

May 24, 2012

CQWG Clinical Quality Measure Essential Components Tiger Team Recommendations

The Quality Measure Essential Components Tiger Team of the Clinical Quality Workgroup of the HIT Standards Committee met three times during the month of April, 2012 to compile recommendations for federal action to make usable and useful value sets available for Meaningful Use Stage 2.

Background and Discussion

The nation is pouring resources into the adoption of electronic health records so that a growing evidence base can be moved to the bedside quickly, more granular information about care quality can be captured, and vulnerable populations can be better managed. Value sets are foundational to all of these programs, which aim to improve care quality and reduce health care costs in the USA.

Value sets consist of codes from standardized vocabularies that unambiguously define clinical concepts. Value sets have been created by measure stewards for Stage 2 Clinical Quality Measures, yet better mechanisms for key steps in the value set life cycle (creation, maintenance, harmonization, validation and distribution) are needed. More urgently, a mechanism for value set validation (cross-checking the accuracy of value set codes and descriptors against appropriate source vocabularies) and an authoritative source for distribution of Stage 2 Clinical Quality Measure value sets are needed to support Meaningful Use Stage 2 readiness.

In Meaningful Use Stage 1, value sets were not always explicitly defined. This method of description required local interpretation and translation into lists of numeric codes (value sets) by analysts at all EHR vendors and care delivery organizations. This local interpretation resulted in value set variation across vendors and facilities, preventing side by side comparisons.

For Meaningful Use Stage 2, value sets must be more adequately specified. The Tiger Team's current recommendations focus on validation and distribution steps for Meaningful Use Stage 2 Value sets, as these are particularly time-sensitive needs. Additional recommendations regarding value set creation, maintenance, harmonization, and governance of publicly available value sets will be required in the future.

Value Set Recommendations

Recommendation 1: Establish NLM as a single authority for the validation of value sets used in Stage 2 quality measures. NLM should serve as a single source of truth for MU2 value sets, and should publish periodic updates to reflect changes within the underlying vocabularies and/or changes made by value set stewards.

- ONC should coordinate with other agencies, value set stewards, and consensus organizations as needed for value set hosting and serving/delivery.
- NLM will cross-check the accuracy of Stage 2 Clinical Quality Measure value sets by comparing value set codes and descriptors against appropriate source vocabularies to assess value set validity, and will suggest edits to value set stewards to ensure the validity of vocabulary codes, names, and vocabulary system version.

Recommendation 2: ONC should expedite recommendations of the Implementation Workgroup (Jan 2012) and Vocabulary Task Force (April 2010) related to establishment of a publicly available value set repository.

Recommendation 3: The value set repository established by NLM should build upon the IHE Sharing Value Sets (SVS) profile for storing and serving value sets, and incorporate Common Terminology Service 2 (CTS2) methods for managing vocabularies referenced by value sets.

Recommendation 4: Establish a web service for human and machine consumption of Meaningful Use 2 value sets. Consider NLM, AHRQ, or CDC as the Internet host for validated value sets.

- Provide output in commonly used formats, e.g., tab-delimited, spreadsheet or XML formats, suitable for import into SQL tables, and web service delivery.
- Support the creation of web-based views based on quality measure and value set names and numerical identifiers, QDM Category, code systems & code system versions used.