

July 16, 2012

National Quality Forum Attention: Quality Data Model Review Panel 601 13th Street, NW Suite 500 North Washington, DC 20005

RE: Quality Data Model

Dear Quality Data Model Review Panel:

The Alliance for Nursing Informatics (ANI) is pleased to submit a letter of support for the comments developed by the AMIA Nursing Informatics (NI) Working Group (NIWG) to the National Quality Forum (NQF) on the Quality Data Model (QDM). We applaud your efforts to obtain public input as you consider this important topic and we appreciate the work completed to date. ANI refers NQF to our previous comments, which were submitted comments in May 2011.

ANI advances NI leadership, practice, education, policy and research through a unified voice of nursing informatics organizations. We transform health and health care through nursing informatics and innovation. ANI is a collaboration of organizations that represents more than 5,000 nurse informaticians and brings together 28 distinct nursing informatics groups globally. ANI crosses academia, practice, industry, and nursing specialty boundaries and works in collaboration with the more than 3 million nurses in practice today.

ANI recognizes the importance of having an information model that clearly defines concepts used in quality measures and care delivery to enable automation of structured data capture in health information technology (HIT). The QDM provides the potential for more precisely defined, universally adopted electronic quality measures to automate measurement through the use of electronic health information captured as a byproduct of care delivery. By defining the Quality Data Model, it will now be possible to capture performance data as part of the care process and provide immediate information feedback and decision support to improve care.

Specific comments about the proposed model were developed by the AMIA NIWG and are now endorsed by the executive committee on behalf of ANI. Comments and recommendations about the QDM are included below.



Overall

- The overall document appears overly focused on illnesses, conditions and diseases. Many of the measures are prevention-focused so the only "condition" may be "well-baby" or "sexually active woman of child-bearing age". The model does not appear to allow for wellness and prevention "conditions".
- Editorial page 11 It appears that the footnote numbers don't match
- Editorial page 14 We believe that the narrative does not adequately explain or correspond to correspond to the graphic.
- Editorial page 29There appears to be a typo on the first line of the 2nd paragraph. It says "There are three", and what follows is a list of 5 actors.
- Page 5 We suggest that NQF consider adding administrative and claims data as data sources. We do not believe that administrative and claims data bases will ever disappear. As efficiency and resource use measures become more common place, we believe that the administrative and claims data will continue to be useful needed.
- Page 18 This seems to imply that all care plans require a problem. However, "Problem" does not include wellness and prevention.
- Page 19 Condition/diagnosis/problem this does not seem to have the capability to include non-illness conditions such as "well-baby", "woman >55 years" which may be the only reason for an encounter immunizations and mammogram.
- Page 21 We believe that Family History should have an attribute that enables specification of the relative or relatives from whom the Family History data derives.
- Page 21 We do not recommend splitting functional status into general and disease specific.
 We believe that stating that a tool is disease specific implies it can only be used for that particular disease, when in fact it may be valuable and applicable for multiple diseases or for screening.
- Page 22 We believe that the proposed definition of an intervention is too restrictive. We believe that not all interventions are for "problems". An intervention can be used for prevention.
- Page 23 We suggest that NQF add genetic profile to risk evaluation.
- Page 24 We believe that transfer category should have defined attributes in the "from/to" location and "from/to" setting, each of which should be bound to PHINVADS HL7 Service Location Codes and/or SNOMED value sets. We believe that allowing arbitrary vocabulary bindings will cause a conflict with the CDA-based QRDA standard.
- Page 26 We are not certain that the stated example of allergy discontinued is applicable as described. For example, if a previously reported allergy is found to be an error, then the allergy list would be updated. We believe that in such circumstances a notation that the allergy was previously listed in error needs to be included in the record.
- Page 28 "States of being We suggest that NQF further clarify the QDM discussion and associated logic regarding state of being. We believe that states of being typically are modified during a patient encounter with a care provider, when the provider modifies the 'problem list', or 'medication list'. Thus, we believe that the state of being is only



meaningful during an encounter. For example, to say that "Diagnosis active: Diabetes Start before Start Measurement Period >= 1 year "is not meaningful. One needs to look for an encounter in the relevant time period in which the diagnosis is active. A second source of confusion is the persistence of a state of being. If a patient visits their primary care provider (PCP) for the chicken pox on 1/1/2012 (diagnosis active: chicken pox DURING encounter), is the diagnosis considered active during subsequent encounters? If there is a subsequent encounter with the same provider, and chicken pox is not present as an active diagnosis, is it considered inactive? Resolved? What if the encounter is with a different provider?"

