June 3, 2016

Karen DeSalvo, MD, MPH, MSc
National Coordinator for Health IT
U.S. Department of Health and Human Services
200 Independence Ave, SW
Washington, DC 20201

Dear Dr. DeSalvo:

The Alliance for Nursing Informatics (ANI) advances nursing informatics leadership, practice, education, policy and research through a unified voice of nursing informatics organizations. ANI has reviewed the Request for Information issued by the Office of the National Coordinator for Health IT (ONC) asking for input on how ONC should define interoperability, required in the Medicare Access and CHIP Reauthorization Act (MACRA). We offer our comments as nursing stakeholders to ONC's request outlined in the Federal Register notice related to populations and elements of information flow that should be measured, as well as current and/or new potential data sources that can be tapped to measure interoperability more broadly.

ANI fully endorses the national objective to achieve widespread exchange of health information through interoperable certified electronic health record (EHR) technology nationwide by December 31, 2018. ANI endorses ONC's plans to assess interoperability among "meaningful EHR users" (clinicians and health care providers); however, ANI recommends interoperability metrics should also include other exchange partners including consumers, behavioral health, school nurses and long-term care providers and align with the Interoperability Roadmap as soon as feasibly possible. In addition, ANI endorses ONC's plans to measure interoperability by identifying measures that relate to exchange of health information. Our specific responses and comments to the questions posed by ONC are included below, organized by sections and questions corresponding to the Federal Register notice.

Measurement population and key components of interoperability that should be measured

Scope of Measurement: Defining Interoperability and Population

Should the focus of measurement be limited to "meaningful EHR users," as defined in this section (e.g., eligible professionals, eligible hospitals, and CAHs that attest to meaningful use of certified EHR technology under CMS' Medicare and Medicaid EHR Incentive Programs), and their exchange partners? Alternatively, should the populations and measures be consistent with how ONC plans to measure interoperability for the assessing progress related to the Interoperability Roadmap? For example, consumers, behavioral health, and long-term care providers are included in the Interoperability Roadmap's plans to measure progress; however, these priority populations for measurement are not specified by section 106(b)(1)(B)(i) of the MACRA.

ANI endorses populations and measures be consistent with how the ONC plans to measure interoperability for assessing progress related to its Interoperability Roadmap and that measurements

should move beyond "meaningful EHR users" as soon as feasibly possible. This follow-on phase would include other exchange partners including consumers, behavioral health therapists, school nurses, home health and long-term care (LTC) providers. In addition, ANI recommends, within the capabilities of currently implemented systems, that the exchange partners of meaningful users be defined to ensure a representative sampling of care providers that are involved in sharing information along the entire continuum of patient care, including but not limited to: LTC, outpatient care, home health care, behavioral health, outpatient surgery centers, personal health records, mobile health monitoring devices, skilled nursing facilities, and retail health delivery sites.

These recommendations are intended to align with the definition that interoperability focuses on the 'use' of clinical information that has been exchanged to provide access to longitudinal information for health care providers in order to facilitate coordinated care and improve patient outcomes. Nurses play a key role in care coordination and improvement of patient outcomes, yet they may not be considered "meaningful EHR users." Behavioral health is a significant Population Health component that impacts wellness and quality of life, such as populations with chronic diseases who also have depression. Additionally, individuals with serious mental illness are at high risk for cardiovascular disease, metabolic disorders, and lifestyle -related conditions resulting from tobacco use, poor nutrition, and anti-psychotic medications. Long term care providers focused on driving improvements through Population Health Management will benefit from greater interoperability given the frequency of readmissions in these vulnerable population as well as the significance of chronic disease management. Specifically, we recommend that measurement requirements include evidence of access and use of the exchanged information in a "meaningful way" that may include changes in care interventions, assessments, treatment plans, or follow-up. Measures should also explore the ease and efficiency of accessing and utilizing information that has been exchanged, including information documented by nurses, as well as patient-generated data.

How should eligible professionals under the Merit-Based Incentive Payment System (MIPS) and eligible professionals who participate in the alternative payment models (APMs) be addressed? Section 1848(q) of the Social Security Act, as added by section 101(c) of the MACRA, requires the establishment of a Merit-Based Incentive Payment System for MIPS eligible professionals (MIPS eligible professionals).

Eligible Professionals (EPs) for the first two years of MIPS (2019-2020) are individual EPs, groups of EPs or virtual groups of EPs that include Physicians, Physician assistants, Certified Registered Nurse Anesthetists, and Clinical Nurse Specialists. Beginning with the third and succeeding years of the program (2021), the statute defines a MIPS EP to include all of the types of professionals identified for the first 2 years, as well as giving the Secretary discretion to specify additional EPs. ANI notes that these additional EPs could include certified nurse midwives, clinical social workers, clinical psychologists, registered dietician/nutrition professionals, physical or occupational therapists, qualified speech-language pathologists, and qualified audiologists. We recommend the scope of interoperability measurement include these clinical professionals given the primary role they play in enabling interoperability and exchange of health information which contribute to the longitudinal patient record, care continuity and coordination.

