

Common Health Interoperability Model (CHIM) And Practitioner's Guide for HIE Interoperability

Using The Open Group IT4IT™ Value Chains and Reference Architecture

Informed by FHA FHIM and HL7 CIMI / DCMs / EHR-S FM,

IHE, NIST & ONC Scenarios, Standards and Security Frameworks.

Using MDHT-MDMI to create Implementation Guides for

CDA, NIEM, FHIR and XML/JSON messages/service API

Call for Participation and Talking Points for

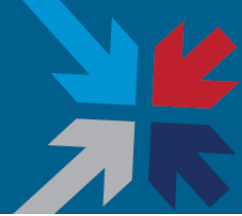
HL7 WG Meeting, Jan 10-15, 2016 (Draft-I)

The Open Group Meeting, Jan 25-28, 2016

Period-of-Performance: Jan-Sep 2016

Steve Hufnagel PhD, Facilitator, 703-575-7912, Shufnagel@ApprioInc.com

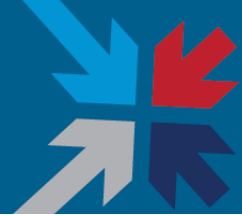
REQUESTED ACTION: Send questions/comments to facilitator



The Open Group Healthcare Forum can add value to the Common Health Interoperability Model (CHIM) at HL7

- » The Open Group IT4IT™ Value Chains & Reference Architecture can add architectural rigor
- » We are vendor-neutral and consensus-driven. We are independent and do not represent any standard or technology
- » Forum members are from key organizations around the globe, represent different stakeholder groups, and contribute innovative thinking
- » We combine a business and technology orientation with structured approaches—using models, frameworks and architecture-thinking—to help solve real-world business problems
- » We view health and healthcare from a person-centric perspective. We think health data should follow the person. We reject point-to-point solutions in favour of longitudinal ones
- » We focus on making existing standards work and encourage collaboration among standards development organizations (SDOs)
- » In short, our orientation to the interoperability problem is holistic and systems-oriented. This approach is aligned with efforts to address the broad goals expressed in the IOM “triple aim” and the “learning healthcare system.” [[*Jason Lee, The Open Group Healthcare Forum*](#)]

The Open Group IT4IT™ Value Chains and Reference Architecture Within HL7 SAIF CD



- **“The HL7 Service-Aware Interoperability Framework Canonical Definition (SAIF CD)** is an architecture for achieving interoperability; but, it is not a whole-solution design for Enterprise architecture management.”
- “SAIF CD must be adapted to an organization's implementation requirements through the production of a SAIF implementation Guide.”
- The **Health IT4IT™ Business Value Chains and Health Information Exchange (HIE) Reference Architecture** is intended to be the HIE Interoperability Practitioner's SAIF Implementation Guide for “organizations building large-scale integrated health IT infrastructures at the national level.”
- **This Practitioner's Guide** will address the implementers' conundrum of *“models, models everywhere; but, I need to develop, test and deploy an interoperable solution architecture now.”*

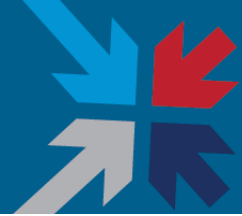
Executive Summary (**Vision, Goal**)



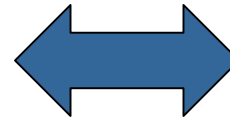
- » Our **vision** is to allow for the development of secure free-flow of medical information to become a reality, thereby creating a patient/clinician friendly environment; where currently, standards in health IT are numerous and varied across systems, making a smooth Exchange among EHR related systems difficult.
- » Our **goal** is for Data Objects to flow across Health IT Systems and their HIE Integration Components supporting Health Business Value Chains; where,
 - a Common Health Interoperability Model (CHIM) is the foundation of an *authoritative architectural* model of the health information landscape and benchmark for health IT standards; and where,
 - we instantiate the Open Group IT4IT Value Chain and Reference Architecture with HL7 EHR related System Models, System Components and Integration Components.
- » IT4IT Value Chains define use cases for strategy, requirements, portfolio, deployment, operations, change and error recovery.

Vision/Goal: Common Health Interoperability Model

“HIE Interoperability: A Practitioner's Approach”



Health IT4IT™ Business Value Chains
and HIE Reference Architecture



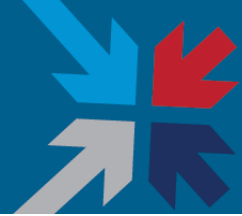
**Clear, Complete, Concise,
Correct and Consistent Fully
Integrated and Tool-Based
Architectural Model**

... faster, better, cheaper HIEs

Architecture identifies Laws, Policies, Health IT Strategy, Health IT Roadmap, Interoperability Standards Advisory for a learning health system to improve the patient experience of care, to improve the health of populations, and to reduce the per capita cost of health care.

