

**Health Information Technology Standards Committee
Final
Summary of the January 25, 2012 Meeting**

KEY TOPICS

1. Call to Order and Opening of the Meeting

Mary Jo Deering, Office of the National Coordinator (ONC), welcomed participants to the 32nd meeting of the HIT Standards Committee (HITSC). She reminded participants that this was a Federal Advisory Committee (FACA) meeting, with an opportunity for the public to make comments, and that a transcript of the meeting would be available on the ONC Website. She turned the meeting over to Chairperson Jonathan Perlin, Hospital Corporation of America, Vanderbilt University, Virginia Commonwealth University, who introduced David Montz, newly appointed ONC Principal Deputy. Montz, most recently the CIO at Baylor Health Care Systems, is a biostatistician. He acknowledged the work of the committee. Perlin asked the members to introduce themselves and to state disclosures and any potential conflicts.

Bettijoyce Lide, NIST

Dixie Baker, Science Applications International Corporation

Cathy Carter, CMS, for Karen Trudel

Anne Castro, BlueCross BlueShield of South Carolina

Christopher Chute, Mayo Clinic College of Medicine, ICD-11 for WHO

Tim Cromwell, Department of Veterans Affairs

John Derr, Golden Living, LLC, Trustee CCHIT

Carol Diamond, Markle Foundation

Floyd Eisenberg, National Quality Forum (NQF)

James Ferguson, Kaiser Permanente, CDISC, HL7 Board, IHTSDO, CIMI

David Kates, Navinet

Leslie Kelly Hall, Health Wise

Rebecca Kush HL7, Global Harmonization of Data Standards, CIMI

Stan Huff, Intermountain Healthcare, HL7 Board, University of Utah, LOINC Committee

Elizabeth O. Johnson, Tenet Healthcare Corporation

Arien Malec, Relay Health

David McCallie, Jr., Cerner Corporation

Steve Ondra, The White House (resignation effective January 31)

J. Marc Overhage, Siemens Corp

Wes Rishel, Gartner, Inc.

Cristopher Ross, MinuteClinic

Walter Suarez, Kaiser Permanente

James Walker, Geisinger Health System

Natasha Bonhomme for Sharon Terry, Genetic Alliance

2. Opening Remarks

Farzad Mostashari, National Coordinator, was not present.

3. Review of the Agenda and Approval of Minutes of December Meeting

Chairperson Perlin and Vice Chairperson John Halamka, Harvard Medical School, talked about the activities ahead as reflected in the agenda, as well as the progress made to date. They described personal experiences with the lack of interoperability in the health care system.

Perlin referred members' attention to the minutes of the December meeting as distributed with the meeting materials, and asked for corrections or amendments. Baker said that the correct spelling of the word highlighted on p. 3 is PHIN, not FIN. Perlin declared the minutes approved as corrected by Baker.

Action item #1: Chairperson Perlin declared the minutes of the December 2011 meeting approved with the correction p. 3 noted by Baker (above).

4. HITSC 2012 Workplan

Doug Fridsma, ONC, talked about the workplan developed by his office and presented at the December meeting. Over the past year a portfolio has been created. This year the building blocks for interoperability can be assembled. He said that he wanted the committee's input on the forthcoming Notices of Proposed Rule Making (NPRMs) and Advanced Notice of Proposed Rule Making (ANPRM). The translation of quality measures into electronic measures is critical. Characteristics of a good standard must be further refined. The insurance exchanges need standards as well. In the second quarter, Query Health will be considered. Imaging standards are also on the agenda. Vocabularies and value sets must be managed. The third quarter work will focus on standards strategy, such as Green CDA and patients' access to information. Maintenance of standards and public health will be considered in the fourth quarter. Fridsma asked what was missing.

Discussion

Hall asked about consumers' involvement being postponed until the third quarter. Fridsma said the topic could be moved up depending on resources.

