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September 21, 2012

Ms. Rebecca Roper  
Agency for Healthcare Research and Quality  
Attention: HIT-Enabled QM RFI Responses  
540 Gaither Road, Room 6000  
Rockville, MD 20850

Dear Ms. Roper:

On behalf of the Electronic Health Record (EHR) Association, we are pleased to respond to the Agency for Health Research and Quality (AHRQ) Request for Information (RFI) on Quality Measurement Enabled by Health IT. Our response was developed through an open, collaborative process engaging representatives from our member companies that represent the majority of installed, operational EHRs in the US, and our customers who use them to improve the quality and efficiency of care delivery.

### Summary

Widespread adoption of EHR technology, implemented using national standards, and used to connect caregivers to one another, is foundational to being able to measure healthcare outcomes in order to use the results to promote the three aims of the National Quality Strategy:

- Drive improvements in individual healthcare,
- Foster health communities, and
- Identify cost effective care models.

The Meaningful Use Clinical Quality Measures (CQMs) set the foundation for a fundamental transformation from manually abstracted measures to “eMeasures” collected via EHRs, with rapid growth in the number of measures that must be supported.

Electronic clinical quality measurement initiatives have a diverse range of stakeholders. Lack of communication among stakeholders can result in projects with overlapping and sometimes competing goals. More effort is needed to harmonize what is being measured with the data that needs to be captured and exchanged. Our detailed responses to the questions posed in the RFI appear below.

## Detailed Responses

1. Briefly describe **what motivates your interest** in clinically-informed quality measures through health information technology. To what extent is your interest informed by a **particular role** (e.g., provider, payer, government, vendor, quality measure developer, quality improvement organization, standards organization, consumer advocate) in this area?

The Electronic Health Record (EHR) Association is a trade association of 41 electronic health record (EHR) companies that join together to lead the health IT industry in the accelerated adoption of electronic health records in hospital and ambulatory care settings in the US. Our members develop certified EHR systems that implement quality measure reporting capabilities required by providers to participate in a number of Centers for Medicare and Medicaid Services (CMS) initiatives, including Meaningful Use, ePrescribing, and the Physician Quality Reporting System (PQRS).

2. Whose **voices are not being heard** or effectively engaged at the crucial intersection of health IT and quality measurement? What **non-regulatory approaches** could facilitate enhanced engagement of these parties?

One of the challenges in quality measurement is the need for greater coordination among all stakeholders: patients and consumers of measures and measure data, guideline developers, measure developers, EHR developers and implementers, standards developers, quality improvement agencies, and others. The landscape is complex, and not all parties are equally connected. It is very difficult to identify and connect with all the relevant programs and stakeholder organizations. One notable shortfall is lack of input from consumers on how quality information would be more useful, and how it could be communicated and used to promote better care and outcomes.

There should be one “source of truth” for eMeasures that is accessible to all stakeholders and relevant for both public and private sector programs, similar to what QualityNet (<https://www.qualitynet.org/>) provides for chart-abstracted measures required by CMS. QualityNet contains current and past measure specifications and a question-and-answer (Q&A) section which organizes the flow of questions between the community and measure developers. The Q&A section also acts as a library which stores past correspondence and responses, bringing efficiency to the process. It would be ideal if something similar to the QualityNet model could be replicated to support the broader community that develops and uses eMeasures.

3. **Some quality measures of interest have been more difficult to generate, such as measures of greater interest to consumers, measures to assess value, specialty-specific measures, measures across care settings (i.e., measures enabled by health information exchange), and measures that take into account variations in risk. Describe the infrastructure that would be needed to ensure development of such measures.**

First, these measures are difficult to develop in many cases because they relate to complex concepts that do not lend themselves to accurate, practical, and cost effective measurement.

In addition, your question asks what infrastructure is needed. We hope you are referring to both organizational and technical infrastructure, addressing broadly what industry groups must be involved and what discussions must take place. We discourage thinking of quality reporting with

specific technical infrastructures. Focusing too much on a specific technical infrastructure can inadvertently discourage or inhibit new and innovative methods for accomplishing the same goals.