- » Agile, Aligned, Interoperable
- » Strategic, Standards Based, Simple
- » Knowledge Driven, Reliable, Reusable
- » Accessible, Secure, Sustainable

Executive Summary (**Objective, Approach**)



- » The **objective**, of this 9 month HL7 investigative study, is to
 - demonstrate that we can automatically transform an instance of one data standard into an instance of another data standard, based on a single shared & documented understanding of information & functional requirements, automatically.
 - This capability will support actual semantic interoperability among stakeholders currently prevented from such interoperability by divergent standards,
 - and it will do so in a way that enforces consistent semantics across any community that uses it.
 - Demonstrate Open Group IT4IT™ instantiated with Health IT models and standards, including
 - Common Information Modelling Initiative (**CIMI**) archetype models,
 - Federal Health Information Model (**FHIM**) and Detailed Clinical Models (**DCMs**) UML Models
 - Demonstrate archetype versus UML Modeling styles.
 - Demonstrate UML archetype Modeling Language profile models and CIMI reference models.
 - Document processes, products and tools in “**Practitioner's Guide for HIE Interoperability**.”
 - Develop a comprehensive HL7 FY2017 Project Scope Statement / Program Plan
- » The **approach** will instantiate The Open Group IT4IT™ Reference Architecture and Value Chain-based operating model with Health IT models, Frameworks and artifacts, following a cyclic Agile build, test, evaluate, document and re-plan methodology.

Objective: Common Health Interoperability Model Business Value Chains & HIE Reference Architecture



Common Logical Information Model (CLIM)

Informed by FHIM
CIMI & DCMs

Linked to S&I
Framework Use-
Case Simplification

Linked to IBRM &
EHR System
Functional Model

Linked to
NIST Risk
and Security
Framework

Linked to IHE
Technical
Framework

Linked to NIST
HIT Standards
and Testing

MDHT-MDMI

NIEM

FHIR

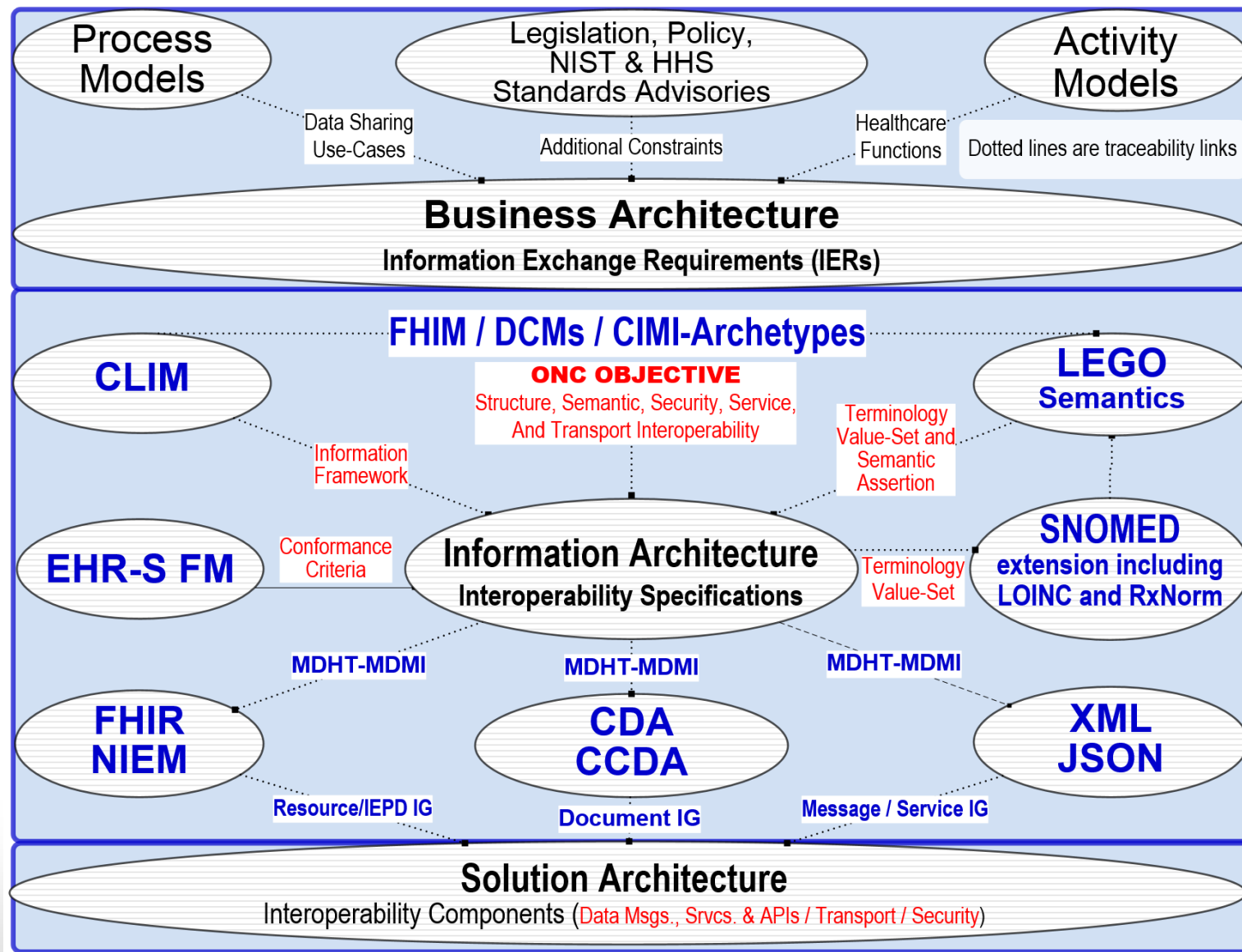
CDA/CCDA

XML / JSON

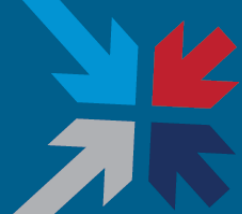
Tool based Traceability to

- Laws and Regulations
- Jurisdictional Policies
- DOD-VA IBRM, ISA, JIP
- Clinical Guidelines
- Clinical Pathways
- Quality Measures
- Implementations
- Tests and Certifications

