

Testimony of

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Good afternoon. Thank you for the opportunity to testify on this most important topic regarding the Glide Path to "meaningful use" of EHRs from a Provider perspective.

Introduction

My name is Judy Murphy. Let me tell you a little bit about myself and my career, in order to frame my comments. I am a nurse, and sit on the American Medical Informatics Association (AMIA) Board of Directors. I am the Vice president of Applications at Aurora Health Care, an integrated delivery network in eastern Wisconsin with 13 hospitals, 120 clinics, and 28,000 employees. Our providers include about 1,000 employed physicians, 1,800 affiliated physicians, and over 6,000 nurses. I have been involved in implementing health information technology (HIT) for 24 years, with custom program development and purchased vendor products, and in all aspects of the system lifecycle. I have led implementations in both the acute and ambulatory care venues – including ePrescribing, computerized physician order entry (CPOE), bar-coded positive patient id and medication administration, automated clinical documentation, and embedded evidence-based decision support for nursing and medical care. I live in the trenches of HIT implementation, with its governance structures, caregiver readiness and adoption issues, technology challenges and budget constraints.

I am thrilled to be able to address you today on something near and dear to my heart – how to implement and use health information technology to improve the quality and safety of care. I doubt there is any one in this room who would disagree that use of electronic health records (EHRs) is a lynchpin for transforming health care delivery and a key enabler of health care reform. The big question is: what path do we follow and how do we know when we've arrived? Hence, the need to define "meaningful use" and plan the roadmap to achieve it. I must add that I am not sure "Glide Path" is the appropriate analogy here. In healthcare we have often used aviation as a role model for safety records and flawless execution, but I don't think we can draw on aviation when we talk about reaching this goal – unfortunately, our path is not clearly guided by a radio beam, and is a lot more like an exploratory expedition than an airplane descent!

Summary

That being said, let me talk about some ideas that may be part of our radio beam. I've organized my comments around six key themes regarding the definition for "meaningful use" and the roadmap to achievement it:

- Interoperability
- Accessibility
- Personal Health Records
- Adoption
- Measuring Success
- Education

Each theme incorporates one of my biases - a very strong patient point of view. Nurses, in general have this partiality. There are 2.9 million practicing Registered Nurses, who comprise 55% of the U.S. health care workforce. As the providers who spend the most time with patients, particularly in hospitals where we are the caregiver and patient advocate 24/7, we have always had a solid focus on seeing things from the patient's vantage point.

Interoperability (Patient as Center of the Universe)

Others have and will testify on the importance of interoperability and the electronic exchange of standardized patient data between clinical and administrative stakeholders. This is a given criteria from my point of view, and is extremely important for the many safety and quality reasons described by others. I support the need for standards harmonization between Healthcare Information Technology Standards Panel (HITSP) and Integrating the Healthcare Enterprise (IHE), as outlined in the HIMSS written statement submitted to you this week. I also support their recommendation to have Standards Implementation Guides published by these groups by 2012, similar to what was done with HL7 and DICOM.

I'd like to focus my personal comments on a more narrow aspect of interoperability to emphasize why this is so important to our patients. Just as Aristotle saw the earth as the center of the universe, so we in healthcare had a hospital-centric view and an illness-based model. During these times, we had hospital-centric patient records which were non-transportable to other care venues. Of course, subsequent to Galileo and Copernicus's studies, we now know that the sun is the center of the universe. Similarly, our health care model has migrated to a continuum of care view; a wellness/health maintenance model, with increased emphasis on ambulatory and home care, and the patient as the center of the universe. Yet our patient records have not kept up. They are not patient-centric; they do not span the continuum of care; and they are transportable between care providers.

Ubiquitous Accessibility (Anytime, Anywhere Access)

Health care professionals are knowledge workers, and must deal with huge amounts of health care data, as well as ever-changing knowledge of best practice. Two simple, yet very key, points here. The EHR needs to be able to assist the provider in distilling the barrage of data into information, deciding what's significant, and making good decisions. Second, access to that information needs to be anytime and anywhere - not limited to proprietary hardware, but ubiquitous like the web.

