S&I Framework Update

HIT Policy Committee

September 4, 2013

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Office of Science & Technology

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S&I Framework Operating Metrics

Timing

Framework Launch Date	Jan 7, 2011
First Initiative Launch Date	Jan 31, 2011
Elapsed Time since Initiative Launch (as-of today)	32 months

Outputs

# Consensus Approved Use Cases	19
# Pilots Committed	37
# Pilot Vendors	42
Total Ballots	16
# Total HL7 Ballot Comments Received	2,569
# HL7 Ballot Comments Resolved	3,452

Participation & Process

# Wiki Registrants	2612
# Committed Members	749
# Committed Organizations	575
# Working Sessions Held	1,816
S&I Face to Face meetings	3
Standards Organizations engaged	35
S&I Monthly Newsletter Editions	19
SDS Newsletter Subscribers	1,924

S&I Initiative Portfolio Snapshot

	Pre-Discovery	Use Case	Harmonization	RI, Test & Pilot	Evaluation

Direct Project (S&I Archetype) — *In production*

Transitions of Care — *Companion Guide, Project Scope Statement & Notification of Intent to Ballot completed for September ballot*

Lab Results Interface — *IG & Second Errata Published; 2014 CEHRT In Progress*

Query Health — *Pilots completed, QRDA III Published, HQMF to be published Fall 2013; Maintenance mode activities*

Data Segmentation for Privacy — *Pilots in Evaluation, IG in ballot with HL7 Security WG, RESTful IG still in SDO adoption process*

Public Health Reporting — *Community-Led; RI Framework and CDA guide published; Testing & Pilots in progress; community will be meeting on a monthly basis*

esMD — *IG and UC consensus closed for UC 1, UC 2, AoR L1, and Prov. Dirs. Guidance, UC consensus closed for AoR L2 and eDoC Generic Use Case*

S&I Initiative Portfolio Snapshot, continued

	Pre-Discovery	Use Case	Harmonization	RI, Test & Pilot	Evaluation
Longitudinal Coordination of Care	*Community-Led; 1st UC Complete; PAS SWG Complete; Created 'Care Plan' Glossary for HITPC & HL7; Use Case 2: Care Plan Exchange Complete; C-CDA updates for Sept HL7 Ballot in comment period*				
Laboratory Orders Interface				*Second Ballot reconciliation in process for LOI IG; Lab pilot efforts include LOI and eDOS*	
Health eDecisions	*Use Case 1: Knowledge Artifact Sharing Model, Schema and IG was approved by HL7, UC 1 Pilots Complete. Use Case 2: CDS Guidance Service achieved consensus. Working on preparing U2 for HL7 ballot in off ballot cycle (we submitted 5 HL7 ballots in support of UC 2)*				
Blue Button Plus				*Two WGs complete (Payer, Clinical Content); Push & Pull IG's complete – now focused on adoption/implementation.*	
Structure Data Capture		*Use Case consensus complete; Confirming Solution Plan and IG development has kicked-off. Form SWG & Standards SWG recommendations have been reviewed with the community*			
EU/US eHealth Cooperation			*Initiative launched on 6/20. Supporting 2 Workgroup meetings weekly Interoperability of EHRs and Workforce Development*		
Data Access Framework			*Consensus on Project Charter Achieved August 28th Working on the Development of the Local Data Access Use Case*		

- [S&I Pilots website](#) indicates geographically where all pilots are located

Structured Data Capture (SDC)

Charter/Scope Summary

- The Use Case focuses on the generic Functionality required to access a form or template, generated by a CDE, form, or template library, displayed in an EHR system and saved/stored in a structured, standardized format sent to an External Data Repository
  - Identified Content Work stream SWGs
    - Patient-Centered Outcomes Research (PCOR) (NLM)
    - Common Formats (AHRQ)
  - Technical Work stream SWG focused on development of four guidance areas: CDE Structure, Form/Template Structure, EHR-Interaction, and Auto-populate