A variety of measure challenges are described in this question and addressing such challenges will likely require multiple approaches.

For example, some of the challenges listed are related to measure development. This includes a lack of measures that are of interest to consumers and a lack of specialty-specific measures. (Consumer engagement in measure development is addressed in our responses to other questions.)

We think that including professional and specialty societies, and relevant specialists and other healthcare professionals in measure development will continue to be important to expanding sets of measures to include measures relevant for a broader set of specialties.

As EHR developers, we note that specialists are likely to use specialized software developed with their requirements in mind (i.e., not just general ambulatory or inpatient EHR systems). For example, radiologists are most likely to use both a radiology information system (RIS) and a picture archiving and communication system (PACS). Pathologists use laboratory information systems (LIS), which might include very specialized modules for pathology. Transplant surgeons might purchase special modules suited to their clinical and regulatory reporting needs, and so forth for other specialties. While we support the development of specialty-specific measures, we note that not all specialty measures will be suitable for inclusion in all EHRs or all specialty-relevant health IT. Measure panels for regulatory programs should include flexibility for both health IT developers and physicians, so that relevant measures can be selected for inclusion, depending on the relevance to the specialty that is targeted and subsequent use by the providers.

We also encourage interdisciplinary work for the development of quality measures that includes patients, consumers, and economists, as well as clinicians, EHR vendors, and measurement experts where appropriate.

Another set of challenges identified in the question has to do with measure implementation and data availability, such as measures of clinical events across care settings and longitudinal measures. Longitudinal measures can be challenging when some groups have only adopted EHRs recently, or have recently changed to a new EHR. Measures across different care settings must also be appropriately matched to the current level of technical capabilities and advanced along with the progression of industry health information exchange (HIE) standards.

4. *What health IT-enabled quality measures, communication channels, and/or technologies are needed to better **engage consumers** either as contributors of quality information or as users of quality information?*

We strongly support the expanded use of patient portals, personal health records (PHRs), and other means for patients and consumers to engage with their healthcare data. These technologies provide growing opportunities to not only present data to patients but also gather data from them.

5. *How do we **motivate measure developers** to create new health IT-enabled quality measures (which are distinct from existing measures which were retooled into electronically-produced quality measures) that **leverage** the unique data available through **health IT**? Please provide examples of*

*where this has been successfully implemented. What new measures are in the pipeline to leverage data available through health IT?*

Funding measure developers to develop new “de novo” eMeasures should be a high priority, and CMS has already taken steps in this direction by awarding contracts for development of some de novo measures. One such contract, through Abt Associates, is for the development of five new Meaningful Use Stage 2 measures for the inpatient setting. Abt is working with both a technical expert panel and EHR vendor participants to help guide the development of the eMeasure specifications.

This type of collaboration between the measure developers and other stakeholders, such as EHR developers, standards organizations, and providers, is critical to the successful development of de novo measures, and provides the opportunity for education between the different stakeholders. The EHR Association welcomes the opportunity to assist with these collaborative efforts to provide the perspective and collective experience that we have as EHR developers and implementers.

Fundamentally, we need to provide tools, education, and knowledge-sharing to support both the development of de novo measures, and the retooling of existing measures so that measure developers are fully aware of the unique opportunities and challenges associated with health IT-based measures, and the clinical workflow implications that may be introduced. Organizations like the National Quality Forum (NQF) and CMS, that use measures, should strongly encourage measure developers to develop de novo e-measures, and should facilitate feedback to the measure developers that reinforces the value provided by the measures.

Additional development of de novo measures, along with the alignment of quality measure requirements across federal programs, will ease the burden on providers, streamline data collection workflows, and increase the success of provider participation in the adoption and use of health IT, and will spur further growth of health IT-enabled measures.

