



Health IT Standards Committee
Meeting Summary
September 28, 2011

[Meeting Agenda](#)

Background

The [Health IT Standards Committee](#) is charged with making recommendations to the National Coordinator for Health IT on standards, implementation specifications, and certification criteria for the electronic exchange and use of health information. In developing, harmonizing, or recognizing standards and implementation specifications, the Health IT Standards Committee will also provide for the testing of the same by the National Institute for Standards and Technology (NIST).

Dr. Mostahari

- In general, my request to this committee is to push. We cannot afford not to move forward with transport and interoperability standards.
- Not moving forward is a greater risk than the risk of possible or perceived imperfection of standards
- We cannot afford to wait another five years for information exchange in this country

Key News Items

- Metadata NPRM published August 9, 2011 (*HIMSS response submitted September 23, 2011*)
- Query Health has been launched to empower providers to have the same kinds of tools and analytics that big corporations have
- Data segmentation effort will launch in October

Opening Remarks (Jonathan Perlin/John Halamka)

- The summer camp recommendations will be turned over to ONC and hopefully turned into an ANPRM

Summer Camp Review (Doug Fridsma)

- Completed work highlights:
 - Identified metadata elements and standards for patient identity, provenance and privacy. Recommended HL7 CDA R2 header elements and published ANPRM on August 9
 - ♦ Currently reviewing public comments
 - Patient matching team created baseline assumptions
 - Surveillance implementation guide: converged on a single standard and gave a clear guide

Patient Matching Power Team (no formal presentation)

- **Completed Recommendations:**
 - Select a base set of attributes based on experience that support the sensitivity and specificity recommendations
 - Establish ways to improve data quality
 - ♦ Providers should allow patients to verify the patient attributes (printed summary or on-line access)
 - ♦ Enables providers to identify missing/unavailable data and approximate/questionable values at the time of entry as well as apply basic checks on the validity of patient attributes
 - Patient queries
 - ♦ Patterns should follow the NwHIN patient query implementation guide and that the CDA R2 header formats should be used to represent patient attributes and metadata
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- Patient results
 - ◆ Patient responses to patient queries should not return any patient attributes that were not included in the original query
- ONCor other agencies should sponsor specific research and analysis to identify relevant and achievable metrics to return in response to a patient matching query.

Metadata Analysis Power Team (no formal presentation)

- Identified metadata elements and standards for the following categories:
 - Patient identity
 - Provenance
 - Privacy
- **Recommended** HL7 CDA R2 header elements (with modifications)
- Published ANPRM August 9, 2011
 - Currently reviewing public comment

Biosurveillance Power Team Report (Chris Chute, Taha Kass-Hout, CDC)

- Some previously required elements for syndromic surveillance are now optional
- Recommended a core set of 17 elements and a set of 16 optional elements
 - Note: There is concern among committee members surrounding the term “optional.” Public health entities could 1) require optional from a sender, which does not conform with the recommendation; or 2) lack the capacity to receive optional elements if they are optional functionalities..
 - There is also concern that state or local governments will require optional elements in their jurisdiction(s)
- **Completed Recommendations:**

<u>Core Elements</u>	<u>Optional Elements</u>
<i>Administrative Elements</i>	
1. Facility Identifier (Treating), (Treating), ISDS Recommended Element# 1 *** a. Unique facility identifier of facility where the patient originally presented (original provider of the data, National Provider Identifier or other number.	1. Facility Name (Treating), ISDS Recommended Element#2
2. Facility / Visit Type (Treating), ISDS Recommended Element# 7 a. [It is recommended that PHA constrain the transmitted data from the source using the patient class code set.	2. Facility Location (Treating) Street Address, ISDS Recommended Element# 3
3. Report Date/Time (Treating), ISDS Recommended Element# 8 *** a. [If data flows through an intermediary or third party, the intermediary must keep the original date/time of transmission.]	3. Facility Location (Treating) City, ISDS Recommended Element# 4
4. Unique Patient Identifier, (Pt Dem), ISDS	4. Facility Location (Treating) Country, ISDS