Approach: Common Health Interoperability Model Model Driven Architecture (MDA)



Schedule: Common Health Interoperability Model Business Value Chains & HIE Reference Architecture



- » Jan/Feb 2016 – investigative study HL7 Project Scope Statement (PSS)
- » May/Aug 2016 – Demonstration and draft FY2017 Program Plan
- » Sept/Oct 2016 – Comprehensive FY2017 HL7 Project Scope Statement
- » Sept/Oct 2017 – HL7 Draft Standard for Trial Use (DSTU) 1
- » Sept/Oct 2018 – HL7 Draft Standard for Trial Use (DSTU) 2
- » Sept/Oct 2019 – HL7 Normative Ballot

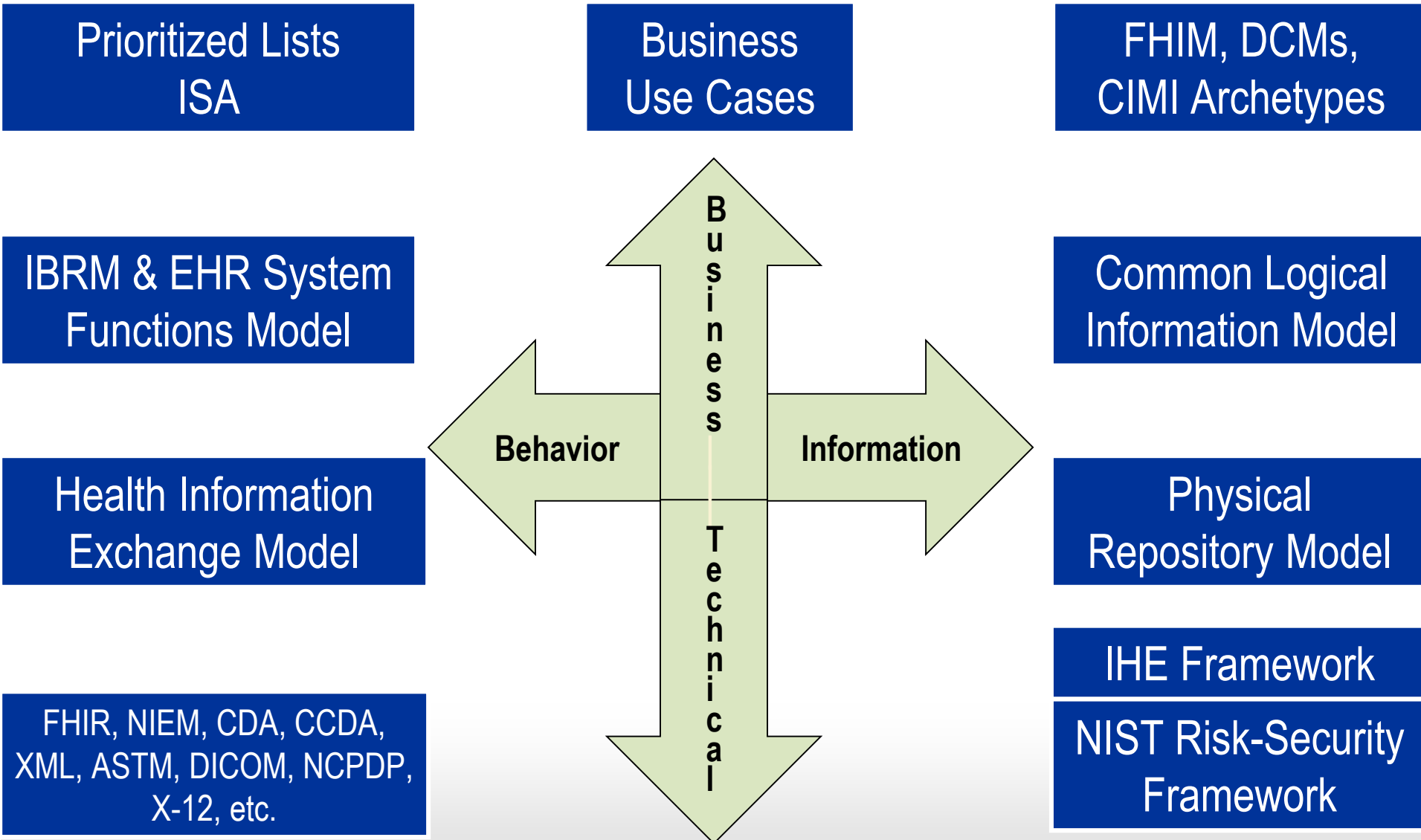
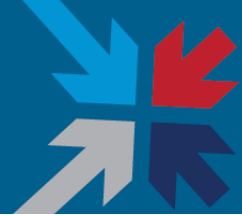
Acronyms