In response to Rishel's question about the NPRMs, Fridsma explained that NPRMs for meaningful use stage 2 are expected in February from the Centers for Medicare and Medicaid (CMS) and ONC. ONC will publish an ANPRM on governance. ONC staff hopes to have a final rule on governance this year. An ANPRM may allow for a better NPRM. Rishel went on to talk at length about the importance of establishing trust, which he wanted added to the workplan. CMS is dealing with trust via fraud audits. However, layers of enablement are needed. Feedback on stakeholders' experiences with stage 1 is needed. He recommended that the workgroups convene hearings on this topic. Standards are needed in order for data to flow from clinicians to payers. Accountable care organizations (ACOs) will need to obtain claims data on a patient in order to understand how to manage the patient. Regarding the next step after vocabularies and value sets, he recommended working with CIMI.

Suarez inquired about the follow up on the ANPRM on metadata. Fridsma said that the comments received will be rolled into the NPRM on standards. Suarez went on to describe the opportunities to coordinate with the National Committee on Vital and Health Statistics (NCVHS) plan for standards on public health and population health, privacy and security, and quality.

Baker reminded the members of something she brought up during the December meeting—the need for standards for virtualization for the cloud and mobile access. She reported having discussed this topic with the Privacy and Security Tiger Team co-chairs, who indicated that there was no need for additional policy. Fridsma said that he would take action, first talking to the co-chairs about priorities.

Eisenberg spoke about a need to address the perceived effect of hard coding on providers' incomes. A work around is needed. Perhaps risk adjusting a practice should be explored. Measure developers should discuss the meaning of hard coding. Regarding mobile apps, he wondered about standards for the packets.

Someone suggested mapping the standards portfolio to policy goals, saying that if a purpose is to reduce costs, ONC should identify where costs are higher than necessary. Linking policy and standards activity is important.

Diamond suggested that the S & I Framework would be enhanced by the incorporation of trust policies and work in order to offer a more holistic view.

Halamka declared that the measure of success should be adoption. Standards must be easy to implement. Walker said that consumer needs should be delineated to guide the work on standards.

Fridsma summarized:

- Move up consumer issues
- Incorporate trust in plan
- Get feedback on stage 1 from venders
- Recommend privacy and security standards for virtualization
- Coordinate with NCVHS
- Fit standards and policy goals to help patients
- Implementation is the metric.

Deering informed them that the HIT Policy Committee is doing its own workplan. Communication across the committees is important.

5. Updates from ONC

Doug Fridsma, ONC, continued to speak and showed slides describing the status of the S & I Framework. Input from many parties was obtained in order to build up the portfolio. He noted the major initiatives and the value created:

- Transitions of care – defines standardized content that enables electronic exchange of core clinical information among providers, patients, and other authorized entities to improve coordination of patient care
- Lab results interface - standardizes results reporting to ambulatory primary care, in support of meaningful use objectives for decision support, quality reporting, and transitions in care

- Provider directories - provide a scalable, standardized solution to discover digital certificates, and an extensible model to query for electronic service information to facilitate health information exchange
- Certificate interoperability - enables providers to electronically exchange and protect electronic health information created or maintained by certified EHR technology
- Query Health - focuses on establishing standards for distributed queries, which can increase the ability to understand macro health trends, proactively respond to disease outbreaks, understand the efficacy of drug treatments, and contribute to reduction of healthcare costs
- Data segmentation for privacy - enables the implementation and management of electronic health information exchange disclosure policies allowing providers to share specific portions of an electronic medical record
- Electronic submission of medical documentation - gives CMS and other relevant payers the ability to send electronic medical document requests, and investigates options to replace providers' wet signatures with an electronic equivalent
- Public health reporting - enabling a standardized approach to electronic public health reporting from EHR systems to local, state and federal public health programs
- Longitudinal coordination of care - enables care coordination across long-term, post-acute and other non-hospital settings. Builds on existing work, including S&I transitions of care initiative

He referred to other slides, one of which depicted the life cycles of the several initiatives. Another slide summarized the numerous accomplishments and the effort applied to their achievement. For instance, 17 use case artifacts were created; 150 segments and sections were harmonized. And more than 20 pilots were committed. Three HL7 ballots were conducted with 1854 comments resolved. In total, 1000 people averaged two meetings per day.

