



December 22, 2010

David Lansky
Office of the National Coordinator HIT Policy Committee,
Quality Measures Workgroup
U.S. Department of Health and Human Services
200 Independence Avenue S.W.
Suite 729-D
Washington, D.C. 20201

RE: Clinical Quality Measures Concepts for Stage 2 and Stage 3 Meaningful Use
Via: <https://www.altarum.net/survey/qmrfc.aspx>

Dear David Lansky,

The [Alliance for Nursing Informatics](#) (ANI) is a collaboration of organizations that enables a unified voice for nursing informatics. ANI represents more than 5,000 nurse informaticists and brings together 28 distinct nursing informatics groups in the United States. ANI crosses academia, practice, industry, and nursing specialty boundaries and works in collaboration with the nearly 3 million nurses in practice today. Nurses constitute the largest single group of healthcare workers, including experts that serve on national committees and interoperability initiatives focused on standards and terminology development, standards harmonization, and electronic health record (EHR) adoption, as well as certification of EHR systems. Further, nurses are active in the research, education, implementation, integration and optimization of information systems throughout the healthcare system. In that spirit we offer the following comments to the Clinical Quality Measures Concepts for Stage 2 and Stage 3 Meaningful Use.

Domain: Patient and Family Engagement

Patient Health Outcomes

- There are innumerable measures for patient health outcomes, but few are standardized across patient populations and settings. One of the important measures identified for Stage 2 and 3 is functional status, however, standardization of this quality measure is needed. For instance, the requirements for functional status measures in home care using the Outcome and Assessment Information Set (OASIS), the Minimum Data Set (MDS) used for skilled nursing facilities' patient assessments, and the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) are inconsistent measurements of functional status. Additionally, there is no standard hospital discharge functional status measure. Functional status was identified by HL7 as part of the Continuity of Care Document, but was not included in HITSP specifications for Continuity of Care. One way to standardize measurement of functional status is to build on the work by CMS, using the Continuity Assessment Record and Reevaluation Tool (CARE) which is an attempt to harmonize multiple measures across settings, including functional status. The CARE tool would replace the OASIS, MDS and IRF-PAI measures and require use of comparable measures for hospital discharge planning with these post-acute care settings.



Domain: Clinical Appropriateness

Appropriate/Efficient Use of Medications

- We would encourage this domain specifically to reach out to nursing stakeholders for input as nurses constitute the largest single group of healthcare workers.
- We would encourage the Committee to explore a measure of adherence that is standardized and with data that would be obtainable from an EHR.
- We would encourage the use of generic versus brand named medications when appropriate.
- We would support selecting medications that have sufficient evidence that they are equally effective and less costly. The Institute for Health Improvement¹ recommends the following medication measures from a patient safety, outcomes perspective be considered: adverse drug events per 1,000 doses; percent of admissions with an adverse drug event; percent of patients receiving a specific high-risk medication with a related adverse drug event and high-risk adverse drug events per 1,000 doses. From a process measures perspective, the following should be considered: percent of unreconciled medications; number of self-reported medication errors; pharmacy interventions per 100 admissions; risk priority number (from failure modes and effects analysis) and errors from unreconciled medications per 100 admissions

Appropriate/ Efficient Use of Facilities

- Rehospitalization is a prevalent problem and unnecessary outcome. Hospital readmissions have been identified as important by the Agency for Healthcare Research and Quality (AHRQ), the Medicare Payment Advisory Commission, the National Quality Forum, the Commonwealth Funds' Health System Quality and Efficiency Program, and the Institute for Healthcare Improvement (IHI). Rehospitalization is a prevalent problem for patients in all settings, particularly the elderly. For instance, on the OASIS website by the Centers for Medicare and Medicaid Services (CMS), the acute care hospitalization rate is reported as 29% for home health care patients for October, 2008-September, 2009 (CMS, 2009²). In one study, the very old, or the disabled, had a higher annual hospitalization rate of 51.8%³. The estimated cost is \$17.4 billion dollars for unplanned hospitalizations for Medicare patients (Jencks et al., 2009⁴). However, according to Audet (2010), one of the challenges is the timing and standardization of the method of measuring hospital readmissions. We support this measure as it obtainable through EHR data and if standardized, could help dramatically improve quality and reduce costs.