<p>Recommended Element# 9 *** a. [Examples of Unique Patient Identifiers are Patient Account number or a Master Patient Index (MPI) number. This data element may be used as the unique identifier used between the data sender and receiver to identify the record.]</p>	<p>Recommended Element# 5</p>
<p>5. Unique Visiting ID, (Pt HI), ISDS Recommended Element# 20 *** a. [A visit is defined as a discrete or unique face-to-face clinical encounter within a service department or location. This data element may be used as the unique identifier used between the data sender and receiver to identify the record.]</p>	<p>5. Facility Location (Treating) State, ISDS Recommended Element# 6</p>
<p>6. Diagnosis Type, (Pt HI), ISDS Recommended Element# 28 a. [Examples include, working diagnosis, final diagnosis] b. Critical: Need to be able distinguish among the diagnosis types when the syndromic system is receiving messages in real-time.</p>	<p>6. Medical Record #, (Pt Dem), ISDS Recommended Element# 10</p>
<p><i>SS Practice Elements</i></p>	<p>7. City/Town, (Pt Dem), ISDS Recommended Element# 14</p>
<p>7. Age, (Pt Dem), ISDS Recommended Element# 11</p>	<p>8. State, (Pt Dem), ISDS Recommended Element# 16 (can be deduced from zip code)</p>
<p>8. Age units, (Pt Dem), ISDS Recommended Element# 12</p>	<p>9. Country, (Pt Dem), ISDS Recommended Element# 17 a. Can be inferred from the other elements. Unclear benefit if it is a country other than U.S.</p>
<p>9. Gender, (Pt Dem), ISDS Recommended Element# 13</p>	<p>10. Date of onset, (Pt HI), ISDS Recommended Element# 22 a. Completion rate is low within BioSense historical data. Unused. Difficult to retrieve (note from EHRA). Could be captured with from the triage notes.</p>
<p>10. Zip Code, (Pt Dem), ISDS Recommended Element# 15</p>	<p>11. Patient Class, (Pt HI), ISDS Recommended Element# 23 *** a. It is recommended that PHA constrain the transmitted data from the source using the patient class code set (example: only transmit records where patient class = E, Emergency)</p>
<p>11. County, (Pt Dem) , ISDS Recommended Element# 36 a. Unlike State of residence which can be deduced from patient's zip code, 30% of zip codes in the US cross county lines making it hard</p>	<p>12. Triage Notes, (Pt HI), ISDS Recommended Element# 25</p>

to deduct patient's residence county	
12. Race, (Pt Dem), ISDS Recommended Element# 18	13. Clinical Impression, (Pt HI), ISDS Recommended Element# 27
13. Ethnicity, (Pt Dem), ISDS Recommended Element# 19 a. Race and Ethnicity are required data elements because they are required elsewhere in Meaningful Use and these elements are essential for using ED data to understand disparities in health and health seeking behaviors. b. In 2011, of the current BioSense civilian facilities (n=665), 27% reported Race, and 27% reported Ethnicity.	14. Disposition Date / Time, (Pt HI), ISDS Recommended Element# 30 a. Often missing
14. Visit Date / Time, (Pt HI), ISDS Recommended Element# 21	15. Initial Temperature, (Pt HI), ISDS Recommended Element# 31 a. Taha's study results (please see attached)-- Conclusion: 0.14% (out of 17,000,000 encounters), having this element provides insignificant increase in sensitivity.
15. Chief Complaint / Reason for visit, (Pt HI), ISDS Recommended Element# 24	16. Initial Pulse Oximetry, (Pt HI), ISDS Recommended Element# 32 a. In 2011, of the current BioSense civilian facilities (n=665), 0% reported Pulse Oximetry.
16. Diagnosis / External Cause of Injury Code, (Pt HI), ISDS Recommended Element# 26 a. Diagnosis code or external cause of injury code (for injury-related visits) of patient condition. The first diagnosis code should be the principal diagnosis. When the first-listed diagnosis code (principal diagnosis) is an injury, one or more supplemental external-cause-of-injury codes or E-codes should also be provided. b. E-codes provide useful information on the mechanism and intent of injury, place of occurrence, and activity at the time of injury.	
17. Discharge Disposition, (Pt HI), ISDS Recommended Element# 29 a. In 2011, of the current BioSense civilian facilities (n=665), 36% reported Disposition.	