The distillation involves intelligently-filtered patient information and decision support in all its forms, including data displays in flowsheets and graphs, as well as care management alerts and reminders. It includes the embedding of evidence-based practices for nurses and physicians in the form of care plans and order sets – and “hard-wiring” the evidence-based care steps, making it easier to do the right thing. This speaks to the ability to get at patient data and make decisions about patient care in a way that was never seen with a paper chart. From an implementation standpoint, this is often the carrot

that draws providers to value the EHR, it includes features and functions that are relatively easy to achieve adoption with, and should be one of the first milestones we consider rewarding.

Tethered Personal Health Records (Patients Co-Managing their Care)

The HIT industry has just begun to tap into the potential of eHealth and the value of patients participating in their own care using web-based tools. Often this is seen as a “self service” option, and possibly as a productivity enhancer for the healthcare organization. But, opening our registration systems and scheduling books so patients can arrange appointments when it is most convenient for them serves the more important purpose of demonstrating that they are a true partner in their care. Furthermore, to have patients update their demographics, insurance, allergies, and medication lists puts the accountability for the accuracy of this information, not only where it belongs, but where the source of truth lies. There is no other part of the human experience where such a passive role is played as we see by patients in managing their own health care today. This needs to be turned around if we are to be able to get to the next level of care quality. It is the patient who is the constant across the care continuum, and it is by focusing on the patient, and not the care venue, that we can create the seamless integration needed in order to have the information to provide the best care.

I believe this area has the largest potential for impact on the quality of health care. Online storage of immunizations records, advanced directives, medication lists, and medical histories in a Personal Health Record tethered to an EHR allows the patient and practitioner to co-manage the patient’s care. Our challenge is clear, though - not only do we need to give patients the opportunities to participate as true partners in their health care; we need to convince them of the reasons why that makes sense.

Technology Adoption (HIT as a Means to an End and not an End unto Itself)

We are in the business of healthcare, and successful IT projects are not about the implementation of technology, but are about the clinical changes and patient impact that is enabled, supported, and facilitated by the technology. Many who work in HIT have long heard the mantra that technology adoption is 10% about the technology solution and 90% about sociocultural issues such as change management, leadership, risk tolerance, incentives, and so on.

In our implementations of information systems for nurses and physicians, the importance of planning and executing the project as a *practice* change that is being *facilitated* by technology cannot be over-emphasized. The HIT needs to take a supportive role to the people/process/practice change being enabled by the technology. We need to ensure that HIT implementation is seen as the *means to an end*, and not as *an end unto itself*. This leads directly into ensuring there is clarity around the purpose of the HIT, as demonstrated by outcome measures.

Measuring Success (Outcome, not Process Measures)

Considerations for incremental maturation of EHR functionality and corresponding reporting measures must be incorporated into the definition of “meaningful use”. I support the maturation model proposed by HIMSS in their written statement, outlining three phases of not less than 2 years, each with identified functionality milestones and outcome reporting measures.

It will be important to incorporate process measures, including implementation metrics of specific features and functions during a defined phase (for example, the implementation of CPOE, 5 rights checking during medication administration, bar-coding, patient education, etc.). However, the true measurement of success needs to be focused on clinical and business outcome measures, focusing on the National Quality Forum (NQF)-endorsed quality measures that align with national quality and performance goals.

Informatics Workforce Education (10,000 Trained by 2010)

From an implementation standpoint, I would be remiss if I did not mention the need for an informatics-trained workforce capable of executing the daunting task we know is ahead of us. We need nurses and physicians who can do this right. In 2005, AMIA created a “10 X 10” Program, with the goal of training 10,000 healthcare professionals in applied health informatics by 2010. We need more programs like this, as well as other educational options, in order to ensure that the EHR implementation and use we achieve is truly “meaningful”.

Closing

Thank you for the opportunity to share my thoughts on the 'Glide Path' to meaningful EHR use from a nurse and health care provider perspective. I will be happy to expand on my points or answer any questions you may have during the Q & A time.