

February 6, 2009

To: Healthcare Information Technology Standards Panel
From: The Health Story Project
Re: Shovel-Ready Health IT: a blueprint for use of stimulus funds

The Health Story Project is an alliance of healthcare vendors, providers and associations that share a vision that all of the clinical information required for good patient care, administration, reporting and research will be readily available electronically – providing patients with a comprehensive electronic clinical record, or complete health story.

The greatest single waste of current HIT resources is the failure to leverage information that is already electronic; this occurs approximately 600,000,000 times each year in the U.S. when dictated notes are printed and the electronic source is not available for exchange and reuse. The economic stimulus provides an opportunity to accelerate transformation of dictation from paper to electronic data and to address this significant gap.

Following for your consideration is our perspective of a blueprint for using the stimulus funds to accelerate what we identify as “shovel-ready” health IT efforts.

Thank you for your consideration, and good luck with the article!

Sincerely,

The Health Story Project Executive Committee

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Shovel-Ready Health IT: a blueprint for use of stimulus funds

- Principles
- Do's
- Don'ts
- Summary

Principles

- Keep it Simple
 - Health IT is hard; if it were easy, it would have been solved before we had inventory tracking and accounting systems
 - "Every Complex System that Works Started Out as a Simple System that Worked," quote from "Systemantics" by John Gall.
 - Evidence of the truth of this law for HIT comes from abroad
 - where started simple, now have wide-spread adoption
 - where set entry point too high, either have little to show for it or went back and reset at a lower point (Finland, UK examples)
- Include Everyone
 - Most care is delivered within small, general practices (5 or fewer MDs)
 - Avoid "hospital head" syndrome
 - most informaticists come out of the complex, integrated enterprise environments;
 - what works there, even what is needed there, is not necessarily a precedent outside those environments
 - documentation for coordination of care can start with a fully-indexed patient record that supports good human decision-making
 - Avoid "my-ology" syndrome
 - most informaticists cut their teeth in pathology or radiology;
 - these are not necessarily good precedents for what is needed in an emergency, surgery or pediatrics department, much less so for what is needed for small, general practices
 - for example, the workflow in radiology is much more consistent and predictable than in the generalized HIT environment; while coded lab results are critical within an integrated care environment, a primary care physician seeing a patient for follow up also needs to understand the decision making process and plan of care, not just orders for new medications and lab results
 - The pay-off for electronic records is first from information sharing which lays the ground work for computerized analysis and decision support

- internally, a single practice will benefit immediately from sharing indexed records that complete the picture of care
 - sharing means between dissimilar environments (small to big, big to small; typically NOT sophisticated enterprise to another like facility)
 - in other words, make the Discharge Summary available, this simple step supports clinicians and also lays the groundwork for computerized decision support
- Use standards and the key standards are for data, not communication or infrastructure
 - Use of standards:
 - Avoid vendor-lock-in and promote “best of breed” purchasing
 - Ensure viability of information assets over time
 - Key is standards for data
 - Architecture, communications must be standardized, however, these will inevitably evolve
 - Major cost of new system is data conversion; if the data can survive, then, migration is always feasible
- Promote jobs across the largest spectrum of HIT workers
 - Re-train U.S.-based transcriptionists as knowledge workers using HIT to create EHR-compatible electronic documents instead of paper
 - This workforce of 98,000 is threatened by off-shore competition and speech recognition; instead, they can leverage the new technology, including natural language processing and template-driven standards
 - This affects a larger number than will be affected by technology purchase alone

Do's: What is Shovel-Ready?

- Transform dictation from paper to an electronic workflow:
 - The greatest single waste of current resources is the failure to leverage information that is already electronic; this occurs approximately 600,000,000 times each year in the U.S. when dictated notes are printed and the electronic source is not available for exchange and reuse
 - Today, 60% of data is captured in free form narrative. Let's take the right steps to feed this data into the clinical data repository.
 - Needed:
 - Standards for common document types: largely available, needs minor work to complete (www.healthstory.com) and to roll into HITSP recommendations
 - Low-cost content management solutions customized for use of these standard document types; there are many candidate products; an RFP here would yield a range of solutions
 - Certification criteria that recognize these HITSP recommendations and the functional requirements for EHR-