¹Institute for Healthcare Improvement <http://www.ihl.org/IHI/Topics/PatientSafety/MedicationSystems/Measures/>

²Centers for Medicare & Medicaid Services. (2008). *OASIS - Based Home Health Agency Patient Outcome and Case Mix Reports*. Retrieved December 13, 2008, from http://www.cms.hhs.gov/OASIS/09a_hhareports.asp

³Audete, A.J. (September 7, 2010). A Call for Standardized Rehospitalization Measures and Information Systems. The Commonwealth Fund Blog. Accessed from: <http://www.commonwealthfund.org/Content/Blog/2010/Sep/A-Call-for-Standardized-Rehospitalization-Measures.aspx> on 12/12/10.

⁴Jencks, S.F, Williams, M.V., & Coleman, E.A. (2009). Rehospitalizations among patients in the Medicare Fee-for-Service Program. *New England Journal of Medicine*, 360, 1418-1428.



Domain: Care Coordination

Effective Care Planning

- We encourage the workgroup to further explore: how would adherence to a comprehensive care plan be measured? We support an advanced care plan as a standard and critical element to reducing unnecessary care; an effective care plan should incorporate the measures of a problem list that represents all providers involved with patient's care.

Care Transition

- We support the accurate measuring of medication reconciliation across the continuum of care. Medication reconciliation was established by AHRQ in 2005 as an important patient safety goal and criteria was recently revised by The Joint Commission⁵. We encourage the workgroup to explore those criteria, developed by these agencies as a secondary use of EHR data.

Domain: Patient Safety (Improving Quality, Safety, Efficiency & Reducing Health Disparities for Stage 1)

Healthy Lifestyle Behaviors

- We support measuring/capturing the use of services that promote healthy lifestyles, including smoking cessation, body mass index (BMI) management and patient health literacy.
- According to the World Health Organization, more than 1 billion people are overweight and 300 million are obese. Obesity leads to many health complications and chronic health conditions. Adding the BMI is a relatively easy item to automate within EHR technology; is critical to increase awareness of obesity with patients; and could potentially provide an opportunity for providers to discuss weight concerns with patients more readily.

Call for New Pressure Ulcer Risk & Prevention Clinical Quality Measure for Stage 2 and Stage 3 Meaningful Use

One of the 12 interventions that the IHI recommends for its 5 Million Lives Campaign is “Prevent Pressure Ulcers . . . by reliably using science-based guidelines for their prevention. The development of pressure ulcers is a painful, expensive, and unnecessary harm event that is all too prevalent in American hospitals. The prevention of pressure ulcers is a key intervention that is not new, not expensive, and has the potential to save thousands of patients from unnecessary harm.”⁶ Therefore, ANI in collaboration with the American Nurses Association (ANA) supports a call for the addition of pressure ulcer risk and prevention as a new Clinical Quality Measure for Stage 2 and Stage 3 Meaningful Use under the domain of patient safety for the following reasons:

1. First, investments in EHRs will result in far greater improvement in patient outcomes if steps are taken to ensure the prevention of avoidable adverse events such as pressure ulcers. Pressure ulcers remain a major threat to the healthcare system and represent a serious safety concern to patients. As many as 3 million patients are treated in U.S. healthcare facilities each year for pressure ulcers at an estimated cost as high as \$15.6 billion. AHRQ reports an 80% increase in pressure ulcer-related hospitalizations from 1993 to 2006.

⁵The Joint Commission Medication Reconciliation: http://www.jointcommission.org/npsg_reconciling_medication

⁶ Institute for Healthcare Improvement <http://www.ihl.org/IHI/Programs/Campaign/PressureUlcers.htm>

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2. Second, because it has been demonstrated that with appropriate nursing care, pressure ulcers are largely preventable, pressure ulcer prevention can be used immediately to evaluate \$17 billion dollar investment in health IT adoption; and
 3. Third, significant support within the nursing community to develop and endorse this measure has been established and is already underway.

Please reference the *Call for New Pressure Ulcer Risk & Prevention Clinical Quality Measure for Stage 2 and Stage 3 Meaningful Use* open letter for additional justification. Thank you for this opportunity to provide comments.