Leadership Team

- Initiative Coordinator: Evelyn Gallego
- ONC Lead: Farrah Darbouze
- External SME: Lisa Lang (NLM), Amy Helwig (AHRQ)
- Community Standards SWG Lead: Dr. Ken Pool

Current Status

- Two Implementation Guides are targeted for development based on REST/OAuth & SOAP/SAML
  - Development has begun on SOAP/SAML IG, target completion end of September
- Technical work streams:
  - Forms SWG kickoff was June 5 - Led by AHRQ, NLM: recommendations on Form Structure have been presented to the All Hands WG
  - Standards SWG kickoff was July 11: EHR interaction & auto-population has been discussed and on target to be finalized by 8/30
- Next steps include continuing IG development with consensus-approved standards solution plan

Data Access Framework (DAF)

Charter/Scope Summary

The value of the DAF initiative will be demonstrated through two work streams that enable providers to access their own patient's data both locally and externally

Local Data Access: A standardized way for providers to access their own patient(s)' data within the health organizations internal Health IT system

Targeted Data Access: A standardized way for providers to access a *known* individual patient's data from an external organization

The Initiative will leverage existing industry standards to create a framework that demonstrates modularity and substitutability for a limited set of standards combinations based on identified business requirements of the community.

Leadership Team

- Initiative Coordinator: John Feikema
- ONC Lead: Mera Choi

Current Status

- Kicked off initiative on 7/16 and achieved Charter consensus on 8/28

- Launched Local Data Access Use Case on 8/14 and launched User Story SWG on 8/29

- Actively engaging with IHE POCs and planning for brief DAF proposal submission to IHE ITI Planning committee due 9/29

- Targeted Data Access Workstream to develop Use Case from late October - December 2013

EU- US eHealth Cooperation Initiative

Charter/Scope Summary

Scope of project: To support an innovative collaborative community of public- and private-sector entities, including suppliers of eHealth solutions, working toward the shared objective of developing, deploying, and using eHealth science and technology to empower individuals, support care, improve clinical outcomes, enhance patient safety and improve the health of populations

Leadership Team

- US: Doug Fridsma, Mera Choi
- EU: Frank Cunningham, Benoit Abeloos

Current Status

- Project launched June 20th, 2013
- Supporting 2 workstreams:
  1. Work Force Development – Cooperation around the shared challenges related to eHealth/health IT workforce and eHealth proficiencies.
  2. Interoperability – To have international interoperability of electronic health records information to include:
     o Semantic interoperability
     o Syntactic interoperability; and
     o Patient mediated data exchange (including privacy and security issues surrounding exchange of health data).
- Community meetings for both work streams began August 14 and continue to be held weekly
- Verifying goals and scope statements match all participants and coordinators expectations

Longitudinal Coordination of Care (LCC)

Charter/Scope Summary

- Patient Assessment Summary (PAS) WG: Develop a model of the PAS based on a scoped Use Case and functional requirements
- LTPAC Care Transition WG: Develop a requirements-driven view of data elements required for LTPAC information exchange based on a set of additional TOC user stories
- Longitudinal Care Plan WG: Identify and develop key functional requirements and Use Cases that would be supported by a longitudinal care plan

Leadership Team

- Initiative Coordinator: Evelyn Gallego
- Workgroup Leads: Larry Garber, Terry O'Malley, Sue Mitchell, Bill Russell, Jennie Harvell, Russ Leftwich

Current Status

- Revised the C-CDA to support Transitions of Care and Care Plan Exchange for the HL7 Fall Ballot cycle (Ballot Period 8/12 – 9/16/2013)
- Developed and submitted recommendations to align Care Plan exchange efforts with various HL7 WGs (Patient Care WG, SOA Care Coordination Services)
- Coordinating Care Plan standard development activities with other SDO and Federal Care Plan activities (HL7 Patient Care WG, IHE Patient Care Coordination Technical Committee, AHIMA LTPAC HIT Collaborative, CMS esMD)
- Identifying potential Pilots for the Transitions of Care and Care Plan implementation guides (Pilot SWG Launch 9/16/2013)

Public Health Reporting Initiative (PHRI)

Charter/Scope Summary

The PHRI will develop and implement a standardized approach to electronic public health reporting from EHR systems to local, state and federal public health programs that addresses the needs of several different reporting use cases, with the long-term goal of reducing the difficulty (to both providers and public health agencies) of implementing electronic versions of the broad spectrum of public health reporting.

