Testimony to the Health IT Policy Committee's (HITPC) and Health IT Standards Committee to inform the Stage 3 Meaningful Use program in better supporting clinical quality transformation.

Provided by Yale New Haven Health Services Corporation/Center for Outcomes Research and Evaluation (YNHHSC/CORE) June 7, 2012

YNHHSC/CORE has developed over 20 hospital quality outcomes measures for use in public reporting to support quality improvement and accountability. Six of these measures are currently used by Centers for Medicare and Medicaid Services (CMS) for public reporting and payment programs. Most have been developed in administrative claims data and others have been developed for use with clinical registry data. Given our team's extensive experience in development of outcomes measures we were asked by CMS to develop an outcomes eMeasure.

Over the past year, under contract with CMS, we both developed a methodology for measure development in the EHR environment and built a preliminary hospital measure of mortality following admission for acute myocardial infarction (AMI). The measure is in the process of eSpecification and we will complete testing in the upcoming months.

Our team approached measure development with the goal of developing a *de novo* measure that could be feasibly implemented in the current electronic health record (EHR) environment without necessitating changes to current clinical practice or EHR implementation. Specifically, we sought to develop a measure that would not add additional processes to routine clinical care solely for measurement purposes, nor rely on future capabilities of EHRs. To do so, we developed a set of criteria against which all potential data elements in our measure were evaluated to assess the feasibility of their use in an eMeasure (detailed below).

Based on our experiences we have prepared the 5 brief recommendations to the committee on how the measure development process can be improved with support from CMS/ONC/MU. These views represent the experience of our team at YNHHSC/CORE but not necessarily the views of CMS. We are happy to speak to committee members further on these topics if you have additional questions.

Recommendation 1: Invest in collaboration across agencies to support the creation of larger, multi-site, multi-vendor datasets available for measure development (and testing)

Outcomes measure development requires the ability to assess risk-adjustment variables across many patients and multiple institutions. These same concerns exist when assessing data elements for use in process measures. In the current environment it is challenging to gain access to multi-site EHR data that may come from multiple vendors for measure development (or testing).

Recommendation 2: Support development of eMeasures in other data platforms, when paired with rigorous feasibility testing.

We have successfully used clinical data elements obtained from a national registry to develop a measure suitable for use in the EHR environment. In order to do so, we applied rigorous feasibility criteria to each data element prior to consideration of its use in the measure. The criteria we developed were the following three:

1. Consistently obtained in the target population based on current clinical practice,
2. Captured with a standard definition and recorded in a standard format, and
3. Entered in structured fields that are feasibly retrieved from current EHR systems.

No data element was considered in initial model development unless they were thought to meet these three criteria by consensus of experts. The use of registry data had the advantage of allowing for, in later stages of development, testing of variables thought to be critical by the clinical community but not found to pass the feasibility criteria to assess their importance in the measure.

Recommendation 3: Promote development of *de novo* measures

Our team has concerns that the re-tooling process has many pitfalls. The process of translating data elements from one platform to another risks both losing the coherence of the original measure and, simultaneously, failing to maximize on the potential of the EHR environment.

Recommendation 4: Provide improved documentation of standard data elements currently available across EHR systems to support feasibility testing

As exemplified by our feasibility criteria above, we sought to select data elements for our eMeasure with consideration for both routine clinical practice (i.e. not forcing new steps in care processes) and data elements currently available in a standard fashion in EHRs. In this way the measure can be reasonably implemented in the short term and not be disruptive of clinical care. Currently both Meaningful Use criteria and the Quality Data Model provide guidance about appropriate data elements but neither provides sufficient information about variables in standard formats across current EHRs. The use of such tools alone could lead to measures that cannot feasibly utilized in the near term.

Recommendation 5: Update guidance on testing requirements and data sources available for testing

eMeasure testing guidance remains in the earliest stages. NQF requirements are still pending and each developer has to creating their own approach. We believe any measure should be evaluated in multiple vendors, to assess whether the eSpecified measure produces the correct output. Detailed guidance on this process and easy access to testing sites remains lacking. But in addition, it is also critical that testing of the eSpecified measure (assessing data element validity as described above) does not replace general testing of the overall measure reliability and validity testing. Simply demonstrating that a machine-read version and a chart abstraction process produce the same data elements does not demonstrate that the measure is a valid measure of quality. Both issues must be addressed in testing. Furthermore, it is critical that guidance should acknowledge the differences in requirements for process versus outcomes measures.