

HIT Standards Committee Implementation Workgroup

Hearing on Implementation Starter Kit: Lessons & Resources to Accelerate Adoption

Panel: Implementation Experiences (paired provider & vendor)

March 8, 2010

9:00 a.m. – 4:00 p.m.

Mayflower Hotel | 1127 Connecticut Avenue, NW | Washington, DC

Maria Rudolph, MPH

Vice President – Medical Informatics and Government Relations

e-MDs with Dr. Jen Brull (AAFP)

My name is Maria Rudolph and I thank the workgroup and Dr. Steve Waldren from the AAFP for inviting e-MDs to participate at this hearing. e-MDs is an ambulatory EHR solutions provider with headquarters in Austin, Texas. We are a medium-sized privately held company created by a family physician, Dr. David Winn, to improve the practice of medicine and delivery of patient care through the use of HIT. Our integrated PM/EHR product, Solution Series, is CCHIT-certified, including specialty certification for Cardiovascular and Maternal/Child Health. We are highly rated by industry surveys such as KLAS, as well as physician-centric surveys sponsored by the ACP and AAFP.

In my role as Vice President of Informatics, I work among e-MDs staff and external stakeholders as a conduit for knowledge sharing as well as serving as a physician advocate. My primary responsibility over the last year has focused on acceleration of EHR adoption, particularly in the context of the HITECH Act and Meaningful Use. The following testimony reflects our implementation experiences within e-MDs and our plans on how to advance our customers from purchasers to meaningful users of EHRs.

Vendor Questions

- 1. Your customer partner has identified solutions for meeting the requirements of meaningful use and quality reporting. In your role of supporting your customer, please expand on possible solutions and provide other solutions being used in your customer base.***

Dr. Brull has identified the exchange of information across the community as an area that will prove challenging for her practice, particularly with lab result interfacing, connectivity to an as yet non-existent HIE, and immunization information exchange.

With regard to the lab interfacing and associated costs, we have found substantial variability in the willingness of hospitals and laboratories to subsidize interface costs. Reference labs and some hospitals will pick up the interface cost for physicians if there is sufficient volume generated to justify the subsidy. With 75% of Dr. Brull's lab orders filled by her local hospital, it would seem practical for the hospital to invest resources on this interface, but budgetary constraints also play a part in these decisions.

What could potentially drive down the cost of interface development and validation on our end is the widespread adoption of a single lab standard; to date, we have seen little uptake of the ELINCS specification that constrains the HL7 message format and promotes use of a LOINC codes subset that covers a significant number of lab results. Most lab systems use a version of the HL7 2.x standards, but not in the way ELINCS has constrained the message; we continue to see non-standard or "Z" segments in messages as well as lack of use of LOINC codes. In other words, each lab interface is a unique interfacing effort, requiring substantial vendor development costs, because we cannot leverage a reusable standard.

The connectivity to Dr. Brull's public health immunization registry is not so much an issue of using the CDC format, but in overcoming some design issues in our software and in the registry's application. There have been recent changes both in the vendor program deployed by the public health agency and our software and we anticipate being able to resolve Dr. Brull's connectivity issues in time for her to achieve Stage 1 meaningful use. We currently have connectivity in several other states, so this is not an issue of our inability to connect to registries. What remains challenging in general is that not all state registries have adopted the vetted CDC format for immunization data exchange and we have identified this as an important issue in our comments and those of the EHR Association on the CMS NPRM and the ONC IFR.

Lastly, although there is currently no HIE in Dr. Brull's area with which we can exchange data, we would like to emphasize the need to have a single "best practice" standard to connect to these entities. Our products are certainly prepared to support the HITSP and ONC IFR standards for interoperability, including CCD and XDS. As with the lab companies, there is no certification requirement for HIEs to adhere to a specific interoperability standard; we have seen in our current relationships with regional HIEs a variation in requirements to connect. This variability is costly, and fundamentally unnecessary, given that there has been continuous, accelerating adoption and support of key interoperability standards among vendors, namely the constructs defined through the HITSP process, tested in IHE Connectathons, and implemented in multiple production sites. I'd like to make the point that there has been a view that being prescriptive in the standards area is undesirable because it stifles innovation; although flexibility is certainly needed in the development of user interface, user experience interactions and workflow, interoperability, to be truly seamless, requires standardization on both content and transport. We urge ONC to advance the use of standards-based interoperability for HIEs and otherwise, using the work by HITSP, in its work with the ONC-funded state HIE efforts.

