



Standards Insight

An Analysis of Health Information Standards Development Initiatives

January 2004

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2004 Outlook for Interoperability Standards

Introduction

In order to look ahead to 2004, it is helpful to look back on five major events in 2003 that will shape future interoperability standards initiatives. To do so, it is useful to frame these initiatives within the context of information technology and the problems that have been identified at a national level in finding effective healthcare IT “solutions.”

1. The National Committee on Vital and Health Statistics (NCVHS) issued its recommendations on core terminologies becoming voluntary national standards. NCVHS acknowledged the need for further integration of these terminologies within a context such as a message, record or document.
2. The Institute of Medicine (IOM) released its third report on patient safety and explicitly called for federal help to insure the development and use of interoperability standards. This continues the increased attention being paid to patient safety problems and calls for standards and IT, but without an identified strategy, framework or roadmap.

3. The Department of Health and Human Services (HHS) asked the IOM and Health Level Seven (HL7) for an electronic health record (EHR) functional model and standard, which would potentially be used with a pay-for-performance demonstration. Here we have high-level business requirements that may have quickly leaped past strategy into technical specifications.
4. The Medicare Prescription Drug, Improvement and Modernization Act, which includes many standards-related provisions in addition to its new drug benefit and reform demonstrations and projects, was passed by the US Congress. The bill clearly seeks IT-enabled solutions in multiple directions.
5. HHS delayed compliance with the transactions and code sets standard of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) by implementing a contingency plan to temporarily accept non-compliant transactions.

These events and the impending reactions will shape 2004 and serve to remind us what can happen when we fail to work through all the steps of an IT solution.

Outlook for 2004

One can hardly miss the obvious point that all of the five events from 2003 involve the federal government. It is clear that Washington is setting the healthcare IT and interoperability agenda. Some of the impact from this federal involvement is focusing the market on the adage “be careful what you ask for.”

The Medicare bill recasts the strategic landscape and includes a series of standards related provisions. Perhaps the most noteworthy is the electronic prescription program (Section 101). While e-prescribing has taken the voluntary form in the Senate version of the bill, it is not voluntary in terms of designating standards for e-prescribing. Moreover, the functions within the section are not simply electronic script writing but include elements of an ambulatory medical record—specifically, a medications administration list and decision support for drug-to-drug interaction. These federally designated standards, to be recommended by NCVHS, will eventually be adopted by regulation or market acceptance so control will be extremely important within the standards-industrial complex.

But the Medicare bill goes much further in “focusing” standards initiatives. Section 1012 establishes a new independent commission to “develop a comprehensive strategy for the adoption and implementation of healthcare IT standards that includes a timeline and prioritization for such adoption and implementation.” The commission’s charge is to consider cost benefits, demands on industry such as HIPAA and the most cost-efficient means for industry to adopt these new standards.

The commission will be similar to NCVHS in its structure and operations (although it will “dissolve” after completing its report), with members appointed by the president and Congressional leaders. It is explicitly not to interfere with other standards processes or replicate the National Health Information Infrastructure (NHII) initiative. However, the commission will become a significant arbiter of winners and losers, displacing NCVHS, American National Standards Institute (ANSI) Healthcare Informatics Standards Board, Consolidated Health Informatics and private industry standards “coordinators” such as the eHealth Initiative.

The bill also authorizes three additional IOM reports and various demonstration projects to determine how to provide more effective and efficient healthcare enabled by healthcare IT. We, of course, do not know what impact these reports or projects will have. Much will depend on the president’s administration and Congress. But it is clear that the current Washington scene is very intent on trying new things.

As we look at the detailed “micro” provisions and our vested interests, we should not ignore the big message: the president’s administration and Congress are looking for ways to transform Medicare around the principle of paying for quality care. Within that context, they are looking for healthcare IT solutions—not studies, standards and commissions to fund. That is why the big winner in 2004 will be the solution that provides a coherent executive level roadmap and strategy to meet business requirements and solve the EHR problem.

EHR Standards in 2004

The EHR remains at the center of any IT solution to improve care and control costs. We will look more closely at the EHR next month. However, we should note that the HL7 EHR Special Interest Group is working on the next version of its EHR system functional model, with the goal of balloting in the spring. In its current draft form, it remains quite complex and is too detailed to serve as a high-level requirements document that sponsors and end-user organizations can use for policy and system evaluation.

Two EHR-related standards initiatives will generate more attention in 2004. These are the Continuity of Care Record (CCR) proposed by ASTM, an ANSI standard development organization, and the Integrating the Healthcare Enterprise’s (IHE) emerging EHR framework and roadmap. We discussed the CCR last month and noted that it is a proposed standard for exchanging basic patient data between one care provider and another to enable this next provider to have ready access to relevant patient information. The CCR is technology and vendor-neutral, and is offered in an XML platform that can stand-alone or can be transformed into the Health Level Seven (HL7) Clinical Document Architecture (CDA). At the content specification level, it is very useful in the context of e-prescribing and ambulatory records sharing.

IHE, a global initiative sponsored in North America by HIMSS, the Radiological Society of North America and the American College of Cardiology, has moved well beyond its traditional role of defining implementation profiles, using existing standards to automate workflow within imaging departments. A year ago, IHE formed an IT Infrastructure Committee to pursue enterprise-wide integration that would support the EHR. In an important conceptual breakthrough—now being vetted with key stakeholders—IHE is proposing an EHR profile model that divides the problem into the Care Record (CR) and the Longitudinal Record (LR) and related systems, using existing standards.

The CR is what we have described as the intra-enterprise EHR-S that enables a provider organization to improve the effectiveness and efficiency of its care delivery.¹ The LR is a distributed system of shared or published records based on directories, common integration profiles, such as security and privacy, and “translation” standards. The LR profiles can meet general or special needs, e.g., an all encompassing lifetime EHR or chronic disease management. The elegance of the solution is in decoupling the internal CR system from the external LR system. This has major advantages in terms of phasing and transitioning each provider’s system and of reducing the need/risk for all-encompassing data content and messaging standards—as long as the CR systems can support the published LR.

Predictions for 2004

The most immediate focus for interoperability standards groups will be to react to the new Medicare environment and position themselves toward a “win.” Thus, E-prescribing and its related ambulatory medical record and decision support systems offered by prescription drug plans will turn the focus toward the ambulatory care setting. The key interoperability players will also seek to participate in these new commissions, demonstration projects, IOM studies and metrics analysis. Washington will soon be the focal point of the standards industrial complex. The breakthrough may come if the IHE model is understood and accepted by Washington policymakers and industry executives. The IHE model is an organizing framework for existing standards that moves toward actionable EHRs for individual provider organizations as well as between providers and secondary users.

In closing, we must note that while we move toward EHR standards, the HIPAA elephant still lurks around the corner. The HIPAA Administrative Simplification, conceptually envisioned 12 years ago and passed into law 7 years ago, is now “indefinitely” delayed. This should be a cautionary tale for all those that expect new laws and regulations to help us attain a functioning NHII and interoperable EHRs.

¹ See last month’s discussion in *Healthcare IT News: HIMSS Insider*. A similar concept of the EHR is illustrated in Figure 3 of the *Standards Insight* for April 2003 at www.himss.org/asp/standards_insight.asp.

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