Leadership Team

- Co-leads: Dina Dickerson, Peggy Leizear, Riki Merrick, Anna Orlova, and Walter Suarez

Current Status

- Artifacts created to date include:
  - Public Health Reporting Initiative Reference Implementation Framework – Reference document on interoperability standards for several public health programs
  - PHRI CDA Guide - Specifies CDA structure for public health report for *Communicable Diseases* and *Adverse Events*
  - PHRI Standards Testing and Pilots Demonstration – A PHRI web page with documentation on testing or pilot projects demonstrating the use of interoperability standards referenced in the PHRI Reference Implementation Framework I
- Some members currently engaged in Structured Data Capture Public Health Tiger Team
- In September 2013, PHRI will begin Phase 2 with a *Call for New User Stories* and analysis of Phase 1 User Stories for inclusion of additional reports into the PHRI Reference Implementation Framework.

Blue Button Plus

Charter/Scope Summary

Consumers want to be empowered to be more engaged in their health and healthcare.

Through the Blue Button, consumers want the ability to exercise more access to and portability of their health care information. With the right privacy and security assurances, they want to be able to:

- Better understand their health and make more informed decisions
- Help to make sure that they and all of their care team members are on the same page
- Improve the accuracy and completeness of the information
- Plug it into apps and tools that promise to make information truly available, when and where it's needed

Leadership Team

- Initiative Coordinator: Josh Mandel
- ONC Lead: Rebecca Mitchell Coelius

Current Status

- The BlueButton Website (http://bluebuttonplus.org) launched in March and includes Push Implementation Guidance, Privacy & Security Guidance, and Clinical Content Guidance.
- Pull API Documentation Website (http://blue-button.github.io/blue-button-plus-pull/) launched in April 2013.
- Push and Pull workgroups are focused on adoption (for vendors, providers and payers) and supporting current reference implementations

Health eDecisions (HeD)

Charter/Scope Summary

To identify, define and harmonize standards that facilitate the emergence of systems and services whereby shareable CDS interventions can be implemented via:

- Standards to structure medical knowledge in a shareable and executable format for use in CDS, and

In order to facilitate integration of a system with CDS interventions, the scope includes standards to refer to data in electronic health records and standards to map recommendations to locally implementable actions.

Leadership Team

- Initiative Coordinators:
  - Lead Coordinator: Ken Kawamoto
  - ONC Coordinators: Jacob Reider & Alicia Morton
  - SMEs/Co-Coordinators: Aziz Boxwala & Bryn Rhodes

Current Status

- Currently we support 3 work streams
  - Work stream 1: HL7 ballot for UC 1
    - We will republish UC 1 through HL7 based on Pilot feedback and direction from the HL7 Technical Steering Committee
  - Work stream 2: Pilots – All Pilots for UC 1 are complete Pilots included:
    - NewMentor and Allscripts completed the NQF 68 Million Hearts Rule
    - CDC and Allscripts – completed the San Diego Pertussis rule
    - Wolters Kluwer and VA – completed the Urinary Tract Documentation template
    - Zynx Health and DesignClinicals completed the Heart Failure order set

- Work stream 3: Use Case 2
  - Monitored ballot comments for the updated DSS standard which was submitted on 8/4
  - Developed and completed two Implementation Guides:
    » Decision Support Service (DSS) IG which informs the use of the DSS standard in obtaining CDS service from an external CDS provider using both SOAP and REST platforms
    » Virtual Medical Record – Clinical Decision Support (vMR-CDS) Templates IG which specifies the vMR data elements to use in various scenarios along with value restrictions
  - Updated vMR Logical Model and XML IG for HeD
  - Submitted final (off cycle) ballot materials to HL7 on 8/30

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Data Segmentation for Privacy (DS4P)

Charter/Scope Summary

Enable the implementation and management of disclosure policies that originate from the patient, the law, or an organization, in an interoperable manner within an electronic health information exchange environment, so that individually identifiable health information may be appropriately shared for: 1) Patient treatment and care coordination; 2) Third party payment; 3) Analysis and reporting for operations, utilizations, access quality and outcomes; 4) Public health reporting; 5) Population health, technology assessment and research.