ONC seeks to measure various aspects of interoperability (electronically sending, receiving, finding and integrating data from outside sources, and subsequent use of information electronically received from outside sources). Do these aspects of interoperability adequately address both the exchange and use components of section 106(b)(1) of the MACRA?

We support the type of measurement ONC outlines, including examining the following: electronically sending; receiving; finding (*e.g.,* request or querying); integrating (*e.g.,* incorporating) information received into a patient's medical record; and the subsequent use of information received electronically from outside sources. We encourage the ONC to continue to consider measures which quantify the growth of information exchange with consumers, and also with other community providers such as school nurses, who serve in a significant role for continuity of care and coordination.

Should the focus of measurement be limited to use of certified EHR technology? Alternatively, should we consider measurement of exchange and use outside of certified EHR technology?

ANI endorses measurement of exchange and use outside of certified EHR technology. Given the significance of data that is needed from a variety of sources (e.g. consumer data, social services data) to understand health determinants of a given population, data from a variety of sources beyond certified EHR technology is needed to effectively manage population health. Home Health Care, Long Term Care and Behavioral Health were excluded from the Meaningful Use EHR Certification Program. As a result many of these facilities continue to use siloed, disparate niche systems, likely limiting their advancements related to interoperability. These community-based healthcare providers are critical data sources for Population Health Management, increasing the need for their inclusion as a focus of measurement.

Current data sources and potential metrics that address section 106(b)(1) of the MACRA
Measures Based Upon National Survey Data

Do the survey-based measures described in this section, which focus on measurement from a health care provider perspective (as opposed to transaction-based approach) adequately address the two components of interoperability (exchange and use) as described in section 106(b)(1) of the MACRA?

Survey-based measures could identify obstacles encountered by ambulatory practices, enhancing our understanding of interoperability beyond analyses of current Meaningful Use measures. Successful survey-based measures will require a valid and reliable instrument, including capturing the role of the respondent. For example, office-based physicians may delegate survey completion to staff without computer or clinical formal education. A valid and reliable survey measure will require clear definitions of terms used. Clinician and staff understanding of Health Information Technology (HIT) terminology may vary and HIT vendors may contribute to this confusion by not using consistent terminology. Interpretation of measures can vary significantly between individuals, organizations and vendors. In addition, many office-based providers are not aware of how information is exchanged with specialists and there is a lack of incentives for specialists to exchange information electronically.

Could office-based physicians serve as adequate proxies for eligible professionals who are "meaningful EHR users" under the Medicare and Medicaid EHR Incentive Programs (e.g. physician assistants practicing in a rural health clinic or federally qualified health center led by the physician assistant)?

Office-based physicians that are **not** affiliated with large practices and large hospital organizations who **are** themselves "meaningful EHR users" could serve as adequate proxies in answering these surveys. However, office-based physicians that are affiliated with large organizations or practices are not appropriate to serve as proxies for eligible professionals. Most providers that are affiliated with large organizations or practices are often insulated from the challenges of health information exchange by practice managers, the systems analysts and referral coordinators who streamline this effort on their behalf.

Do national surveys provide the necessary information to determine why electronic health information may not be widely exchanged? Are there other recommended methods that ONC could use to obtain this information?

National surveys must include small-practice, ambulatory, primary care providers in order to comprehensively provide qualitative data to determine why health information is not widely exchanged. We recommend approaches that would incentivize past Meaningful Users to qualitatively explain challenges met when meeting health information exchange measures. An additional approach for ONC to consider is conducting a survey of Regional Extension Centers that have assisted practices with implementation and Meaningful Use of EHRs. ANI members involved in this work for the past five years have observed the following trends that we encourage ONC to confirm nationally:

1. Unexpected costs for office-based practices purchasing functionality from EHR vendors including health information exchange.
2. Systems external to certified EHRs that are used within Accountable Care Organizations (ACOs) for closed-loop referrals and secure exchange of data.
3. Usability of the health information exchange in EHRs.
4. Lack of incentive for receiving specialists to connect to primary care.
5. Specialists' preference for concise faxed information rather than a CCDA.
6. Lack of availability of direct messaging accounts.
7. Lack of functionality to allow referral coordinators to receive or disposition referrals on the provider's behalf. EHRs sometimes require the provider to send and receive data.
8. ACO specialists are not incentivized to work with other office-based physicians to share electronic health information.

