NATIONAL QUALITY FORUM

Quality Data Model, Version 3.0 Member and Public Comments

Tracking	Comment Submitter Name	Comment Submitter Organization	Question	Comment	NQF Response
1	Janet Leiker	American Academy of Family Physicians	I. General	'Comments from the AAFP Center for Heatlh IT We are pleased with the maturation of the "quality data" effort from NQF and are confident that the "concept" model is much more evidence-based than the initial "data element" approach. However, we are concerned about a number of elemental inconsistencies in the model that should not persist past a draft phase. These inconsistencies range from vocabulary ("Occurs during" becomes "DURING"), to grouping ("Linked to" is not a "relative timing" construct), to restrictions in the model borne out of current administrative process (could we only be interested in "FIRST" through "FIFTH" because a claim form doesn't have more slots for diagnosis codes?) (5010 has 12 ICD slots, by the way). A shared model of the basic building blocks of clinical quality/performance measures is essential for understandability and computability. As such, consistency and simplicity are critical success factors. The quasi-English "expression language" is complex in its relative infancy. No doubt, subsequent modification and additions will be required that are more likely to complicate it further rather than simplify it. (part 1 of 3)'	
2	Janet Leiker	American Academy of Family Physicians	I. General	'(AAFP--part 2 of 3) The more complex the "syntax" the less likely it is to be used consistently. We are very interested in any validation NQF has undertaken particularly in regard to trained but independent measure developers/encoders "deconstructing" the same measure into substantially different representations in the QDM syntax. Also, we are concerned with the "QDM Mapping of Concept to States" tables as several QDM "attributes" have additional "states" that are logical but absent from the tables. For example, an "allergy" can certainly be "Accessed", "Acknowledged", "Alerted", "Assessed", "Created", "Discontinued", "Documented", "Notified", "Reconciled", "Recorded", "Reported", etc. Part of the ambiguity lies in whether these "states of action" or "behaviors" treat the attributes as the subject (what's doing it) or the object (what's getting it done to it).'	
3	Janet Leiker	American Academy of Family Physicians	I. General	'(AAFP- Part 3 of 3) We have previously expressed a concern about the ambiguity and perceived overlap of several "attributes" in the model. Specifically, "Diagnostic study", "Intervention", "Laboratory test", and "Procedure" have partial, but not complete disambiguation in this version. Environmental location and Facility location also present a degree of foundational overlap that may be unnecessary. Usability and consistency of the model depend on the definition and application of distinct "attributes". Additionally, we are concerned about significant limitations in the "Actor" construct, particularly in regard to establishing the provenance of a data element. Often in a health care setting,	

				someone might “record” a data element that is subsequently validated or confirmed by another - Device-Patient-Nurse-Physician, for example. The current Actor construct does not appear to allow for such a treatment. Two attributes triggered a particular level of discomfort - the concepts of a “Health Record Field” and its related “Health Record Component”. This introduces a level of model fudge-factor that is likely to be abused and render measures incalculable. Please carefully consider the unintended consequences of these concepts in the model.'	
4	Janet Leiker	American Academy of Family Physicians	I. General	Thank you for the opportunity to comment on this version of the QDS -> QDM. We are pleased to see fundamental informatics improvements and hope that subsequent versions will continue toward a usable model. AAFP Center for Health IT	
5	Rachel Nelson	Georgetown Law	I. General	'This updated version of the QDM represents a useful advancement. The model itself is immensely important as a facilitator for quality measurement and feedback automation, as well as bridging communities (such as clinical decision support and quality) that should not be so separate as they currently are. The specification document seems to me less "technical" than simply "specification", but perhaps as someone from the non-IT side I am too accustomed to local terms of are where "technical" specifications definitionally identify content/transport standards or even specific value sets. Other than that, I would observe that the introductory narrative sections on pages 3 and 4 could use a bit of refinement and clarification before standing as the final record. (The content and apparently intended spirit, however, I would support.)'	
6	Diana Jolles	American College of Nurse-Midwives	II. Concepts	'I appreciate your consideration of our previous concern with the lack of structure for the concept of "overuse" within your model. We would once again like to urge you to consider "OVERUSE" as concept #24. Without this level of structure, the concept will continue to be marginalized rather than central to the framework. With maternity and end of life care as two examples, "overuse" should be central and most certainly one of the CONCEPTS included within QDM. Thank you for reconsidering. Diana R. Jolles CNM MS'	
7	Dana Alexander	GE Healthcare Information Technologies	I. General	'The acronym IFMC is not explicitly written out. Providing the full name will enhance the understanding of the relationship between QDM and the Measure Authoring Tool.Data from administrative and financial applications are essential to evaluating NQF endorsed measures in addition to information from clinical systems (e.g. nurse staffing). The addition of financial and administrative applications to the specifications will more adequately reflect and support NQF endorsed measures.Patient, clinical and community characteristics should be changed to "care delivery" and population health characteristics broadening consideration of all aspects of care delivery to include the social and economic well-being of populations aligning with	