CDA	Clinical Document Architecture		IG	Implement Guide
CCDA	Consolidated CDA		IHE	Integrating the Healthcare Enterprise
CLIM	Common Logical Information Model		IM	Information Management
CMS	Centers for Medicare & Medicaid Services		ISA	Interoperability Standards Advisory
DAF	Data Access Framework		IT	Information Technology
DBA	Database Analyst		JIP	(DOD-VA) Joint Interoperability Plan
DCM	Detailed Clinical Model		MDHT	Model Driven Health Tool
CIMI	Clinical Information Modelling Initiative		MDMI	Model Driven Message Interoperability
EHR-S FM	EHR System Functions Model		NIEM	National Information Exchange Model
EHR-S FIM	EHR System Functions and Information Model		NIST	National Institute of Standards and Technology
FHIM	Federal Health Information Model		NLM	National Library of Medicine
HIE	Health Information Exchange		ONC	US Health Office of the National Coordinator
HIT	Healthcare Information Technology		S&I	Standards and Interoperability
HHS	Health and Human Services Agency		SDO	Standards Development Organization
IBRM	DoD-VA Integrated Business Reference Model		SME	Subject Matter Expert
ICIB	Interagency Clinical Informatics Board		V2	HL7 Version 2 Messaging
			VLER	Virtual Lifelong Electronic Record

Health IT4IT Value Chains & Reference Architecture

Model-Driven Architecture (MDA)



Software Development Lifecycle (SDLC)