Leadership Team

- Initiative Coordinator: Johnathan Coleman
- ONC Leads: Libbie Buchele, Penelope Hughes

Current Status

- DS4P IGs for DIRECT and eHealth Exchange owned by HL7; IG for RESTful accepted by IHE
  - The Direct and Exchange IGs are in ballot with HL7 for September WGM.
  - The RESTful IG is still in development and is in consideration for a joint IHE/HL7 balloting process.
- There are five ongoing pilots: VA/SAMHSA, SATVA, NetSmart, Jericho Systems-UT Austin, Louisiana State HIE (GNOHIE)
- Teradacts was accepted as a pilot and will be the sixth pilot
- The initiative transitioned into a community-led effort with Pilots and SDO balloting as focuses

Laboratory Results Interface (LRI)

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Charter/Scope Summary

- The Laboratory Results Interface Initiative focuses on identifying the requirements, specifications and standards, and on providing the implementation guidance for electronic reporting of ambulatory care laboratory test results in the US Realm

Leadership Team

- Initiative Coordinator: John Feikema
- Workgroup Leads: Ken McCaslin and Hans Buitendijk

Current Status

- Use Case Consensus Dates
    - LRI Use Case: May 5, 2011
    - Abbreviated Public Health Reporting Use Case: June 15, 2011
- LRI IG DSTU
    - First errata was released on October 8th, which includes a set of recommended corrections and modifications for incorporation into the currently published document
    - Second errata approved for publication in April 2013
    - As of Jan. 8, 2013, LRI Pilots were completed and Validation Suite Tool was released for 2014 CEHRT

Laboratory Orders Interface (LOI)

Charter/Scope Summary

The Laboratory Orders Interface (LOI) Initiative is focused on the creation of an Implementation Guide (IG) for the ambulatory setting that builds on the architecture and design of the California HealthCare Foundation's ELINCS Laboratory Orders and the S&I Framework Laboratory Results Interface Initiative.

Further, the Initiative seeks to design an IG that can serve as a foundation for eventual use in acute care and public health and incorporate vocabulary consistent with the above mentioned guides as well as support for the upcoming HL7 Version 2 Implementation Guide: Laboratory Test Compendium Framework, Release 2 (eDOS).

Leadership Team

- Initiative Coordinator: John Feikema
- LOI Workgroup Leads: Hans Buitendijk and Ken McCaslin
- eDOS Workgroup Leads: Freida Hall and John Mooney

Current Status

- LOI IG
  - Out-of-cycle ballot took place June – July, and completed July 19
  - Workgroup is continuing ballot reconciliation to address the comments received
    - LOI comments 40% resolved; eDOS comments 30% resolved
- Laboratory Pilots
  - Current pilot efforts include LOI and eDOS
  - LOI Tool for testing is almost complete and will be referenced by upcoming pilot

Questions/Discussion

ONC website:

www.healthit.gov/

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S&I Framework Wiki:

http://wiki.siframework.org/

S&I FRAMEWORK

Transitions of Care (ToC)

Charter/Scope Summary

- Create a migration path to greater interoperability by producing a toolset to aid in development and validation of uniform clinical documents, which has hindered widespread standards adoption

- Support Meaningful Use Stage 1 summary of care (Eligible Provider, Eligible Hospital, and Critical Access Hospital) requirements for transition of care/transition of care to consumer