Discussion

Ross noted an indicator of success: The standards are being cited in RFPs and in other documents.

David Kates observed that medication prescriptions and adherence were not included. ACOs and value based purchasing need standards for attribution and quality reporting. Fridsma reported that a contractor and several grantees are working on related issues.

Rishel acknowledged that the lab work is a good sign. He wondered about the process for innovative work—getting it going versus getting it good. Fridsma replied that imposing too much structure early may inhibit work. He talked about trying to determine what should be done within the framework and what the framework should simply track. He is looking at what projects to work on. Sometimes others can do it better.

Suarez inquired about the life cycle. Fridsma declared that at some point the initiatives will graduate. Graduation falls under the category of standards strategy. The portfolio will be rebalanced over time. Many of the initiatives grew out of committee discussions. Linking them to policy may help with prioritization. Suarez asked about funding to support these initiatives in

the next budget. Fridsma declined to make predictions about the budget. It is important to demonstrate and communicate success.

Someone commented that flexibility is good. Hall mentioned a paper on the vision for transition of care and collaborative care that could inform the framework.

NwHIN

Fridsma showed more slides and talked about NwHIN, a critical piece of the ecosystem. Over the past few months, consideration has been given to how to sustain a coalition and create an ecosystem. The NwHIN Coordinating committee is developing a business plan based on the establishment of a 501(c) 3 to:

- Provide shared governance and infrastructure
- Expand connectivity (test once, exchange with many)
- Provide assurance of interoperability in production
- Hold participants accountable, with ability to revoke privileges
- Provide common platform for a variety of exchange modalities
- Align with but not solely limited to nationwide health information network standards, services and policies

He announced that last week the Office of General Counsel lifted the requirement that participants have an official federal contract. Now parties without a contract can participate; 22 organizations currently participate with 35 expected by the end of the year.

Discussion

Chute expressed concern about the scope creep and the proliferation of purpose- or agenda-specific organizations. Fridsma responded that coordination across bodies would be needed.

Rishel noted that with regard to certification misinterpretations should be discovered and understood. Work on the consolidated CDA taught many lessons. Much will likely be learned from the next iterations. Currently, there are no ready means of adjudicating disputes. The end-to-end testing criteria for certification should be available before certification. This would reduce the time required for certification and allow for working out any problems in advance.

Ferguson asked about the relationship between a forthcoming rule on governance and the business plan for NwHIN. Fridsma explained that NwHIN is policy and standards, not a physical thing. Governance is needed more generally than for this particular 501(c) 3. There are challenges regarding conformance as well as with exchange. The on-boarding tasks with Exchange revealed a need for test harnesses. Technical conditions as well as trust and the protection of data affect governance. He said that this learning was incorporated into the ANPRM. He repeated that the HITSC should respond to the ANPRM when it is published.

Steve Ondra emphasized that NwHIN was part of a strategic framework to make data about benefits available to veterans. Use of NwHIN was the first tactical approach. Exchange was the only thing available at the time. He urged clarity in these distinctions.

6. Update from Clinical Quality Workgroup

Jim Walker, Chair, reported that ONC wants standards for quality measures as well as better coordination with the HIT Policy Committee. Therefore, the Clinical Quality Workgroup is being reconvened and will have a meeting no later than February 15. His slides delineated initial questions for the workgroup:

- How can the standards needs of quality measures be aligned with the HITPC quality work group?
- What are appropriate standards for the definition of quality measures?
- What are appropriate standards for value-set definition?
- What entities should use what processes to validate, provide, and maintain quality measures and value sets?
- How should this work be aligned with information management for clinical decision support (CDS) which has nearly identical dependencies on value sets?
- What standards should be used for the extraction and export of data for quality-measure computation?