Health IT MDA Users and Uses

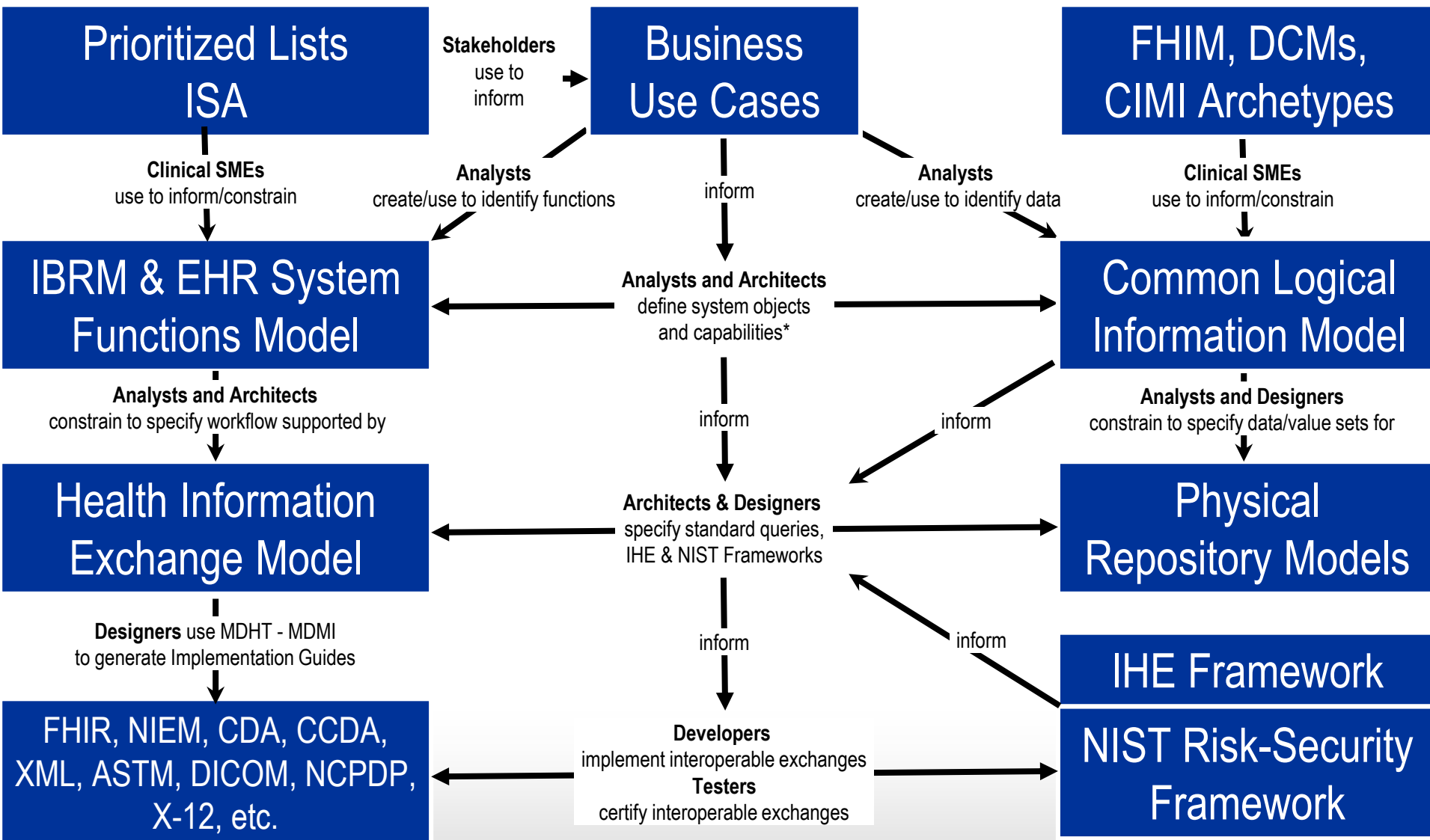


Notional User-Story / Use Case

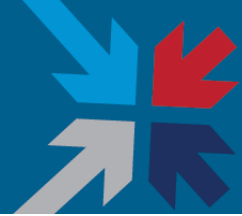
1. Clinician Lists are prioritize by Health Data Sharing (HDS) initiatives; where, the lists inform
2. Business Use Cases (UCs) developed by Analysts; and, the UCs inform / constrain
3. System Objects, Capabilities, Services, and Information Exchange Requirements (IERs) described by Analysts and Architects, who are informed by
 - » IBRM and/or EHR-S System Functional Model
 - » CLIM informed by FHIM, HL7 Detailed Clinical Models (DCMs) and CIMI models
4. System Physical Repositories are specified by Architects and Designers, based on
 - » System Objects, Capabilities, and Services specified as EHR-S FM & FHIM subsets.
5. System Information Exchanges are specified by Architects & Designers, based on
 - » MDHT-MDMI (FHIM) generated Implementation Guides (IGs)
 - » for CDA, NIEM, FHIR and XML/JSON messages/service API
 - » FHIM-based queries/APIs to obtain required data from Physical Repositories.
 - » NIST Security Framework and IHE Technical Framework to manage the exchanges.
 - » NIST SP-800 Risk Assessment/Management Framework to manage network risk.
6. Implementation Guides (IGs) can be specified by analysts/engineers using MDHT-MDMI
7. Developers/testers use IGs to construct/test interoperable information exchanges.

Software Development Lifecycle (SDLC)

Health IT MDA Users and Uses



Significant Milestones



2001-2009 Bush Administration

- 2004 ONC Established
 - 2005 HITSP established Dec 2005 through Apr 2009
-

2009-2017 Obama Administration

- 2009 ARRA:HITECH Act / VLER Program established
- 2009 FHIM established, Tim Cromwell & Nancy Orvis, proponents
 - HITSP Lesson Learned → MDHT/FHIM needed to empower Developers
- 2011 DOD-VA iEHR / IPO established by NDAA / S&I Framework Established by ONC
- 2011 MDHT capable of doing CDA Implementation Guides
- 2012 FHIM-based Immunization Information Model with CDC
- 2012 MDHT/FHIM Immunization Implementation Guide/Spec for CDC
- 2013 FHIM-based Population Health Information Model with CDC
- 2013 DoD-VA Data Sharing Accelerator Initiative, VistA & DHMSM Modernization announced
- 2013 MDHT capable of doing NIEM Implementation Guides
- 2015/6 MDHT capable of doing FHIR Profile / implementation Guide
- 2017/9 Common Health Interoperability Model & Practitioner's Guide for HIE Interoperability

HL7 Investigative Study Project Scope Statement (PSS) and Call for Participation: Common Health Interoperability Model (CHIM) and Practitioner's Guide for HIE Interoperability

Steve Hufnagel PhD, Facilitator, 703-575-7912, SHufnagel@Appriolnc.com

REQUESTED ACTION: Please send questions/comments to facilitator.

1. Project Name and ID

Common Health Interoperability Model (CHIM) And Practitioner's Guide for HIE Interoperability	Project ID: it
<input type="checkbox"/> TSC Notification Informative/DSTU to Normative Date :	
<input checked="" type="checkbox"/> Jan-Sep 2016 Investigative Project Date : January 9, 2016 DRAFT I	

2. Sponsoring Group(s) / Project Team

Primary Sponsor/Work Group (1 Mandatory)	CIMI
Co-sponsor Work Group(s)	EHR, PC, CIC, SOA
Co-Sponsor Group Approval Date	Co-Sponsor Approval Date CCYY-MM-DD
Indicate the level of involvement that the co-sponsor will have for this project: <input type="checkbox"/> Request formal content review prior to ballot <input checked="" type="checkbox"/> Request periodic project updates. Specify period: Monthly, at WGMs, etc. <input type="checkbox"/> Other Involvement. Specify details here:	

Project Team:	
Project facilitator (1 Mandatory)	<div style="display: flex; justify-content: space-between;"> Steve Hufnagel Facilitator </div>
	<div style="display: flex; justify-content: space-between;"> Stan Huff CIMI Co-chair </div>
	<div style="display: flex; justify-content: space-between;"> Mark Janczewski EHR Co-chair </div>
	<div style="display: flex; justify-content: space-between;"> Jay Lyle PC co-chair </div>
	<div style="display: flex; justify-content: space-between;"> CIC co-chair </div>
	<div style="display: flex; justify-content: space-between;"> SOA co-chair </div>
	<div style="display: flex; justify-content: space-between;"> Gary Dickinson S&I Simplification co-chair </div>
	<div style="display: flex; justify-content: space-between;"> Nancy Orvis DoD Proponent* </div>
	<div style="display: flex; justify-content: space-between;"> Bob Bishop VA Proponent* </div>
	<div style="display: flex; justify-content: space-between;"> Nona Hall IPO Proponent* </div>
	<div style="display: flex; justify-content: space-between;"> Gail Kalbfleisch FHIM Sponsor* </div>
	<div style="display: flex; justify-content: space-between;"> Jason Lee The Open Group Healthcare Forum </div>
	<p>* This project is not currently "sponsored" by a federal agency.</p>
Other interested parties and their roles	
Multi-disciplinary project team (recommended)	
Modeling facilitator	Steve Hufnagel
Publishing facilitator	
Vocabulary facilitator	
Domain expert rep	

Business requirement analyst	
Conformance facilitator (for IG projects)	
Other facilitators (SOA, SAIF)	

Implementers (2 Mandatory for DSTU projects)
NOT APPLICABLE FOR INVESTIGATIVE Project

3. Project Definition

3.a. Project Scope

- Our **vision** is to allow for the development of secure free-flow of medical information to become a reality, thereby creating a patient/clinician friendly environment; where currently, standards in health IT are numerous and varied across systems, making a smooth Exchange among EHR related systems difficult.
- Our **goal** is for Data Objects to flow across Health IT Systems and their HIE Integration Components supporting Health Business Value Chains; where,
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- IT4IT Value Chains define use cases for strategy, requirements, portfolio, deployment, operations, change and error recovery.
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This Investigative Project is not currently "sponsored" by a federal agency.