				the National Priorities Partnership.'	
8	Dana Alexander	GE Healthcare Information Technologies	II. Concepts	Further define "clinical concepts" to eliminate any potential ambiguity. Performance measurement involves both the person being measured as well as healthcare delivery provided. Healthcare delivery is not restricted to clinical concepts alone but includes administrative and financial concepts related to the management of care. Further define how concepts "transfer" and "discharge" are defined within the QDM model to support care coordinationPlanning & Providing care: the concept of goals should be structured discretely to support future measures related to planning and care coordination. Communication and monitoring of goals should be defined as discrete concept along with the QDM concepts of condition/diagnosis/problem and intervention.Care Coordination: references to "physicians" should be expanded to include provider or healthcare professional to reflect key stakeholders of the care delivery team.	
9	Dana Alexander	GE Healthcare Information Technologies	III. States	Suggest to add state of "assigned" to QDM states of action	
10	Dana Alexander	GE Healthcare Information Technologies	IV. Attributes	The term "actor" needs to specify data derived and recorded by consumers to reflect aspects of care delivery and self care management	
11	Dana Alexander	GE Healthcare Information Technologies	V. Relative Timings, Functions, Operators	Clarity between the definition of characteristics and condition/diagnosis/problems is suggested.The definition of condition/diagnosis/problems should take into consideration consumer and patient centered models. i.e.patient problems are recorded and monitored by providers and/or consumers. Clarify if "facility location" is referencing care provision location	
12	Mark Antman	American Medical Association-Physician Consortium for Performance Improvement	IV. Attributes	'It is unclear how attributes are to apply to the entire QDM element. It seems that attributes should be able to be applied to individual components of the QDM element, such as to a QDM concept. For example, it would seem that the attribute “result” could apply to several QDM concepts, such as “diagnostic study” or “laboratory test”; so that it would be “diagnostic study result and the state could be “reviewed”. It does not make sense to apply the attribute to the entire QDM element.'	
13	Mark Antman	American Medical Association-Physician Consortium for Performance Improvement	V. Relative Timings, Functions, Operators	'RELATIVE TIMINGS The terms SOURCE ACT and TARGET ACT are used in the relative timing descriptions but are not defined in the QDS documentation. Definitions should be provided for these terms. Technical Specifications Document, Page 5 through 7 The language used in the timing column should match the timing language as displayed in the “Example”. This will be an important distinction if NQF intends that Measure Developers will use the Technical Specifications Document as a reference guide. Example: Timing column says, ‘occurs during’, recommend saying DURING Example: Timing column says, ‘concurrent with’, recommend saying CONCURRENT FUNCTIONS Suggest adding the following function:	

				Average LOGICAL OPERATORS Suggest adding the following logical operators: AND NOT The functions “SUBTIME” AND “SUBDATE” are referenced in the math operators but are not defined or described. Please provide definitions for these terms.'	
14	Mark Antman	American Medical Association-Physician Consortium for Performance Improvement	III. States	'It is unclear why states of action need to be in the present tense. (p. 5 of overview document) Suggest adding the following states to the QDM version 3.0: Allergy Discussed (could be applicable to the following concepts: condition/diagnosis/problem, device, diagnostic study, medication, preference, and procedure). Communicated We support the addition of the QDM state Decline. For the “states of being” please provide further clarity on the difference between “inactive” and “resolved”. Could a diagnosis be both “resolved” and “inactive”? States of Action Technical Specification Document, Page 38 to 40 Recommend further definition to differentiate between the following States of Action: --Record versus Document --Order versus Request'	
15	Suzanne Pope	American Urological Association	II. Concepts	'The American Urological Association appreciates NQF's continuing modification of the Quality Data Model. The detailed information provided for each data element in this version is very useful. However, some of the "concepts" in the QDM still require further clarification. Specifically, the concepts of procedure and intervention are not conceptually distinct from each other. The problem is that procedure and intervention are at the same hierarchical	