- Support Meaningful Use Stage 2 requirements

Leadership Team

- Initiative Coordinator: John Feikema

Current Status

- ToC Use Case Work Groups have completed work
- The ToC/MU2/CCDA Companion Guide PSS passed the Technical Steering Committee for September Ballot
- The Companion Guide was approved for a September Informative Ballot within HL7 Structured Documents WG and all ballot materials have been submitted and approved
- Currently monitoring the Structured Documents WG for S&I Framework projects providing updates to the C-CDA in the September HL7 ballot and working to ensure a greater understanding of those updates and how they will impact the standard

Provider Directories (PD)

Charter/Scope Summary

Health information exchange requires a mechanism to obtain a digital certificate or security information (public keys) and electronic service information including electronic addresses. A scalable and standardized solution will be needed in order to efficiently, accurately, and reliably query and obtain digital certificates or security information (public keys) and electronic service information including electronic addresses to enable health information exchange. Two work streams took place within the Provider Directories Initiative:

- Certificate discovery for Direct Project with a known Direct Address

- Electronic Service Information discovery (including Electronic Addresses) with some known basic provider attributes

Leadership Team

- Initiative Coordinator: John Feikema

Current Status

- Provider Directory Work Group has completed their work; S&I Initiative is Closed

- Outcomes of this initiative are now addressed via OST's Mod Specs work (Phases 3 & 4)

esMD – Electronic Submission of Medical Documentation

Charter/Scope Summary

This Initiative intends to replace various, current paper documentation and processes with an electronic alternative for Providers to submit to Payers.

- Address the registration process, technical transport and authentication needed to allow Payers to identify Providers and send requests to them (PPA WG – Use Case 1)

- Determine the structured electronic format of medical document request letters to be sent to Providers, with consideration for the technical transport, expected response and information needed to support the response (PPA/SC WGs – Use Case 2)

- Digital Signature needs for this initiative will be addressed as part of Author of Record Level 1, 2 and 3 Use Cases (AoR WG – AoR L1 Use Case, AoR L2 Use Case)

- Define data sets, templates and standards in providing guidance with decision support, enabling provider capture of required structured documentation, and securely exchanging for benefit determination based on Health Plan/Payer's coverage and payment rules (eDoC WG – eDoC Generic Use Case)

Leadership Team

- Initiative Coordinator: Bob Dieterle
- CMS Lead: Dan Kalwa
- Co-Workgroup Leads: Dr. Mark Pilley, Dr. Viet Nguyen

Current Status

- Submitted Author of Record Level 2 HL7 CDA IG to HL7 for September ballot
    - Author of Record Level 2 S&I Framework IG in development
- eDoC Structured Data SWG currently ongoing to develop a C-CDA Order Template
- eDoC Power Mobility Devices (PMD) User Story Addendum to the eDoC Generic Use Case is near completion
- eDoC Generic Use Case S&I Framework and HL7 IGs in development

Query Health (QH)

Charter/Scope Summary

Distributed queries approaches to date have relied upon dedicated experts exploring standards and services to best utilize data from distributed systems. The value of the Query Health Initiative will be to lower the barrier using consensus-based standards and specifications to support queries for population based/aggregated data from certified EHRs and other community records. The initiative will provide a standardized clinical element data dictionary to support implementable, high-value user stories, based on available, shareable and standardized information from EHRs and other patient care systems. The initiative will also provide extensible 'Query' and 'Return Results' standards and services, enabling interoperability between and among information requestors and data sources.

Leadership Team

- Initiative Coordinator: John Feikema

Current Status

- Use Case Achieved Consensus on 11/16/11
- Pilots:
    - MDPHnet pilot is live as of 10/30/12
    - NYC/NYS pilot is live with test data as of 2/27/13
    - FDA pilot is live and able to query their partner, Beth Israel
    - Allscripts is in the planning stage
    - Appalachian Primary Care Research Network (AppNET) may be targeted to be a DAF pilot instead of QH
- QRDA Cat III DSTU Release 1 was published on 11/28/12
- Finalizing pilot feedback and incorporating findings into a summary report
- HQMF R2 draft published on 7/2; comments closed 8/11; Plans to publish Fall 2013 (date TBD)