He concluded by saying that the membership may be expanded in order to assemble the expertise to respond to these question. Eisenberg suggested including value sets, the context in which they are used, and registries. There were no other comments or questions.

7. Update on Value Sets and Vocabulary Mapping

Doug Fridsma, ONC, talked about the functions of his office: enable stakeholders to come up with simple, shared solutions to common information exchange challenges; curate a portfolio of standards, services, and policies that accelerate information exchange; enforce compliance with validated information exchange standards, services and policies to assure interoperability between validated systems. He elaborated on a use case that required a vocabulary as well as other building blocks for information exchange, saying that ONC is flushing out all of these building blocks so that they can be assembled in different ways to solve problems.

Q and A

Baker asked why UDDI was listed when is has few users. Fridsma responded that it was being used by NWHIN participants for exchange.

Rishel spoke about SAML and questioned the appropriateness of UDDI for scale up. Testimony about SAML indicated the need for common insertions, which is extremely difficult within an institution. UDDI may work for 35 organizations but it is a long term concern. Fridsma disclosed that silence followed this presentation when he made it to the HIT Policy Committee. Exchange is occurring among participants using Web services, SAML, and UDDI. The dialogue will continue about the right building blocks. There is not a RESTFUL transport mechanism.

Baker cautioned about taking a step back. According to the information obtained from public comments, only the Social Security Administration uses SAML or UDDI. She asked Fridsma to revise his slide to incorporate this fact. He agreed.

Ferguson observed that more work should be done to develop additional use cases.

Someone said that generalized terminology services can address these functionalities. NwHIN should leverage existing standards.

Steve Ondra asked that real work examples be used. The market can sort it out.

Ross said that much of the ongoing exchange uses REST-based standards. The on-ramp to include REST-based technologies has not been located. These standards should be used. Fridsma said that work is being done on this topic. Halamka referred to MITRE's work.

Eisenberg noted that quality measures are based on value sets. The use cases need atomic value sets. The Chairperson talked about the progress made with the building blocks, which facilitate the use cases.

Malec expressed concern about the current building blocks approach. The set evaluated by the NwHIN Power Team was built for 50 (state) exchanges but what is currently happening is exchange across ACOs. The building blocks are not sufficient for the world as it now exists. Fridsma said that he was searching for how to communicate the value of the discussion. He indicated that he wished to avoid discussion about the specific characteristics of the blocks.

Then **Betsy Humphreys** showed slides that listed the National Library of Medicine (NLM) portfolio and the numerous ongoing and planned activities. NLM has an interagency agreement with ONC to support meaningful use, including additions to SNOMED CT, LOINC, and RxNorm; high priority subsets and mappings; tools for value set development, maintenance; and enhanced APIs. More work is needed on how users intend to use APIs. She went on to slides that described issues with and resources for the problem list such as migrating from Uncontrolled or Local Vocabulary +/- ICD-9-CM, adding value to free text notes, and implementation of ICD-10-CM in 2013. NLM is working on mapping SCT to ICD-9-CM (issued with SCT International Release) and SCT to ICD-10-CM (rule-based).

Humphreys also referred to the many NLM assets for medications and medication allergies targeting RxNorm. Regarding tests and measures, she noted that significant progress has been made in getting labs to report using LOINC. Recent expansions have been made in the coverage of patient assessment instruments, genetic tests, newborn screening, and public health surveillance. The latter was challenging because it required action by providers, vendors, and public health agencies. CDC is working with NLM and Regenstrief on efforts such as updating LOINC and SNOMED CT to reflect currently notifiable conditions, recommended tests, and a newborn screening guide. CDC and NLM are discussing how to avoid duplication of effort and to achieve seamless access.