- Page 29 Actors. We believe that some measure developers may want to use the actors associated with an Act as a 'role', rather than an individual. For example, was the counseling session performed by an MD, RN, or someone who lacks these types of licensure. Also, certain measures may require certifications in addition to licensure.
- Page 29 Actors. We suggest that NQF provide additional clarification about how are the actors, human and inanimate, identified in the QDM?
- Page 34 "Category Specific Attributes.
 - We believe that there admission and discharge times should be restricted to appropriate settings, such as ambulatory surgery, inpatient hospital, and emergency room.
 - We believe that Discharge Status should have a specified vocabulary and potential value set. We recommend the Uniform Hospital Discharge Data Set (UHDDS) definitions as they have been widely adopted for claims and administrative data sets.
 - We believe that Facility Location should have a specified vocabulary and potential value set. This is specified in Logical Observation Identifiers Names and Codes (LOINC®) with the Nursing Management Minimum Data Sets and has wide applicability across settings for any discipline.
 - We believe that Laterality should have a specified vocabulary and potential value set.
 - We believe that Ordinality should have a specified vocabulary and potential value set.
- - Related to: What categories can be 'related to'? Anything at all?"
- Page 40 Medication add Laterality and Status
- Page 40 Substance add Laterality and Status
- Page 41 Symptom add Frequency and Related to
- Page 41 Transfer add Health Record Artifact
- Page 42 Expression Language. Since the style and grammar of the QDM is informal is difficult to check a QDM expression for correctness. We urge NQF to address this potential shortcoming. The Measuring Authoring Tool (MAT) user guide provides an inadequate description of the QDM Logic, and we believe that the description should be independent of the tool used to construct a QDM expression.
- Page 44 Relative timings. The relative timings cited here have informal definitions, and do not provide a basis for standardized computation of time intervals. We are concerned that measure developers may not understand the distinction between an interval of 24 hrs and an interval of 1 day, and this is an important distinction for computing.
- Page 45 Linked to. In the example, we suggest additional clarification; should the statement be: "Medication, ordered: Beta Blocker"? What types can be the target of a LinkedTo timing?



- Page 45 Ends before Start. We believe that the example should cite Medication Active during an Encounter to improve the statement's logic and to clarify the definition.
- Page 49 Communication. It is not clear how would one specify that a particular document was shared with a patient/provider.
- Page 50 Health Record Component. If the stated goal of this category is to capture reconciliation, we suggest that it would be much easier to use a procedure or intervention code for "allergy list reconciled" instead. As currently proposed, this seems like a complication.
- Page 50 Intervention We believe that the proposed definition is too limited by referencing "health problems", because not all patient education is about a "problem". Patient education can be about preventive interventions, e.g. condom use.
- Page 51 As noted above, we disagree with removal of "declined" in several categories, for example:
 - When planning and providing care, the concepts of "goal" or "expected outcome" are critical factors. Defining and monitoring goals are essential in preventing potential problems, resolving a currently existing problem, or maintaining or enhancing a present status or level of functional ability.
 - Goals are subsumed within the QDM concept "characteristics." Given the critical importance of defining and monitoring goals within care delivery, ANI believes that goals should be structured discretely to support future measures related to the planning and coordination of care.