*** are elements that are necessary for basic data management and exchange in HL7

NwHIN Power Team Report (Doug Fridsma, Dixie Baker)

- NwHIN Power Team evaluated specifications developed for the Exchange and Direct pilots, with respect to their usability and scalability, to support national health information exchange; and made recommendations for specifications that could be used to support the secure transport and exchange of electronic health information nationally.
- Approved Recommendations
 - 1) The set of standards, services, and policies that comprise the NwHIN must be deployable within an architectural framework capable of supporting the secure exchange of health information at a national scale.
 - 2) Neither the Exchange nor the Direct specifications have been proven at large scale, in production environments, across a broad range of healthcare organizations. The scalability of the underlying architectures, and inherent impacts on workflow, need to be better understood to determine suitability as a nationwide standard.
 - 3) The Exchange specifications are complex, and designed to support a complex architecture that may not be appropriate for all healthcare organizations
 - 4) Opportunities for simplification
 - a. Two specifications address needs judged “low”:
 - i. *NHIN Access Consent Policies Specification*
 - ii. *NHIN Health Information Event Management (HIEM) Specification*
 - b. *NHIN Web Services Registry Specification* – a moderately mature specification that uses technology in its declining phase of the life-cycle [Note: The S & I Framework team is already considering alternatives
 - c. *NHIN Authorization Framework Specification* – highly complex, and alternatives exist (e.g., OAuth)
 - d. *NHIN Patient Discovery Specification* (highly complex, highly needed) and *NHIN Query for Documents Specification* (operational and workflow challenges)
 - 5) The underlying Direct transport standard (SMTP) is widely deployed, and proven highly scalable. The security standard (S/MIME) fulfills the EHR certification requirement for an “encrypted and integrity protected link.” The Direct specifications introduce some new approaches that have yet to be fully developed beyond the Direct Project. Given current ONC initiatives to address these risks, the Workgroup supports and encourage broader deployment and use of the Direct specifications.
 - 6) Some areas are underspecified in the current specification set
 - a. Exchange or remote viewing of large images
 - b. Discovery and retrieval of data elements (e.g., lab results) outside a “document” context
 - c. More granular query capability for patient records (e.g., “most recent ECG”)
 - 7) Addressing these needs may present opportunities to consider the PCAST model for data discovery using indexed metadata, combined with retrieval of the desired data element or object
 - 8) REST architectural style in designing networked systems
 - a. REST is not a “standard,” but a “style” that uses the HTTP standard communication protocol to provide a simpler alternative to SOAP for accessing web services – not all “RESTful” implementations are implemented in the same way
 - b. REST is not inherently secure, but can be secured using standards such as Transport Layer Security (TLS) and Open Authorization (OAuth)
 - c. Developing specification(s) for “secure RESTful transport for healthcare exchange” would provide healthcare organizations assurance that RESTful implementations built in accordance with the specification(s) would be predictable and secured

E-Prescribing for Discharge Medications Report

- Recommendations focus on HL7 discharge prescription messaging to be used in EHR certification
- The Committee agreed to transmit the following **recommendations** to ONC for further consideration:
 - 1) HL7 Amendment to Power Team recommendation:
eRx for discharge medications may use HL7 version 2.2 through version 2.5.1 prescription messages, as described above
 - ◆ Aligns EHR certification with Medicare Part D regulations
 - ◆ Practical and testable
 - ◆ Alternative standards allowed in Part D are comparable
 - 2) Request HITSC approval of HL7 amendment to previous recommendations of standards for eRx of discharge medications

Clinical Quality Workgroup & Vocabulary Task Force: Transition Plans (Jamie Ferguson)

Goal: Identify acceptable transition vocabularies for specific data categories of the Quality Data Model (QDM)—to support CQM reporting (scope does not extend beyond CQM Reporting)

- Balance the need for standards with flexibility to meet the needs of implementers