2. Describe your roadmap for moving from where you are today to having software that supports the Level 1 "meaningful use" criteria which is able to be certified.

We have been a CCHIT-certified ambulatory EHR since 2006; our current 2008 certification includes specialty certification in Cardiology and Maternal/Child Health. As a comprehensive EHR solution, our gap analysis revealed that our combined PM/EHR applications will be able to meet the ONC IFR meaningful use-driven certification criteria as we currently understand them. We have identified the need to expand some of our reporting and data collection capability based on our current interpretation of both the HIT functional and clinical quality measures.

In the past, we have tried to streamline our customer's reporting burden by recommending clinical measures that are widely reported in a primary care/Medicare setting and have developed "canned" reports on such measures, e.g., those that focus on chronic conditions such as diabetes and cardiovascular disease. We have taken this approach because our experience with small and solo practices has indicated that there is a lack of resources and knowledge specific to custom report writing. Even practices with their own IT support require knowledge transfer about our data model. Although the number of measures on which an individual physician must report is intended to be few, e.g., 6-8, the aggregate number for which a vendor must be responsible imposes a significant burden on all aspects of the development team including testing and quality assurance, especially as many of the proposed measures do not have validated, defined EHR specifications and there is not, as of yet, a readily consumable electronic standard for reporting quality measures, although one is under active development.

A specific task for us is to ensure that all data elements relevant to the HIT functional and clinical measures can be easily collected electronically without additional undue burden to our customers. We currently use ICD-9 and CPT as the underlying coding for our documentation; we have already begun work to ensure that more of our data, especially that which needs to be queried for reporting, is structured and coded.

Finally, we are evaluating how to best expand our reporting capabilities; we have developed a roadmap that allows us to incrementally increase our portfolio in a safe yet efficient manner to meet the needs of our customers as they progress through the three stages of meaningful use. Our first phase is the creation of additional reports for each of the measures as defined in the CMS NPRM; we feel that this would be the easiest and quickest path for our customers to report on meaningful use. Our second phase is based on the business case for creating an ad hoc reporting tool that would use predefined clinical views based on our interpretation of what data sets are needed for core measures as well as each specialty set of measures and those beyond what are currently identified in the CMS NPRM. We have found the need to provide the initial clinical view, as most of our clients, typically small and solo practices, do not have the database query and report writing skills to successfully manage a tool like Crystal. The third phase of our approach is the development of a full-blown OLAP data warehouse for all of our clients. The benefit to this approach is the potential to provide benchmarking and more immediate feedback to clinicians about their QI efforts; we have heard many of our customers' concerns about the lack of timely feedback from CMS on their PQRI reporting and this solution would remove the burden from the practices.

3. *In executing this roadmap, what do you feel is your greatest challenge and why?*

Our biggest challenge in executing this roadmap, with Stage 1 Meaningful Use certification as the goal, is the need for finalized certification criteria and test scripts. Most EHR development teams will attest to the fact that we are under a very compressed development cycle given the legislative timeframe around the initial meaningful use dates for both ambulatory and enterprise systems. Development roadmaps at our company typically encompass an eighteen month timeframe from initial concept through deployment as a generally available release; two factors that affect cycles are the complexity of an EHR system and continuous attention to potential patient safety issues. Without clarity about what and how functions are tested, we foresee some challenges in getting our customers upgraded to the ARRA certified version of our software. I will note that we are extremely pleased with the progress reflected last week by ONC with its temporary certification proposal and by NIST in beginning to release testing methods for specific certification criteria.

4. *Outline the tools that you are providing to your customers to facilitate their ability to demonstrate the Level 1 "meaningful use" criteria and receive the CMS incentive payments.*

As Dr. Brull states in her testimony, our implementation team has a reputation for strong customer support. We believe in education of both our existing customers as well as those who are beginning to look at adopting EHR and have developed a multi-pronged outreach program that includes hosted webinars, website collateral and outreach to clinician stakeholders that are active in EHR adoption activities, such as the AAFP and ACP.

In addition to these freely available resources, we also have developed a package of implementation and training services focused on practice optimization and use of our system to achieve meaningful use. This effort has expanded to include development of implementation guides for other quality improvement programs such as the patient-centered medical home and PQRI.

For customers who do not have the time for our recommended instructor-assisted training, we also offer e-learning sessions. Our e-Learning via a Learning Management System (LMS) package provides role-based on demand training that is customizable for all types of system users.

Thank you again for this opportunity to share our experiences with the Implementation Workgroup.