She talked about challenges with meaningful use quality measures, such as developing measures and vocabulary value sets that: retrieve appropriate sets of patients for denominators and numerators; use vocabulary standards correctly; are maintainable as medical knowledge and standards evolve; are implementable; and do not greatly expand data collection burden. She concluded by identifying priorities for the Vocabulary Task Force:

- 2012 outreach targets for available assets
- Consolidated distribution mechanisms

- New API features to facilitate access to vocabularies
- Additional vocabulary subsets/value sets to assist implementers

Q and A

Huff observed a bimodal distribution—a small number of large sets and thousands of very small sets. He said that he was excited about the availability of value sets. Humphreys described work with the NQF value sets.

Eisenberg said that the NQF value sets were created by 18 measure developers and are available on the NQF Web site. He expressed his hope that NLM can harmonize them. He reported that at least four contractors are creating value sets for meaningful use: How will their results be incorporated? Sometimes the names of the value sets are confusing.

Ferguson agreed with the priorities for the Vocabulary Task Force. Rishel spoke about the learning health care system. Frequent revision of standards is an issue. Access to and installation of code set revisions must be made easy in order to have a learning IT system. Humphreys agreed that it is essential to have a place to go to decipher a standard. Rishel talked about operationalizing a different system response. Updates for compendia must be available. There must be a way to deal with a record with an unrecognizable code. In certifying systems to interoperate, it is essential to certify that the system can deal with data that are not in updated code sets.

Malec's questions on adverse drug effect according to class were placed on hold for another meeting. Fridsma closed with exclaiming on the importance of robustness.

8. Update on CMS' Meaningful Use Activities

Rob Anthony, and Jessica Kahn, CMS, reviewed the results of the EHR incentive program in 2011. They showed slides on trends in attestation and payments, along with the December numbers and expressed their optimism about the status of the program. Regarding attestation, which has increased rapidly since September, the meaningful use data pertain to Medicare physicians and for acute care and critical access hospitals. The data are not based on a representative sample of eligible professionals (EPs), or of all eligible hospitals (EHs). In terms of early adopters, on average all thresholds were greatly exceeded, but every threshold had some providers on the borderline. There was little difference between EPs and EHs. Little difference was found among specialties in performance, although exclusions varied. 33,595 Medicare EPs had attested by the end of December, 33,240 successfully. 842 acute care and critical access hospitals had attested, all successfully. 43 states have launched their Medicaid payments. Several large states are ramping up.

They showed slides on the performance (average score), exclusions and deferrals of each of the objectives for EPs, followed by results for EHs. In terms of specialty performance, gastroenterology had the lowest rate for patient electronic access by almost 10%. For providing patient education resources, optometry was nearly 10% higher than others and podiatry was nearly 20% lower. All other measures were consistent across specialties. Family practice, internal medicine, and optometry were highest for CPOE. Optometry and podiatry had lowest rates of recording vitals. They reminded the group that these results were preliminary, based on

non-representative early adopters, and that official data should be sourced and cited from the CMS website, which is updated monthly (http://www.cms.gov/EHRIncentivePrograms/56_DataAndReports.asp). In response to a question, Anthony said that he did not know how many of the more than 842 hospitals were critical access hospitals. Members had no other questions or comments.

9. Public Comment

Carol Bickford, American Nurses Association, requested that the NLM slides be posted.

Annamarie Saarinen, Newborn Coalition, talked about her work on pediatric and newborn health issues. Pediatric cases are a high transfer population. Minnesota is implementing a pilot program – an electronic newborn health record hub for reportable conditions. The program uses Direct for transport, which is accessible for small, rural hospitals.

SUMMARY OF ACTION ITEMS:

Action item #1: Chairperson Perlin declared the minutes of the December 2011 meeting approved with the correction p. 3 noted by Baker (above).

Meeting Materials:

Agenda

Summary of December 2011 meeting

Update reports presentation slides