- compatible content management; do-able within one year with support for functional specification development and ballot through HL7
 - Training in use of template-driven electronic document standards for both transcriptionists and dictating physicians
- Target the complete patient-centric record
 - Define the initial target of HIT exchange (HIE) as a simple collection of electronic documents that come from dictation, lab and EHR systems (there are already HITSP specifications for EHR system and lab output that are compatible with dictation, all are Clinical Document Architecture - CDA)
 - Nullify privacy concerns by placing this record under the control of the patient or the patient's proxy (model used by GoogleHealth)
 - Create incentives that value the completeness of a record above the completeness of its underlying coded semantics
 - Today, a record can be complete or it can be coded, it cannot be both; if we achieve the former, it will provide immediate benefit to providers, will not disrupt current workflow and lays the groundwork for later code-driven automation. If we push too fast for the latter, we risk the entire enterprise.
 - Narrative within these standard, structured electronic documents can support automated data extraction through natural language processing
 - Incentives that encourage collecting the complete patient record in standard electronic documents provide immediate payback and support integration into the EHR system
 - Support a free-enterprise business model for HIE
 - Integrate with reimbursement by using these electronic documents for claims adjudication (can be similar to the current NPRM for Claims Attachments, but much simpler using the source documents themselves). Trial implementations have found that the simple, narrative form is available; while this will not automate adjudication, it saves up to \$30 for each document that need not be processed on paper.
 - Report-receiving agencies (CMS as the most important, also CDC, state and local public health entities, research, Quality Improvement Organizations, etc.) establish graduated incentives based on degree of reusable coding within the electronic documents
 - Benefits accrue to providers and, to extent permission is granted for rights that extend beyond payment, treatment, operations, to patients who grant those rights

Don'ts: Directions that Threaten the Entire Enterprise

- Geographical model for HIE

- Doesn't match reality of the delivery of care (is local, doesn't faithfully follow geographic, political boundaries - exceptions are the rule)
- Is inflexible and does not allow for patient/consumer choice, essentially, establishing a local monopoly.
- EHR as pre-condition to play
 - Too complex, too steep an initial step for small practices (and for many larger ones)
 - Not needed for many point-of-care communications and benefits
- Attempt to drive adoption through a steep increase in mandated, coded reporting
 - It's too hard
 - Accessible and feasible to the few
 - We are still working out the bugs in what it means to do quality reporting, pay for performance; let's do that before we risk all through a mandate

Shovel-Ready HIT

1. Complete and promote use of standards for electronic documents
 - method: complete the standards, recognize through HITSP; provider incentives to adopt as RFP check-off
 - metric: percentage of the 600 million notes dictated each year increases by 10-20%; within 4 years, more than 50% of dictated notes can comply.¹
2. Augment CCHIT criteria beyond EHR to encompass EHR-compatible content management
 - method: use HL7 EHR Interoperability functional model and CDA4CDT (Health Story) specifications
 - metric: new CCHIT criteria by 2010
3. Issue an RFP for standards-compliant low-cost content management
 - method: RFP through ONC; criteria are compliance with HITSP data and communication standards and CCHIT functional criteria (essentially, an low-tech, commercial CDA/XDS-based system)
 - metric: within two years, there are at least six commercial systems available, affordable to small practices (annual cost of operation below \$15,000)
4. Establish market incentives for complete, patient-centric, patient-controlled health repositories/exchanges

¹ NOTE: about 5% *already* comply because it is simply more efficient for the transcription companies to do it that way. The little-known secret success story of HIT standards is that approximately 4,000,000 CDA documents are produced each year solely as an aid to productivity. Let's take advantage of this resource to jump-start information sharing.

- method: use market power of CMS, reporting agencies to provide incentives for access, offset by savings on cost of access to paper charts
- metric: within two years, nationally-available HIE repositories offer services that comply with these incentives

Examples of shovel-ready projects:

- For providers who achieve 95% standards-compliance in their EHR-compatible electronic documents, reimburse 50% of the cost of an EHR-compatible content management system.
- For providers who can make available 80% of their clinical documentation to HIE/PHRs (with patient consent, of course) reimburse 50% of the cost of their communications infrastructure.
- For transcription service providers, underwrite the cost of transcriptionist training on use of the standards.
- For providers, underwrite the cost of training on use of the template-driven electronic documents.
- For standards developers, underwrite the cost of completing the series of electronic document specifications and the cost of supporting their integration into HITSP and CCHIT recommendations.