the adverse event reporting program should include a system that protects the privacy of patients and clinicians
- Adverse event reporting programs requires data from disparate IT systems that are not well integrated even within the same institution

- Use of sophisticated computer algorithms that analyze data and identify adverse events are not very high-tuned to detect events
- Even If adverse events can be detected using electronic systems, the level of harm from the events are not well documented
- Measures can target high impact reactions to certain medications (e.g., warfarin)
- The current capacity of IT systems to alert clinicians to potential medication-related adverse events, such as serious drug-drug interactions, is very limited by systems that “over-alert” and get turned off

#### **4. Other Issues**

*Definition: Issues that emerge from the prioritized concepts from the other Tiger Teams.*

##### **Methodologic Issues Identified:**

- Consider incremental quality measurement to ensure that the complexity of quality measures is in step with the capacity of available EHRs
- Need to consider how to integrate standardized EHR context into measurement – i.e., where to expect to find needed data
- To avoid duplicate information in each IT system, need to consider how to utilize HIEs to capture needed data across providers
- To track population-level information, patient data needs to be accurately tracked across different providers and data platforms
- To track efficiency measures, such as repeated imaging/lab tests, need interoperable systems that can assure that original results are available
- To capture equity, need to standardize the strata for race, ethnicity, language to allow for measure stratification
- To capture patient-reported outcomes, need to consider emerging technology that addresses health literacy (e.g., talking touch screens)
- Need to consider inconsistencies in coding between types of providers (e.g., primary care and psychiatrists)

#### **5. Methodologic Issues / Recommendations**

*Definition: General methodologic issues with suggested recommendations.*

##### **Methodologic Issues and Recommendations Identified:**

- Accuracy of coding is highly variable depending on type of diagnosis
- Need for standards for coding problem list – e.g. active/inactive designation of a problem; date of onset for a given disease process
- Need clinicians to consider the problem list as a quality measurement reporting tool
- Need conventions for how to deal with problems that have been resolved and deleted from problem list
- Need to establish rules for consistent use of problem list and past medical history
- Need guidance for proper use of problem list for reporting of new conditions