3.b. Project Need

The Need to Architect the Health Information Standards Landscape

Standards in health IT are numerous and varied across systems, making a smooth exchange of EHRs difficult; where, Secure exchange of meaningful healthcare information requires that parties agree upon a common application of standards that define the type of content being exchanged and the manner in which this takes place. But currently, numerous standards exist. There are different standards that define content from their most basic elements and expected values through their packaging and transmission frameworks. There are numerous development organizations that support health information technology. It is not uncommon to perform a target scan of the environment and discover relevant healthcare standards supported by a standards development organization whose primary purpose is other than healthcare. Numerous standards utilized for the same purpose often exist within a single standards development organization. Choices of standards, standards bodies, and archetypes appear to have a geographical component as well with nations tending to favor one approach over the other.

The fluidity of the landscape in health information technology and the high level of information security that is needed to protect patient information has created a very difficult environment. For instance, it is currently much harder for systems to exchange a medical record than it is for an ATM machine to exchange information regarding identification of an account and available credit.

An authoritative architectural model of the present international health information landscape would benefit the health information technology vendor community. It would create a benchmark for health IT standards, allowing for the development of a secure free-flow of medical information to become a reality and creating a patient/clinician friendly environment. [Gail Kalbfleisch, **FHA Director**]

Interoperability is not simply a technical issue, a leadership issue, an organizational issue, or a money issue. Rather, it is all of these, considered together in an integrated manner. To do this, we simplify by representing the fundamental structure of health care systems in a landscape in which key actors produce essential actions. This simplification makes it is easier to identify barriers and gap-filling steps necessary for improvement and advancement In this way we can see both gaps and benefits. In short, our orientation to the interoperability problem is holistic and systems-oriented. We do not believe solutions are merely technical. Rather, they build on a keen understanding of the interdependence of the key elements of the healthcare landscape. This approach is aligned with efforts to address the broad goals expressed in the “**triple aim**” and the “**learning healthcare system**.”¹ [Jason Lee, **The Open Group Health Forum**]

¹ The US-based Institute for Healthcare Improvement (IHI) coined the term “**Triple Aim**” in 2007 to refer to “the simultaneous pursuit of improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care. . . The IHI Triple Aim framework often functions as a statement of purpose for health care system transformation that will better meet the needs of people and patients. Its successful implementation will result in fundamentally new systems contributing to the overall health of populations while reducing the cost to society.”

(<http://www.ihi.org/communities/blogs/layouts/ihi/community/blog/itemview.aspx?List=81ca4a47-4ccd-4e9e-89d9-14d88ec59e8d&ID=63>, accessed October 28, 2015.)

The US Institute of Medicine (IOM) describes a **learning healthcare system** as one that is “designed to generate and apply the best evidence for the collaborative healthcare choices of each patient and provider; to drive the process of discovery as a natural outgrowth of patient care; and to ensure innovation, quality, safety, and value in health care. IOM 2012

The Healthcare Forum at The Open Group can help this Health IT work at HL7 because:

- » The Open Group IT4IT™ Value Chains & Reference Architecture can add architectural rigor
- » We are vendor-neutral and consensus-driven. We are independent and do not represent any standard or technology
- » Forum members are from key organizations around the globe, represent different stakeholder groups, and contribute innovative thinking
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The Open Group IT4IT™ Value Chains and Reference Architecture Within HL7 SAIF CD

- » “The HL7 Service-Aware Interoperability Framework Canonical Definition (SAIF CD) is an architecture for achieving interoperability; but, it is not a whole-solution design for Enterprise architecture management.”
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- » **This Practitioner's Guide** will address the implementers' conundrum of “*models, models everywhere; but, I need to develop, test and deploy an interoperable solution architecture now.*”

3.c. Success Criteria

Approved FY2017 comprehensive PSS

3.d. Project Risks

Risk Description:	TBD in FY2017 PSS			
Impact:	<input type="checkbox"/> Critical	<input type="checkbox"/> Serious	<input type="checkbox"/> Significant	<input type="checkbox"/> Low
Likelihood:	<input type="checkbox"/> High	<input type="checkbox"/> Med	<input type="checkbox"/> Low	
Risk Type:	<input type="checkbox"/> Requirements	<input type="checkbox"/> Resources	<input type="checkbox"/> Social-Political	<input type="checkbox"/> Technology
Risk To HL7:	<input type="checkbox"/> Internal to HL7		<input type="checkbox"/> External to HL7	
Mitigation Plan:				

3.e. Security Risks **TBD in FY2017 PSS**

Will this project produce executable(s), for example, schemas, transforms, stylesheets, executable program, etc. If so the project must review and document security risks.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
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3.f. External Drivers

DoD and VA EHR modernization and interoperability, CDC Public Health initiatives, CMS and FDA initiatives.

