Standards Insight

An Analysis of Health Information Standards Development Initiatives

November 2005

This information, prepared as a benefit to HIMSS members, is **not** for public distribution. Parts may, however, be incorporated into internal and external communications. Attribution as to source is appreciated. The Standards Insight is an independent business analysis of health information standards development initiatives. It does not necessarily reflect official positions or opinions of the Healthcare Information and Management Systems Society. Your comments on this publication and HIMSS standards development analysis reporting efforts on your behalf are valued.

Katrina Floods HIT with Lessons Learned

Introduction

Health Level Seven (HL7) held its Annual Plenary Meeting in mid September. The ubiquitous Dr. David Brailer, the National Coordinator for Health Information Technology, was the keynote speaker. He covered much familiar ground, offering some tough love for standards developers. However, he first recapped lessons learned from Hurricane Katrina. The loss of many paper and some computerized health records compounded the medical emergencies of many evacuees in predictable manners. In particular the lack of prescription and medication data became the most acute and widespread problem in providing care to evacuees. Brailer pointed out that these experiences not only argued for regional health information systems, but also for patient centric records that support a mobile population - two key elements of his strategic framework.

It will be interesting to see what Washington does with these “lessons.” One implication of Katrina is that even a fully distributed, peer-to-peer system with intact EHRs would not have survived the physical loss of computers and facilities in New Orleans and other parts of the Gulf Coast, unless it had a strong offsite back-up. This fact, coupled with the widespread prescription problem, led to the formation of KatrinaHealth.org, a public-private group to provide online access to prescription medication records, assembled from multiple sources. This may become a model for the federal government setting up regional and national prescription databases to handle such emergencies, as well as routine prescription access. This argues for a centralized data repository within a regional

or national network. The federal government, now sensitive to widespread disaster preparedness and still facing the threat of terrorist attack, may preempt some of the proposed NHIN pilot projects, e.g., the Santa Barbara model.

Most of Dr. Brailer's talk was addressed directly to the HL7 standards developers, using this platform to articulate the message that the standards infrastructure is broken. He acknowledged that there has been little input from industry or government in terms of requirements, support or leadership. The huge intellectual talent pool among standards developers has often debated and focused on things of interest to them, not necessarily on addressing real world priorities. Standards groups have focused on data problems, not business problems. Moreover, without any great consequence, standards developers have become competitive, representing their theoretic interest, not external constituents. Thus we have standards that are overlapping, fragmented, ambiguous and yet still full of gaps, creating risks for any vendor or user trying to choose or implement standards-based systems.

The SDO Reality

Brailer does have us pegged. Next on the plenary session agenda, HL7 invited key standards development organizations (SDOs), including ASTM, NCPDP, SNOMED and ASC X12N, to update the HL7 membership on their respective activities and cooperation with HL7. HL7 and ASTM Committee E31 on Healthcare Informatics, despite memos of understanding and press releases, are competing over the technical implementation of the Continuity of Care Record (CCR). In fact ASTM has formed an Acceleration Task Group for its CCR and HL7 has developed its own Care Record Summary (CRS). Integrating the Healthcare Enterprise (IHE) will demonstrate the interoperable CRS at the Interoperability Showcase at HIMSS 2006 Annual Conference and Exhibition. Even as HL7 and X12N celebrate their joint effort resulting in a notice of proposed rule-making for the HIPAA electronic claims attachment, they dance around XML and clinical message formats. SNOMED may be the reference terminology of choice in the United States, but it still has significant vendor and international resistance to its licensing and business model, which is now in the process of being reworked.

Finally we have noted the importance of e-prescribing, now reinforced by the Katrina experience, and the relationship between HL7 and NCPDP. Last year, both SDOs formed a collaborative working group to map HL7 medication messages to NCPDP SCRIPT. This mapping is designed to let prescription messaging flow bi-directionally from inpatient and outpatient institutions using HL7 messaging and physician practices and pharmacies using SCRIPT messaging. The mapping and documentation are complete, at least for the basic prescription messages. However, there is no plan for moving forward together even as HL7 moves further into medication prescribing, dispensing and administration in the ambulatory setting in order to support its international affiliates.