6. *Describe **how quality measurement and “real-time” reporting could inform clinical activity**, and the extent to which it could be considered synonymous with clinical decision support.*

Clinical decision support is designed to ensure that safe, high quality clinical care is provided. Quality measurement is designed to show the impacts of these processes on clinical outcomes. Measurement that takes place after the process has been performed can provide a retrospective view of processes, but measurement that takes place at the time of, or even prospectively, can influence and improve care processes. At that time, quality measurement becomes virtually indistinguishable from clinical decision support.

However, to enable prospective and real-time use of quality measurement inputs, they need to be tied more closely to the implementation of quality and patient safety processes (e.g., evidence-based guidelines). This linkage will create a need for quality measurement that is based upon the clinical data used to provide care, rather than data that is gathered for other purposes (e.g., billing and administration).

7. *Among health IT-enabled quality measures you are seeking to generate in a reliable fashion, including the currently proposed Meaningful Use Stage 2 measure set, what types **of advances and/or strategies for e-measure generation** if pursued, would support more efficient generation of quality measures?*

The EHR Association strongly supports the framework of aligned performance measurement, alignment across federal programs, and more broadly with private sector initiatives by using the same or harmonized measures and, specifically, the need for technical alignment of measures. We would like to see this theme further developed in future eMeasure development, including the identification of misalignments.

For example, we support the use of common EHR data elements to address similar clinical concepts, along with the development of a library of standardized, endorsed “value sets” to be used by measure developers when creating or retooling endorsed measures.

We believe that refining the NQF measure endorsement process for electronic measure specifications to address use of clinical data, along with the Quality Data Model (QDM), the QDM Style Guide, the National Library of Medicine’s (NLM) new Data Element Dictionary, and the Measure Authoring Tool (MAT) will assist with this alignment.

8. *Many EHR, HIE, and other health IT vendors are developing software code to support measures. Tools such as the Measure Authoring Tool (MAT) were created to improve efficiencies in the process of creating and implementing eMeasures. What **additional approaches might be used to enable consistent, accurate, and efficient quality measurement when using health IT?***

With the evolution of quality measures into the eMeasure format, the fundamental requirements of the measure development community change. Historically clinical expertise was the main requirement for robust quality measure development. As we move into the use of technology, the development team must now include individuals who understand technology from the following perspectives:

- Data capture and integration – measure developers need to have an understanding of the way data is captured and stored in health IT, and how this fits into clinicians’ workflows. This impacts an organization’s ability to obtain the necessary data elements for reporting.
- Workflow – measure developers must understand the impact of data collection at the point of care and how the data collection process can impact clinical workflows.

Education and augmenting teams with new skill sets will help aid in the development of accurate eMeasures.

9. *How do you see the establishment and adoption of data standards impacting the future of health IT-enabled quality measurement? For what types of quality measures **should a combination of natural language processing and structured data be considered?***

Natural language processing (NLP), while greatly advanced in the last decade, has still not developed to a level of clinical accuracy needed for providing care. Human intervention is still required to enable NLP to achieve that necessary level of accuracy. We are hesitant to suggest that NLP be widely used in quality measurement initiatives, but would encourage focused experimentation in high priority areas where there is a great deal of narrative text.

10. *Much support has been voiced for the need of **longitudinal data** in quality measurement. What are the strengths and weaknesses of different information architectures and technologies to support health IT-enabled quality measurement across time and care settings? How can data reuse (capture*

*once, use many times) be supported in different models? What examples might you provide of successful longitudinal health IT-enabled quality measurement (across time and/or across multiples care settings)?*

As mentioned earlier in this response, focusing too much on a specific technical infrastructure can inadvertently discourage or inhibit new and innovative methods for accomplishing the same goals.

That said, EHR developers seek ways to capture data intuitively as part of the charting workflow and then to use that data for quality reporting, understanding that our users can be frustrated when quality measures require specific charting only for the purposes of a quality measure.

For example, some measures evaluate whether a lab value is within a certain range. This approach is well suited to data reuse, as lab values are commonly already present discretely within the EHR. However, some measures seek to identify whether a clinician acknowledged that a lab value was within a certain range. This is more difficult, and requires explicit documentation for the purpose of that quality measure, and allows for less reuse of data.