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The Alliance for Nursing Informatics (ANI)

Sponsored by AMIA & HIMSS

ANI Member organizations

- American Medical Informatics Association (AMIA)
 - 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)
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 - South Carolina Informatics Nursing Network (SCINN)
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 - Taiwan Nursing Informatics Association (TNIA)
 - Utah Nursing Informatics Network (UNIN)

Also affiliated with the American Nurses Association

**New Pressure Ulcer Risk & Prevention
Clinical Quality Measure for Stage 2 and Stage 3 Meaningful Use**

December 20, 2010

Dr. David Lansky, Chair
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HIT Policy Subcommittee
Office of the National Coordinator for Health Information Technology
U.S. Department of Health and Human Services
200 Independence Avenue S.W.
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Washington, D.C. 20201

Dear Dr. Lansky,

Thank you for this opportunity to provide comment on The Health Information Technology Quality Measures Workgroup recommendations on Stage 2 and Stage 3 Meaningful Use clinical quality measures enabled for use within electronic health record systems (EHRs). The more than 3 million nurses in the United States (U.S.) commend the Committee for recommending new quality measures, leveraging EHRs to improve the quality of care our patients receive, using the National Priorities Partnership Framework for health quality, and the outlining five pillars of Meaningful Use.

After reviewing the Quality Measures Workgroup's recommendations for Stage 2 and 3 Meaningful Use clinical quality measures, we recommend adding the measure of pressure ulcer risk and prevention under the domain of patient safety/hospital associated events, for three reasons:

1. First, investments in EHRs will result in far greater improvement in patient outcomes if steps are taken to ensure the prevention of avoidable adverse events such as pressure ulcers. Pressure ulcers remain a major threat to the healthcare system and represent a serious safety concern to patients. As many as 3 million patients are treated in U.S. healthcare facilities each year for pressure ulcers at an estimated cost as high as \$15.6 billionⁱ. The Agency for Healthcare Research and Quality (AHRQ) reports an 80% increase in pressure ulcer-related hospitalizations from 1993 to 2006ⁱⁱ.
2. Second, because it has been demonstrated that with appropriate nursing care, pressure ulcers are largely preventable, pressure ulcer prevention can be used immediately to evaluate \$17 billion dollar investment in health IT adoption; and
3. Third, significant support within the nursing community to develop and endorse this measure has been established and adoption is already underway.

The nursing workforce represents the largest potential group of EHR users and therefore, a significant portion of documentation is completed by nurses. The sheer volume of documentation by nurses provides an excellent opportunity to use health information technology (HIT) to improve decision-making during the process of care delivery, where it can have the greatest

impact on preventing pressure ulcer occurrence. To this end, nurses have been working on the infrastructure needed to bridge quality measurement and health IT for purposes of preventing one of the key nursing sensitive indicators, pressure ulcer. This measure meets the qualifying criteria your team described in the following ways:

HIT-Sensitivity

Health IT, specifically the use of an EHR-enabled standardized risk assessment tool, can facilitate the consistent identification of at-risk patients, documentation, decision making, and timely communication of these findings to other providers. This is especially true if the system is based on expert rules or clinical guidelines and integrated within the nurses' workflowⁱⁱⁱ. Through the Clinical LOINC Nursing workgroup, several leading healthcare organizations including the Department of Veterans Affairs and Kaiser Permanente (two organizations that have been integral to the development of the Nationwide Health Information Exchange), Aurora Healthcare, Partners Healthcare, Mayo Clinic, and Intermountain Healthcare have brought together their nurse researchers, informaticists, terminologists, subject matter experts, and quality experts, to create a common nursing information model related to pressure ulcer risk assessment and prevention. This team has been working with the standards community (LOINC, IHTSDO, HL7, IHE) to develop terminology-based value sets. Furthermore, the information model's data elements align with the National Quality Forum's Quality Data Set (QDS) format, making this measure amenable to EHR use. Recognizing that effective care coordination requires data exchange, this effort is focused on identifying ways to "free the data" locked within EHRs and effectively move the data for data exchange and quality reporting. It is our intention to demonstrate that this measure is technically feasible, supports consumer empowerment, and improves health care safety and quality.