HL7 Inc.

HL7 is exhibiting all the signs of a free-wheeling start-up forced to mature into a formally structured and managed business. Those in our industry that have seen a company go from $5 million to $25 million in sales know the drill. HL7 has increased its full-time staff, is adopting project management methods and has even commissioned a strategic planning project with outside consultants.[1]

HL7 is facing a surge in participation by new clinical constituencies as it moves further into electronic health and summary records. New clinical special interest groups are forming for pediatrics, emergency medicine, cardiology and anesthesiology. This expansion is orthogonal to the technical standards structure of HL7 but necessary if standards are to be driven by business, i.e., clinical, requirements. Expansion is a good problem to have; both necessary and valuable, such clinical interests further divide the membership interests and efforts while increasing the coordination problem.

The international affiliates continue to be a growing force within HL7 because in most cases they are committed to using the new HL7 Version 3 standards in national HIT initiatives and must have solutions. Until the recent push by the Administration to have interoperable EHRs, most vendors and users in the United States were comfortable with existing Version 2 messaging standards. Dr. Brailer gave little comfort to international needs and harmonization although allowing this was a theoretically good objective. It will be extremely important to see if any of the NHIN pilot projects propose using HL7 Version 3, rather than Version 2.x, with the exception of the Clinical Document Architecture. The requirements of the NHIN and the size of the U.S. HIT market may alter focus and priorities within HL7 away from advancing Version 3.

A further point of interest is the key role that consultants now play in HL7. A survey from the HL7 Marketing Committee shows that almost 70 percent of “high-level of activity creators” are consultants. Vendors and other standard developers equally represent the remaining 30 percent. There is virtually no one in the high activity class from the government, from providers, or payers. The current officers and board reflect the same make-up. Not surprisingly then, the survey shows that two thirds of the high level creators are paid directly for working on standards. As a consultant, I will not pick up the first stone, but this does point to the evolution of a volunteer organization into a highly specialized technical organization one step removed from direct users, perhaps concerned more with projects not results. Brailer, in his talk, noted that standards are about money, power and control.

Concluding Thoughts

Dr. Brailer “gets” the standards interoperability problem but will that lead to solutions? The director of IT management issues for the General Accounting Office recently told a Congressional committee that the Office of the National Coordinator (ONC) gets an “A” for leadership and vision but an “incomplete” for implementation. That is a fair

---

[1] We tackled this controversial subject in the October 2002 issue of Standards Insight.

statement. We know that implementation starts with awarding the four ONC contracts for standards harmonization, certification, privacy and security policies and the national health information network (NHIN) prototypes. We also know that these four projects are to be coordinated through selection of common use cases. The first year set will deal with ambulatory or physician practice delivered care. The second contract year will focus on inpatient use cases and the third on infrastructure use cases. While this approach makes sense from a project standpoint, does such sequencing insure that they create a strategic whole? For example, while the standards harmonization project is focused on developing a process to recommend standards, both the process and recommendations must look beyond year one use cases. Brailer, in his remarks, described the important role of the American Health Information Community (AHIC) for identifying breakthrough areas and setting priorities, e.g., picking use cases. The AHIC membership was described as decision makers, although except for the SureScript CEO, none are from the HIT industry. If they probe deeply enough with domain experts, they may select the right use cases that build to seamless information flow across all care settings that meets all the needs of patients, providers, payers and secondary users, such as public health. It will be incumbent on ONC and its project manager to insure that AHIC's willingness to make decisions is informed by strategic consequence. We are all aware that ONC and AHIC have the opportunity to either coordinate these strategic initiatives towards interoperable EHRs and the NHIN, or misdirect them.

Please direct any questions, suggestions or comments regarding *Standards Insight* to Joyce Sensmeier, HIMSS vice president of informatics, at jsensmeier@himss.org or to its author Ed Larsen at erlarsen@erlinc.com.