CMS Medicare and Medicaid EHR Incentive Programs Measures

Given some of the limitations described above, do these potential measures adequately address the "exchange" component of interoperability required by section 106(b)(1) of the MACRA?

As a health system, a long term goal should be to advance our interoperability capabilities toward a 'closed-loop' model, enabling synchronous and dynamic information flows to minimize information loss

and maximize continuity of care as the patient moves through the health system. In the spirit of working toward this long term goal, ANI recommends that measures should include the evaluation of information requests that are fulfilled. Specifically, ANI encourages ONC to consider a measure for assessing an organization's response rate to requests received for information.

Do the reconciliation-related measures serve as adequate proxies to assess the subsequent use of exchanged information? What alternative, national-level measures (e.g., clinical quality measures) should ONC consider for assessing this specific aspect of interoperability?

The medication reconciliation measures should be clarified to incentivize providers to encourage patient medication reconciliation using patient portals prior to an encounter, and the provider's active use of, and request for, external data (including these patient-generated data) during the reconciliation process. ANI urges ONC to include the use of patient-generated data as a critical reconciliation-related metric for interoperability, given the patients centrality and ownership of their medication regimen.

Can state Medicaid agencies share health care provider-level data with CMS similar to how Medicare currently collects and reports on these data in order to report on progress toward widespread health information exchange and use? If not, what are the barriers to doing so? What are some alternatives?

ANI believes that obtaining individual transaction data is important to comprehensively evaluate adequacy of interoperability; in this spirit, ANI encourages measures that represent interoperable data.

These proposed measures evaluate interoperability by examining the exchange and subsequent use of that information across encounters or transitions of care rather than across health care providers. Would it also be valuable to develop measures to evaluate progress related to interoperability across health care providers, even if this data source may only available for eligible professionals under the Medicare EHR Incentive Program?

ANI endorses measures that evaluate interoperability progress across providers as essential to move past an encounter-level paradigm to a continuity of care and patient-centered model of continuous information exchange. We encourage ONC to consider patient-generated and patient-accessed data in this model of interoperability.

Other data sources and metrics ONC should consider with respect to section 106(b)(1) of the MACRA or interoperability measurement more broadly.

Identifying Other Data Sources to Measure Interoperability

Should ONC select measures from a single data source for consistency, or should ONC leverage a variety of data sources? If the latter, would a combination of measures from CMS EHR Incentive Programs and national survey data of hospitals and physicians be appropriate?

We encourage ONC to leverage multiple data sources and continuously evaluate and compare those data as a proxy to understand the reliability and validity of data received. For example, ONC could evaluate trends of Meaningful Use Menu-set measures selected by providers and the ONC certified EHRs used by those providers. These findings could be triangulated with National Survey data to better understand barriers to interoperability. For example, some ONC Certified EHR systems may not provide

interoperability functionality at the baseline price of the product, forcing practices to buy additional modules at high cost to meet more complicated interoperability measures.

What, if any, other measures should ONC consider that are based upon the data sources that have been described in this RFI?

Variation in functionality and reporting features exist across ONC Certified products. The opportunity for practices to formally report discrepancies that may arise for an ONC certified EHR should be considered.

Are there Medicare claims based measures that have the potential to add unique information that is not available from the combination of the CMS EHR Incentive Programs data and survey data?

ANI suggests that ONC could utilize Medicare claims data to evaluate if CPT codes for tests align with reported National Quality Forum (NQF) Clinical Quality Measures (CQMs).

If ONC seeks to limit the number of measures selected, which are the highest priority measures to include?

ANI recommends prioritizing medication reconciliation because it is a feasible, quantifiable, and clinically valuable measure. In addition, the measure of timely access to information for patients should be prioritized, while accounting for patient preferences to opt out of portal access.

How should ONC define "widespread" in quantifiable terms across these measures? Would this be a simple majority, over 50%, or should the threshold be set higher across these measures to be considered "widespread"?

ANI recommends that 'widespread' interoperability should be defined as greater than 50%. Quantification of this measure will require a clearly, and appropriately, defined denominator. In setting a higher threshold and defining this measure, ONC may consider including and quantifying patients who prefer not to be on the portal.

ANI commends the ONC's careful consideration of interoperability metrics to measure effective information exchange. ANI appreciates the opportunity to contribute to the conversation on these important interoperability metrics, particularly as it relates to meaningful use of EHR data, including nursing data, for improved, coordinated patient care.

Sincerely,

Judy Murphy, RN, FACMI, FHIMSS, FAAN
ANI Co-chair
Email: murphyja@us.ibm.com

Charlotte Weaver, PhD, RN, MSPH, FHIMSS, FAAN
ANI Co-chair
E-mail: caweaver2011@gmail.com