Parsimonious

Accurate identification of the risk and prevention strategies for pressure ulcers crosses many of the high priority measure concepts, including care coordination, patient health outcomes, care transitions, and effective preventive services. The prevalence of pressure ulcers is widespread in all settings with estimates of 10-18% in acute care, 2.3-28% in long term care, and 0-29% in home care^{iv}. In addition, about 50% of all adult patients in acute care facilities are at high risk for developing pressure ulcers^v. The prevalence of pressure ulcers is generally considered a proxy for the quality of care^{vi}. Better communication about the patient's risk factors and effective preventive interventions is critical to reduce this risk.

Demonstrates preventable burden

Pressure ulcers are one of the most serious safety concerns related to hospitalizations^{vii}. Approximately 3 million adults are affected by pressure ulcers in the U.S. and this adverse event causes increased healthcare costs^{viii} and a great deal of pain and suffering to patients^{viii}. The Centers for Medicare and Medicaid Services (CMS)^{ix} has labeled pressure ulcers as one of the "never events", and considers skin integrity as a reflection of quality of nursing care. As a result, as of October 2008, CMS will no longer reimburse for hospital-acquired pressure ulcers. The average treatment cost per hospital stay of a pressure ulcer in 2008 was estimated to be \$44,141^x.

Assesses health risk status and outcomes

Accurately assessing the patient's risk of developing a pressure ulcer is the first step in prevention. Pressure ulcer prevention is listed as one of the National Priorities Partnership top healthcare reform priorities. Pressure ulcers appear on the both National Quality Forum's Serious Reportable Events (SREs)^x and the CMS's serious Hospital Acquired Conditions (HACs)^x. As a result, acute care hospitals and nursing homes will soon be required to publicly report the number of these events that occur within their facility^{xi}. Most of the existing NQF-endorsed quality measures related to pressure ulcers only track the prevalence of late-stage pressure ulcers, not the process (assessment and intervention) necessary to prevent this common HAC. What is needed is the ability to track and trend patient outcomes suitable for comparison by health care professionals. EHRs that provide evidence-based guidelines at the point of care make it easier to find and share best practices; help reduce healthcare-associated preventable conditions; promote ongoing research on the effectiveness of practices; and allow monitoring and analysis of how individual clinicians and systems are performing relative to peers exemplify the type of functionality required to demonstrate meaningful use today. The collection of quality measures needs to be an automated byproduct of electronic documentation at the point of care, not a manual, retrospective, and costly process as it exists today.

Longitudinal

A standards-based risk assessment tool can communicate consistent results across episodes of care. Patients are at highest risk as they transition to different care settings, and the best way to mitigate this risk is through accurate communication. As previously mentioned, a standardized format for communicating the patient's risk factors and interventions is key to reducing the likelihood of pressure ulcer development.

Quality Measure Gap

Currently, there is no single quality measure that addresses the pressure ulcer risk identification and prevention for all environments. NQF-endorsed quality measures #538, 539, 540, 0201, and 0181^{xii} all offer a slightly different view of the problem. A modification, combination, or bundle of these measures that applies to all environments (acute care as and long-term care) is a step in the right direction. This quality measure gap can start to be addressed in the next phase of meaningful use criteria with a national focus on capturing select data within an EHR that measures the impact of nursing care on patient outcomes.

Other Quality Measure Candidates

We recognize the value of the other quality measures that are currently being considered in the HIT Policy Quality Measures Workgroup that you Chair. We have been closely following the workgroup's progress. Nonetheless, we ask you to consider this patient-centered quality measure for reasons that we have not heard discussed in the public workgroup sessions.

In summary, pressure ulcer prevention is particularly sensitive to nursing care, is well researched, and represents avoidable costs in health care. This approach supports the vision for Meaningful Use to enable significant and measurable improvements in population health through a transformed health care delivery system. The health IT industry is at a tipping point, and expanded participation by nursing leaders is needed if we are to address the opportunity to lead health care reform by applying the effective use of technology to achieve better patient

outcomes. An EHR-enabled pressure ulcer process quality measure could help to facilitate the identification of high risk patients and encourage early intervention to mitigate the identified risks. Reducing the incidence of pressure ulcers can help build public trust in health IT and electronic health information exchange. We appreciate the opportunity to provide these recommendations on quality measures for Stage 2 and 3 Meaningful Use.

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