



Standards Insight

An Analysis of Health Information Standards Development Initiatives

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Checkpoints for the National Healthcare IT Strategy

We have tracked with great interest the growing Washington commitment to using 21st century information technology to transform our healthcare system. The President has set a goal of an electronic health record (EHR) for every individual within 10 years. To this end, the President issued an executive order in April creating the Office of the National Health Information Technology Coordinator, and the following month Dr. David Brailer was named to that post. The order requires Dr. Brailer to produce a strategic plan for the United States within 60 days. Dr. Brailer plans to use the July National Health Information Infrastructure Conference to introduce his preliminary plan. By the time this is published in early August, the plan will be available for review. Rather than speculating on its content, we offer several key elements to look for in assessing the strategy.

Is the individual EHR the focal point of the strategy?

Clarity of purpose is paramount in all great undertakings. To a large extent the coordinator's office is the result of the 2001 National Committee for Vital and Health Statistics (NCVHS) report "A Strategy for Building the National Health Infrastructure". This report not only described the national health information infrastructure (NHII) in terms of serving the needs of patients, providers, and population health but also called for a national coordinator. While infrastructure is necessary, it is not sufficient. We have

become bogged down in concepts of local health data exchanges and have lost a national vision. The President's goal of achieving an individual health record shared by patient and care providers should reset strategic purpose and focus.

Does the plan outline a framework for a nationwide health information infrastructure?

Previous NHII proposals have been based on a series of local health information exchanges, modeled on such efforts in Santa Barbara and Indianapolis, to be loosely linked at their boundaries to other local health information infrastructures (LHIIIs) through national standards. The Center for Information Technology Leadership (CITL) made a case that such health information exchanges could save \$87 billion a year. But upon inspection neither the local examples nor the CITL estimates appear to support a sustaining business case for either the providers or the exchange infrastructure. An LHII, however local is defined in the Internet era, may be a good model for organization and governance and a technical means to optimize data access and interoperability. However, it does not address the business case, and without clear national requirements and standards, it does not create the individual health record. The business case of aligned incentives and shared EHR requirements for coordinating care are nationwide problems and the substance of the NHII.

Does the plan propose aligning incentives to make the business case?

We have long held that it is the lack of a business case not technology that has slowed investment in EHR systems. A business case requires a strong economic analysis that identifies the flow of real costs and tangible benefits to enable better alignment of incentives. Current industry estimates of both costs and benefits are wide of the mark. Most hospital-centric healthcare organizations are currently implementing enterprise EHR systems based on their own return on investment (ROI) analysis. However, physician practices, where most ambulatory care is delivered, are not. While no one should expect payers to pick up the full cost of physician practice EHR systems, there is clear need for direct incentives for using an EHR system as well as for contributing to the shared individual EHR. Such economic analysis could also identify easy wins, such as changes to the Stark regulations to allow collaborative IT services. As noted above, health systems are investing in enterprise systems and could, with aligned incentives, provide technology and infrastructure for maintaining and sharing individual EHRs.

Is e-prescribing envisioned as part of EHR and NHII initiative?

It is apparent that e-prescribing as authorized under the Medicare Modernization Act must be aligned with the shared EHR and NHII or else it is otherwise duplicative. E-prescribing is a function of an EHR system, characterized by sharing individual patient information to coordinate care among prescribers, plans and pharmacies. Many of the proposed benefits of e-prescribing come from the use of decision support that in turn requires data from EHR systems. At the level of interoperability standards, coordination should be assured since the NCVHS recommends both e-prescribing and EHR standards to the Secretary of Health and Human Services. However, e-prescribing sets up new

agents, the prescription drug plans, and new incentives not common to EHR systems, and is mandated on a timeline much shorter than 10 years. The strategic plan should address convergence of these initiatives.

How will the national infrastructure be designed, funded and managed?

Since it is unlikely the NHII can be based on a pure peer-to-peer self organized and funded design, there will necessarily be new roles and entities comprising the infrastructure. Minimally, there will be new network, directory and repository services (or multiples if e-prescribing is not aligned). Functions will include identification, authentication and authorization services. Shared data stores or shared EHR application services must be made available to both providers and individuals. Dr. Brailer has made it clear that the Federal government should NOT provide the infrastructure, but it SHOULD provide a unified framework, contribute funding and incentives and assure the privacy and security sufficient to establish public trust.

Does the strategy require new EHR standards or does it begin with existing standards and plot a transition?

While there are many existing standards for exchanging clinical data, there are no widely accepted standards for either an individual EHR itself or for an abstract/summary EHR that might be shared among providers. Either the ASTM E31 Continuity of Care Record or the Health Level Seven (HL7) Clinical Document Architecture or both could be used as starting points, but these are container not content standards. SNOMED has been designated as the primary core reference terminology but it is not widely deployed or used by clinicians. The gap between codes and containers is the heart of the problem – what is the shared clinical content; what are the rules for including content; and what are the rules for sharing that content? These are clinical and business standards rather than technology standards.

Is the 10-year time line accelerated and how does the strategy use the planned local demonstration projects?

One of the challenges facing Washington policy makers in their desire to accelerate HIT investment is the lesson learned from HIPAA. Federally mandated transactions and standards did not result in speed or operational success. Can a series of demonstration projects, the majority of which are authorized and budgeted under the Agency for Healthcare Research and Quality, be redirected towards piloting systems for creating and using the shared individual EHR? Or will they simply remain interesting case studies pursuing diverse models of local data exchange?

Despite these questions, we are finally moving forward. We are encouraged by Dr. Brailer's early presentation of vision and principles. We do not expect that his 60-day strategy will fully answer all of the questions, resolve all of the issues or be acceptable to all. However, we do expect it will be a good start and his coordination is welcomed.

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