We encourage the development of best practice guidelines for creation of measures that fit with clinical data being captured during provider workflow.

11. *What are the most effective means by which to **educate providers on the importance of health IT-enabled quality measurement** and how clinical information is used to support health IT-enabled quality measurement and reporting? How **can providers be better engaged** in the health IT-enabled quality measurement process?*

The EHR Association supports efforts to provide more education and better engage with all stakeholders, including providers, as we have expressed elsewhere in this response.

12. *What is the best way to **facilitate bi-directional communication between vendors and measure developers** to facilitate collaboration in health IT-enabled measure development?*

We welcome the opportunity to work with the measure developers, and have found this to be a very effective means of collaboration in the development of health IT-enabled measurement. There are several ways that this communication can happen. First, as technical expert panels (TEPs) are formed to begin the development of new measures, vendor representatives should be included on those panels. In addition, vendors should be involved in the field testing and piloting of the measures. As we stated in our response to question five above, we believe that collaboration between the measure developers and EHR developers provides a critical step in the successful development of de novo eMeasures, and provides the opportunity for education among different stakeholders.

13. *To what extent do you anticipate **adopting payment models that use quality measurement informed by electronic clinical records (as opposed to exclusively using claims data)**? What strategies are you pursuing to gain access to clinical data and test the reliability of health IT-enabled clinical outcome measures? How do you anticipate sharing quality measure results with consumers and other stakeholders?*

We hear from our customers increasing interest in payment models based on quality measures using EHR and health IT data. We see significant advantages to clinical quality measurement based on clinical rather than administrative data.

14. *What **tools, systems, and/or strategies** has your organization been using to **aggregate information** from various EHRs and other health IT for use in quality measurement? What strategies is your organization pursuing to move toward greater automation in quality measurement?*

As stated in responses to other questions above, we strongly support measures that fit with clinical data being captured during provider workflow. We believe that collecting this data in a more automated fashion will avoid the added expense of chart abstraction that has traditionally been required to support quality measurement.

As EHR developers, we are also strong supporters of robust, standards-based interoperability. We see interoperability as offering additional ways to incorporate more quality data within the EHR for treatment, clinical decision support, and quality reporting.

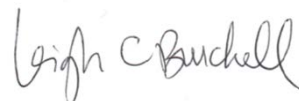
15. *Please **describe scalable programs, demonstrations, or solutions** (domestic or internationally) that show material progress toward quality measurement enabled by health IT.*

We have asked our members to speak to specific programs or demonstrations that they have participated in as part of their own responses to this RFI. The EHR Association would be more than happy to hear from you regarding programs and/or demonstrations that are seeking participants, and would encourage agencies that are aware of such programs to contact Pam Brewer, EHR Association Program Manager at [pbrewer@himss.org](mailto:pbrewer@himss.org).

Sincerely,



Michele McGlynn  
Chair, EHR Association  
Siemens



Leigh Burchell  
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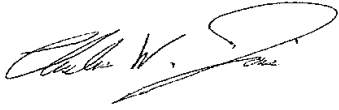
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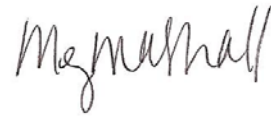
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#### **About HIMSS EHR Association**

*HIMSS EHR Association is a trade association of Electronic Health Record (EHR) companies that join together to lead the health information technology industry in the accelerated adoption of EHRs in hospital and ambulatory care settings in the US. Representing a substantial portion of the installed EHR systems in the US, the association provides a forum for the EHR community to speak with a unified voice relative to standards development, the EHR certification process, interoperability, performance and quality measures, and other EHR issues as they become subject to increasing government, insurance and provider driven initiatives and requests. Membership is open to HIMSS corporate members with legally formed companies designing, developing and marketing their own commercially available EHRs with installations in the US. The association, comprised of more than 40 member companies, is a partner of the Healthcare Information and Management Systems Society (HIMSS) and operates as an organizational unit within HIMSS. For more information, visit <http://www.himsssehra.org>.*