				level as "concepts," yet intervention is conceptualized as an action that includes treatment, procedures, or activity. Intervention or procedure cannot be distinct from each other if procedure is subsumed under intervention. We would appreciate clarification on how exactly interventions and procedures differ.'	
16	Maureen Dailey	American Nurses Association	IV. Attributes	'The timing metric of "ends before or during" is confusing as it includes 2 options of before and during. Seems as if "ends before start of", "ends during", and "ends after end of" could describe that time sequencing related to clearly defined target acts. Status attribute needs to also include the capacity for describing "pending" and on/off. This will enable checking about completion of plan of care actions and description of device operability levels. For example, on page 14 table the status column should be marked for device, diagnostic study, laboratory test, and medication.'	
17	Sharon Sprenger	The Joint Commission	III. States	'There seems to be an overlap in meaning for the states of action “record”, and “document”. They require further definition to ensure consistency of use. The definition as provided, in fact seem circular: To record is to register or preserve data in some form of log or documentation To document is to create a recordof facts, events, symptoms or findings. According to these definitions, one could argue that the concept communication is an event, and therefore could be associated with the state of action “document”. However, it is linked to the state of action “record”. Similarly, a “characteristic” could, according to the definition, be associated with “record”, but the QDM only allows the mapping to the state of action “document”.'	
18	Sharon Sprenger	The Joint Commission	III. States	'Some concept-state mappings are focused on the action of documenting (e.g., allergy), while others portray the action itself (e.g., medication), and others do both (e.g., communication). Most states of action rely on documentation without explicitly representing on the act of documenting. For instance, the concept “medication” associated with the state of action “administer” will ultimately translate into the documentation of such an administration. However, a concept such as “communication” cannot be linked to a state of action that actually portrays the action, but rather is mapped to the act of recording (“record”). This creates confusion regarding what is being captured: is it the action, or the documentation of the action? In addition, it is not clear why for some concepts it is acceptable to capture the action, but not its documentation, while for others it is only possible to capture the documentation. There is no clear justification provided for this differential approach across concepts.'	
19	Sharon Sprenger	The Joint Commission	III. States	'When attempting to model physician-patient education using the concept “communication”, the only state that can capture the action is “acknowledge.” This state relies on the confirmation of receipt of the information by the patient. This might not be aligned with the representation of the concept in a taxonomy, which most likely will be focused on the provision of information to the patient by the clinician, rather than the explicit acknowledgement of receipt of information by the patient.'	
20	Sharon Sprenger	The Joint Commission	III. States	'The “transmit” state of action can only be coupled with the concepts of “communication” and	