3.g. Project Objectives / Deliverables / Target Dates

	Target Date
First "work-in progress" Investigative Project demo / lessons-learned Demonstration, FY2017 Program Plan	May 2016 HL7 WG mtg. June-Aug 2016
Comprehensive FY2017 <i>Common Health Interoperability Model (CHIM)</i> PSS for HL7 review/processing	Sep 2016 HL7 WH mtg.
• Example Health IT4IT CLIM informed by FHIM, CIMI, DCMs	
• Example Health IT4IT Business Value Chains & Reference Architecture	
• Example MDHT-MDMI IG for CDA, NIEM, FHIR and XML/JSON messages/service API	
• Prototype Users Guide for <i>Common Health Interoperability Model (CHIM)</i> & Tools	
• FY2017 Work Breakdown Structure (WBS) / Program Plan	
• Risks and risk mediations identified	

3.h. Common Names / Keywords / Aliases

CIMI, DCM, FHIM, HIT, CLIM, NIEM, FHIR, CDA, V2, IT4IT, HL7, Open Group

3.i. Lineage

NA

3.j. Project Requirements

- The Investigative Project will demonstrate
- The Open Group IT4IT processes and products including the HIT-CLIM Specification of "Common Clinical Data Set" IAW ONC "Connecting Health and Care for the Nation: A Shared Nationwide Interoperability Roadmap"
 - Traceability to
 - Use Case Simplification (S&I Framework Project)
 - IHE Technical Framework
 - EHR-S Functional Model
 - NIST Security and Risk Framework
 - Interoperability Standards Advisory, Strategy and Roadmap
 - XMI support for Use Case Authoring Tool (UCAT) and/or UML SDLC Tools, such as Sparx EA, IBM RSA, MagicDraw, NIST Prometheus, open source Papyrus

3.k. Project Dependencies

FHIM, CIMI, DCMs, EHR-S FM, FHIR, OpenGroup IT4IT, S&I Framework Use Case Simplification, eclipse.org MDHT

3.l. Project Document Repository Location

CIMI wiki

3.m. Backwards Compatibility

2016-01-09-DRAFT-I HL7-PSS for Common Health Interoperability Model.docx	2015 Release	Page 5 of 8
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[Click here to go to Appendix A for more information regarding this section and FHIR project instructions.](#)

Are the items being produced by this project backward compatible? ☐ Yes ☐ No ☐ Unknown ☒ N/A

For V3, are you using the current data types? ☒ Yes ☐ No

If you check 'No' please explain the reason:

3.n.External Vocabularies

[Click here to go to Appendix A for more information regarding this section.](#)

Will this project include/reference external vocabularies? ☒ Yes ☐ No ☐ Unknown ☐ N/A

If yes, please list the vocabularies: **Vocabularies used by CIMI, FHIR and DCMs such as, but not limited to, SNOMED, LOINC, RxNorm**

4. Products

<input checked="" type="checkbox"/> Non Product Project- (Comprehensive HL7 PSS for FY2017)	<input type="checkbox"/> V3 Domain Information Model (DIM / DMIM)
<input type="checkbox"/> Arden Syntax	<input type="checkbox"/> V3 Documents – Administrative (e.g. SPL)
<input type="checkbox"/> Clinical Context Object Workgroup (CCOW)	<input type="checkbox"/> V3 Documents – Clinical (e.g. CDA)
<input type="checkbox"/> Domain Analysis Model (DAM)	<input type="checkbox"/> V3 Documents - Knowledge
<input type="checkbox"/> Electronic Health Record (EHR) Functional Profile	<input type="checkbox"/> V3 Foundation – RIM
<input checked="" type="checkbox"/> Logical Model	<input type="checkbox"/> V3 Foundation – Vocab Domains & Value Sets
<input type="checkbox"/> V2 Messages – Administrative	<input type="checkbox"/> V3 Messages - Administrative
<input type="checkbox"/> V2 Messages - Clinical	<input type="checkbox"/> V3 Messages - Clinical
<input type="checkbox"/> V2 Messages - Departmental	<input type="checkbox"/> V3 Messages - Departmental
<input type="checkbox"/> V2 Messages – Infrastructure	<input type="checkbox"/> V3 Messages - Infrastructure
<input type="checkbox"/> FHIR Resources	<input type="checkbox"/> V3 Rules - GELLO
<input type="checkbox"/> FHIR Profiles	<input type="checkbox"/> V3 Services – Java Services (ITS Work Group)
<input type="checkbox"/> New/Modified/HL7 Policy/Procedure/Process	<input type="checkbox"/> V3 Services – Web Services (SOA)
<input type="checkbox"/> New Product Definition	
<input type="checkbox"/> New Product Family	

5. Project Intent (check all that apply)

<input type="checkbox"/> Create new standard <input type="checkbox"/> Revise current standard (see text box below) <input type="checkbox"/> Reaffirmation of a standard <input type="checkbox"/> New/Modified HL7 Policy/Procedure/Process <input type="checkbox"/> Withdraw an Informative Document <input type="checkbox"/> N/A (Project not directly related to an HL7 Standard)	<input type="checkbox"/> Supplement to a current standard <input type="checkbox"/> Implementation Guide (IG) will be created/modified Project is adopting/endorsing an externally developed IG: Specify external organization in Sec. 6 below; Externally developed IG is to be (select one): <input type="checkbox"/> Adopted - OR - <input type="checkbox"/> Endorsed
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**Comprehensive FY2017 PSS for
Common Health Interoperability Model (CHIM)
And Practitioner's Guide for HIE Interoperability**

5.a. Ballot Type (check all that apply)

<input checked="" type="checkbox"/> Comment Only for Investigative Project <input type="checkbox"/> Informative <input type="checkbox"/> DSTU to Normative	<input type="checkbox"/> Normative (no DSTU) <input type="checkbox"/> Joint Ballot (with other SDOs or HL7 Work Groups) <input type="checkbox"/> N/A (project won't go through ballot)
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Investigative Project in support of a comprehensive FY2017 PSS to define DSTU and ultimately a normative ballot.