Impact on Stakeholders

- **CQM developers** – would not be required to use transition vocabularies; they could do so voluntarily to make their measures easier to implement.
- **HIT developers and HIT certifiers** – Transition vocabularies would not be required for certification
- **Care-delivery organizations** – would not be required to use transition vocabularies
- **CMS** – would be required to receive and credit reports of care-quality measures communicated in both standard vocabularies and in transition vocabularies. (CMS must be able to process all)
- **Non-CMS payers** – would not be required to receive quality reports in interim (or standard) vocabularies

Acceptable Transitional Vocabulary Code Sets

- ICD-9 CM Diagnoses (not usable after 10/1/2013)
 - Mapping: SNOMED CT to ICD 9 CM and vice versa (readiness unknown)
- ICD-10 CM (usable after 10/1/2013)
- ICD 10 CM to SNOMED CT and vice versa (readiness unknown)
- ICD-9 CM Procedures (not usable after 10/1/2013)
 - Mapping: SNOMED CT to ICD 9 CM and vice versa (readiness unknown)
- ICD10 PCS (usable one year after MU Stage 3 is effective)
 - ICD 10 CM to SNOMED CT and vice versa (readiness unknown)
- CPT (usable one year after MU Stage 3 is effective)
 - Mapping: CPT to LOINC and SNOMED CT
 - Mapping cannot take place until required SNOMED CT codes for MU Stage 2 and Stage 3 are available.
- HCPCS (usable one year after MU Stage 3 is effective)
 - No mappings identified

Action Items

- ONC needs to track and revise final dates and recommendations, according to any changes affecting MU timelines.
- HCPCS (FDA is preparing an NPRM for a Unique Device Identifier, NCVHS is planning hearings. Ferguson: expects FDA UDI as a replacement for HCPCS)
- Who is responsible for developing and publishing authoritatively cross-maps? What funding is available to support this activity?
 - What agency should be responsible? (NLM?)
 - Chair agrees that NLM should be considered to be the distributing agency for this effort.

S&I Framework Follow-up Discussion (Doug Fridsma)

Summary of findings throughout summer camp

- Transitions of Care
 - Significant convergence around Consolidated CDA templates
 - **Recommendations:** use *Implementation Guide for CDA Release 2.0 Consolidated CDA Templates* standard currently in ballot reconciliation in HL7
- Lab Results Interface
 - Broad agreement on usage of new LRI IG and required vocabularies
 - **Recommendations:** use *HL7 Version 2.5.1 Implementation Guide: Laboratory Results Interface*, currently in HL7 ballot process, with required vocabularies (LOINC, SNOMED)
 - Encourage and monitor pilots of optional vocabularies, including UCUM, OIDs and SNOMED CT (for specimen info), for future inclusion in implementation guidance
- Provider Directories
 - Consensus that a DNS-with-failover-to-LDAP solution allows a greater number of implementers to effectively enable certificate discovery and management.
 - Suggest pilots as next step (there are pilots taking place in Q4)
 - Agreement that standards to query provider directories need broader real-world usage

Implementation Workgroup (Judy Murphy, Liz Johnson)

- Here to talk about Stage 2 Criteria and Standards
- **Workgroup timeline (for review)**
 - Released survey on Monday, May 16th - **DONE**
 - Survey comments close on Friday, June 17th - **DONE**
 - Compile and summarize survey comments – June 20th to July 15th – **DONE**
 - Analyze results and formulate recommendations and report – July 15th to Aug 17th – **DONE**
 - Determine if additional data collection is required via hearing – **NONE PLANNED**
 - Present recommendations to HIT Standards Committee
 - *Stage 2 (overall certification process)* – **8/17, DONE, transmittal letter in progress with 10 recommendations**
 - *Stage 2 (certification criteria & standards)* – **9/28, TODAY, for discussion by HITSC, comments to be used by ONC**
 - *Stage 2 (certification testing)* – **10/21**
- **Work left to do**
 - Complete transmittal letter on Stage 2 certification testing principles, procedures and processes

- Work with ONC/NIST to finish the Stage 2 grid for:
 - Recommended Certification Testing
 - Consider scenario-based testing vs. individual MU criteria-based testing
 - Recommended Implementation Specification
 - Provide a vision for what is expected as part of Stage 3 and beyond to enable true health care transformation
- ****Recommendations included in attached PDF document****
 - *Action Items included in attached table*