				“health record component.” Since the state is defined as “to communicate a message, information, or news”, and the concept of “transmission” is traditionally associated with electronic data, together the state and concept are confusing. The confusion results because the state seems to have a different meaning depending on which concept it is used with.'	
21	Sharon Sprenger	The Joint Commission	III. States	'It is awkward to think of the concept “communication” associated with the state “transmit.” According to the provided definitions, the connection of the concept and state would literally mean communication communicated or transmission transmitted.'	
22	Sharon Sprenger	The Joint Commission	III. States	'The state of being “resolved” is mapped to the concept “symptoms,” but not to the concept “condition/diagnosis/problem.” However, when defining the state “resolve”, there is an example that refers to the concept “condition/diagnosis/problem”. Taking into account the broadness of this concept, we would include “resolved” as an allowable state of being for the concept “condition/diagnosis/problem.”'	
23	Sharon Sprenger	The Joint Commission	I. General	The QDM does not include any attributes or states that would allow for the processing of conflicting documentation. How will this be addressed?	
24	Sharon Sprenger	The Joint Commission	IV. Attributes	'When representing discharge medications, “medication order concurrent with encounter performed (discharge)” would seem adequate. However, the exact moment in which medication is prescribed will not necessarily match the moment of discharge. It will, almost certainly occur before discharge. Usually, one knows that a medication is a discharge medication either because the source is a specific health record component, or because it is “flagged” as such. Therefore, we feel that creating an attribute would better suit the modeling needs of discharge medications.'	
25	Sharon Sprenger	The Joint Commission	IV. Attributes	'It is not clear what specific “time” attributes exist, and how they should be used. An inventory should be created that would allow for the identification of any existing gaps.'	
26	Sharon Sprenger	The Joint Commission	I. General	'We have several concerns based on the statement in the QDM overview document that updates to the QDM will be made as needed. At the same time, it is noted that the measure-authoring tool (MAT) will be available in Fall 2011. It would be our expectation that the MAT must reflect the most current version of the QDM. This is necessary since the QDM underwent important changes from prior versions that will have a significant impact on measure retooling. At this time, we are not aware that there is a clear update schedule to the QDM or how it will be integrated into the MAT. As a measure developer, we are concerned that without a regular update schedule clearly defined to the QDM and MAT we cannot plan accordingly. The lack of a schedule and timely version release will also potentially result in rework of already retooled measures.'	
27	Michelle Spetman	Baylor Health Care System	II. Concepts	'Transfer – Like Location, Transfer needs clarification to specifically designate transfers between locations versus level of care. In addition, it is unclear what the relationship is between Discharge Status, Status, and Transfer.'	
28	Michelle Spetman	Baylor Health Care System	II. Concepts	'Dosage and Result – To optimize data analysis, these fields should not be “free form” text fields. Both Dosage and Result could be separated into 3 separate fields to enable analysis of (1) value, (2) units, and (3) operator/direction.'	
29	Michelle Spetman	Baylor Health Care System	IV. Attributes	Laterality – There is no concept-specific attribute for anything other than left/right. Is left/right the only distinction necessary? What about anterior/posterior? Superior/inferior?	
30	Michelle Spetman	Baylor Health Care System	IV. Attributes	'Location – Should the term “particular location…” be changed to “functional location…” (or similar) to distinguish between a “venue” (such as Med/Surg 5 West) and a function (such as ICU)? The term “location” could refer to (1) physical location (such as 3rd floor, etc), (2) functional location (such as ICU, telemetry, etc), or (3) level of care. A combination of these “locations” is needed to provide the granularity of detail necessary for an effective unit analysis. It’s not unusual to have a level of care that does not align with the usual level of care for a particular “venue/location.” A universal bed is a good example of this. It’s unclear which field	

				might reflect “level of care” versus “patient location.”'	
31	Michelle Spetman	Baylor Health Care System	I. General	'Overall, more examples are needed to help clarify/interpret the concepts included in the QDM.'	
32	Michelle Spetman	Baylor Health Care System	I. General	Renaming the operator “TIMES” to “MULTIPLIED BY” would be more specific and in parallel with the usage of “DIVIDED BY”	
33	Serafina Versaggi		I. General	'We are pleased that the enhancement to the QDM (version 3 technical specification) helps clarify the syntax used in the re-tooled eMeasures and moves toward the ability to automatically compute quality measures from data that is captured in the course of direct patient care. To further this goal, we respectfully suggest that eMeasures be resolved to a set of database queries, and that ideally, each eMeasure should provide sample SQL intended to work with a standard-based database schema.'	
34	Serafina Versaggi		IV. Attributes	'It is unclear how some attributes are used within the QDM syntax. The example measures section (starting p.19) indicate that attributes are in parenthesis but the attribute TIME does not match the example “Diagnosis active: hypertension (timing: onset time). There are also inconsistencies in how some attributes are used in the syntax examples and how they are defined in the Attribute table. E.g., in example A, Data Flow is followed by an Actor qualifier (source) which is similar to Data Flow qualifier Sender. In addition, for some, the definition in the Attribute table and the example syntax are inconsistent leading to confusion, e.g., Data Flow – description indicates that a sender and receiver are required, yet no example includes receiver at all, and the first syntax example in which Data Flow appears (on p.20) does not include the term attribute after Data Flow (where as it does on p.22 example) seems to imply that Data Flow properties are source, recorder and subject but they are properties of the attribute Actor; the Concept-specific attribute Environmental Location is referred to as environment: ambulatory office in an example.'	
35	Serafina Versaggi		II. Concepts	'The definitions of Intervention and Procedure does not help to distinguish between the two: why there is a need for two distinct concepts, nor why within the context of Quality Measures reimbursement (discussed in both concept definitions) is referenced unless it helps to distinguish between the terms'	