DRAFT PROPOSAL FOR A SCORING SYSTEM FOR DATA ELEMENT FEASIBILITY

The Expert Panel identified several characteristics of data elements that influence the feasibility of each data element. Many of these characteristics relate to the data quality criteria from HITEP I. To start the discussion at the expert panel, NQF staff drafted a set of characteristics related to data quality and a draft feasibility scoring system for the panel's consideration.

Questions for discussion:

- What roles should developers, EHRs vendors, and providers play in the scoring of individual data elements?
- At what points during the development, testing and implementation spectrum should feasibility of data elements be scored?
- Should this be included in the maintenance of the measure?
- Should some of the characteristics be applied at initial assessments with others included later in the development and testing process?

Proposed characteristics and scoring:

- **Data is captured during the course of patient care** *(maps to Authoritative Source, Workflow Fit and Availability from HITEP I)*
  During measure development, the quality construct and intent of the measure should be very clear. When specifying the data elements for eMeasures, developers should determine whether the data elements should be captured when providing care for the patient as part of the quality construct. ONC's two by two diagram identified "high value" as elements essential to quality care. Important data that is not being captured may reflect a quality problem.

  Proposed scoring criteria:
  > 2 - Data element is essential to patient care and should be captured as a part of patient care.
  > 1 – Data element is of moderate value to patient care and is sometimes captured during patient care.
  > 0 – Data element is not significant to care decisions and does not need to be captured during patient care.

- **Data are found in structured data fields** *(maps to Workflow Fit and Data Standards from HITEP I)*
  Certain data types lend themselves to structured data more than others. Dates, numerical values, diagnosis and procedure codes, laboratory tests and medications and some yes/no queries are found in structured fields in most EHRs today. Other data types such as care plans

are more likely to be entered into unstructured text fields, which hamper feasibility for that data element. Negation and negation rationale are particularly difficult to capture.

Proposed scoring criteria:
   2 - Data element is captured as structured data in EHRs.
   1 – Data element is sometimes captured as structured data in EHRs.
   0 - Data element is not captured as structured data in EHR's.

Question:

- Should a percentage or number of EHRs be required in the scoring?

- **Data element definition is precise and unambiguous with appropriate granularity to represent the quality concept.**
  Data elements should be well defined and the granularity of the codes is sufficient.
  Proposed scoring criteria:

   2 – Data element is precisely defined and coded with appropriate granularity.
   1 – Data element is well defined but the coding may not be sufficiently granular to represent the concept accurately.
   0 – Data element definition is unclear or ambiguous or the codes do not provide sufficient granularity to accurately represent the quality concept.

Questions:

- Will the determination of granularity be assessed through different methods (e.g., expert panel, survey of vendor systems) at different points within the development timeline?
- How do you determine what is appropriate or sufficient?

- **Data element and associated value set use standardized vocabularies**. *(maps to Data Standards from HITEP I)* In September 2011 the HIT Standards Committee's (HITSC) Clinical Quality Measures Workgroup (CQMWG) and Vocabulary Task Force (VTF) jointly developed recommendations on the assignment of code sets to clinical concepts [data elements] for use in quality measures.

Proposed scoring criteria:
   1- Data element is coded with a standard vocabulary conforming to the HITSC CQMWG and VTF recommendations.
   0 - Data element is not coded with a standard vocabulary or no agreed upon standard exists.

- **Interoperability complexity (maps to Authoritative Source, Workflow and Data standards from HITEP I).** Expert panel members have noted that interoperability is currently a very challenging aspect of some eMeasures. Some data elements are easily obtained using established interfaces. Other data elements are more difficult. The complexity of capturing data through various interfaces impacts feasibility.

    Proposed scoring criteria:
    - 2 – Interoperability complexity is low.
    - 1 – Interoperability complexity is moderate.
    - 0 – Interoperability complexity is high.

    Questions:

    - Would interoperability complexity be assessed through different methods (e.g., expert panel, survey of vendor systems) at different points within the development timeline?
    - How do you determine what is low, moderate, or high?

Possible scoring methods:

Individual data element feasibility:

- Sum of the ratings for each category, then identify thresholds for acceptable feasibility – the levels should be validated against data elements that have meet a given standard (QDM, ONC HIT certification); OR
- A "0" rating in any category indicates low feasibility.

Aggregate feasibility of all data elements in the measure:

- The average of the sum of each data element, then identify thresholds for acceptable feasibility; OR
- The lowest or least feasible data element score determines the feasibility for the measure.

Questions:

- What standard should the individual data element feasibility be compared against – QDM, ONC HIT certification, other?
- Which scoring method provided for individual and aggregate is preferred? Are there other methods that should be explored?
- Are both levels of scoring needed? At which point, if any, does reliability and validity testing eliminate the need for feasibility assessment and scoring?