Style Guide

- Overall We suggest that NQF establish vocabulary constraints for most attributes.
- Page 5 We disagree with the proposed removal of "declined" for characteristic. Absence
 of data could indicate the question was not asked, not necessarily that the data was not
 available or provided. Patient characteristics are used in the denominator of numerous
 measures. For example, smoking cessation if a patient declines to answer whether they are a
 smoker is different than the absence of data, especially when it is a process measure.
- Page 6 We disagree with removal of "declined" for communication. Patient education, discharge planning, etc. are communication vehicles. Provision of communication is included in several measures and we would expect more in the future as care transition measures become more commonplace. Presence or absence of data is insufficient for determining some numerators and denominators.
- Page 10 We question if many of the states listed as "Feasible but require additional effort, such as the following workflow changes" are either not included in the EHR or workflow.
- Page 12 We request clarification about the concept of "recommended". What is a recommended encounter? Is this supposed to mean "referred"?
- Page 19 We request clarification of including ICD-9-CM especially since the implementation date for ICD-10 has been delayed. We question the value of "recommended" or "planned". We agree with removal of "discontinued".



- We ask that NQF reassess and further clarify the states listed as "Feasible but require additional effort, such as the following workflow changes" are either not included in the EHR or workflow. "
- Page 23 We agree with removal of "declined"
- Page 24 We agree with removal of "declined"

Summary

Nurses are critical members of the interdisciplinary healthcare team and are essential to the success of organizations as they continue to leverage the data and information contained in EHRs. The nursing profession performs an instrumental role in the key areas of patient safety, change management, design, and usability of systems as evidenced in quality outcomes, enhanced workflow, and user acceptance. These areas highlight the value of these knowledge-based workers and their role in the adoption of HITs, with greater integration across systems to deliver higher quality clinical applications in healthcare organizations.

ANI appreciates the opportunity to endorse the comments of the AMIA Nursing Informatics working group and the submission of these comments to NQF. Again, we thank the NQF for soliciting public input to help inform the review of the QDM. Please contact us at any time for further discussion of the comments offered here.

Sincerely,

Judy Murphy, RN, FACMI, FHIMSS

ANI Co-chair (HIMSS representative) 230 E. Ohio Street, Suite 500

Chicago, IL 60611

Email: Judy.Murphy@aurora.org

Comedicate PLD RN, FAAN

Bonnie Westra, PhD, RN, FAAN ANI Co-chair (AMIA representative) 4720 Montgomery Lane Suite 500 Bethesda, MD 20814

Email: westr006@umn.edu



The Alliance for Nursing Informatics (ANI)

Sponsored by AMIA & HIMSS

ANI Member organizations

- AMIA (American Medical Informatics Association)
- American Nursing Informatics Association-CARING (ANIA-CARING)
 - Association of periOperative Registered Nurses (AORN)
- Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)
 - Center for Nursing Classification and Clinical Effectiveness (CNC)
 - Central Savannah River Area Clinical Informatics Network (CSRA CIN)
 - Cerner Nursing Advisory Board
 - Connecticut Healthcare Informatics Network (CHIN)
 - CPM Resource Center International Consortium
 - Croatian Nursing Informatics Association (CroNIA)
 - Delaware Valley Nursing Computer Network (DVNCN)
 - Health Informatics of New Jersey (HINJ)
 - Healthcare Information and Management Systems Society (HIMSS)
 - Informatics Nurses From Ohio (INFO)
 - MEDITECH Nurse Informatics program
 - Midwest Nursing Research Society NI Research Section (MNRS)
 - Minnesota Nursing Informatics Group (MINING)
 - NANDA International
 - National Association of School Nurses (NASN)
 - New England Nursing Informatics Consortium (NENIC)
 - North Carolina State Nurses Association Council on NI (NCNA CONI)
 - Omaha System
 - Puget Sound Nursing Informatics (PSNI)
 - SNOMED CT Nursing Working Group
 - South Carolina Informatics Nursing Network (SCINN)
 - Surgical Information Systems Clinical Advisory Task Force (SIS)
 - Taiwan Nursing Informatics Association (TNIA)
 - Utah Nursing Informatics Network (UNIN)

Also affiliated with the American Nurses Association