5.b. Joint Copyright

Check this box if you will be pursuing a joint copyright. Note that when this box is checked, a Joint Copyright Letter of Agreement must be submitted to the TSC in order for the PSS to receive TSC approval.

☐ Joint Copyrighted Material will be produced **TBD for FY2017 PSS**

6. Project Logistics

6.a. External Project Collaboration

<p>Include SDOs or other external entities you are collaborating with, including government agencies as well as any industry outreach. Indicate the nature and status of the Memorandum of Understanding (MOU) if applicable.</p> <p>TBD for FY2017 PSS</p>		
<p>For projects that have some of their content already developed:</p>		
How much content for this project is already developed?	100% for Investigative Project	
Was the content externally developed (Y/N)? YES	The Open Group IT4IT Reference Architecture, FHA FHIM, NIST Security & Risk Framework, IHE Technical Framework, ONC S&I Simplification	
Date of external content review by the ARB? TBD for FY2017 PSS	Approval date CCYY-MM-DD	
Is this a hosted (externally funded) project? (not asking for amount just if funded)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

6.b. Realm

<input type="checkbox"/> Universal	<input type="checkbox"/> Realm Specific
<input type="checkbox"/> Check here if this standard balloted or was previously approved as realm specific standard	
TBD	

6.c. Project Approval Dates

Affiliate/US Realm Task Force Approval Date (for US Realm Specific Projects)	USRTF Approval Date CCYY-MM-DD
Sponsoring Work Group Approval Date	WG Approval Date CCYY-MM-DD
FHIR Project: FHIR Management Group Approval Date	FMG Approval Date CCYY-MM-DD
Steering Division Approval Date	SD Approval Date CCYY-MM-DD
PBS Metrics and Work Group Health Reviewed? (required for SD Approval)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Technical Steering Committee Approval Date	TSC Approval Date CCYY-MM-DD
TSC has received a Copyright/Distribution Agreement (which contains the verbiage outlined within the SOU), signed by both parties. <input type="checkbox"/> Yes <input type="checkbox"/> No	
NOT APPLICABLE FOR INVESTIGATIVE PROJECT	

6.d. Stakeholders / Vendors / Providers

This section must be completed for projects containing items expected to be ANSI approved, as it is an ANSI requirement for all ballots

Stakeholders	Vendors	Providers
<input type="checkbox"/> Clinical and Public Health Laboratories	<input type="checkbox"/> Pharmaceutical	<input type="checkbox"/> Clinical and Public Health Laboratories
<input type="checkbox"/> Immunization Registries	<input type="checkbox"/> EHR, PHR	<input type="checkbox"/> Emergency Services
<input type="checkbox"/> Quality Reporting Agencies	<input type="checkbox"/> Equipment	<input type="checkbox"/> Local and State Departments of Health
<input type="checkbox"/> Regulatory Agency	<input type="checkbox"/> Health Care IT	<input type="checkbox"/> Medical Imaging Service
<input type="checkbox"/> Standards Development Organizations (SDOs)	<input type="checkbox"/> Clinical Decision Support Systems	<input type="checkbox"/> Healthcare Institutions (hospitals, long term care, home care, mental health)
<input type="checkbox"/> Payors	<input type="checkbox"/> Lab	<input type="checkbox"/> Other (specify in text box below)
<input checked="" type="checkbox"/> Other (specify in text box below)	<input type="checkbox"/> HIS	<input type="checkbox"/> N/A
<input type="checkbox"/> N/A	<input type="checkbox"/> Other (specify below)	

Federal Health Architecture, Federal Agencies and their Commercial Partners	<input type="checkbox"/> N/A	
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6.e. Synchronization With Other SDOs / Profilers

Check all SDO / Profilers which your project deliverable(s) are associated with.		
<input type="checkbox"/> ASC X12	<input type="checkbox"/> CHA	<input type="checkbox"/> LOINC
<input type="checkbox"/> AHIP	<input type="checkbox"/> DICOM	<input type="checkbox"/> NCPDP
<input type="checkbox"/> ASTM	<input type="checkbox"/> GS1	<input type="checkbox"/> NAACCR
<input type="checkbox"/> BioPharma Association (SAFE)	<input type="checkbox"/> IEEE	<input type="checkbox"/> Object Management Group (OMG)
<input type="checkbox"/> CEN/TC 251	<input type="checkbox"/> IHE	<input type="checkbox"/> The Health Story Project
<input type="checkbox"/> CHCF	<input type="checkbox"/> IHTSDO	<input type="checkbox"/> WEDI
<input type="checkbox"/> CLSI	<input type="checkbox"/> ISO	<input checked="" type="checkbox"/> Other (specify below) The Open Group Healthcare Forum
<p>This investigative project is intended to document processes and products, using examples from the well understood Immunization Management, Lab and Transfer of Care domains; as such, the project may duplicate existing IGs as a verification and validation of the approach.</p>		

Acronyms			
CDA	Clinical Document Architecture	IHE	Integrating the Healthcare Enterprise
CCDA	Consolidated CDA	IM	Information Management
CLIM	Common Logical Information Model	ISA	Interoperability Standards Advisory
CMS	Centers for Medicare & Medicaid Services	IT	Information Technology
DAF	Data Access Framework	JIP	(DOD-VA) Joint Interoperability Plan
DBA	Database Analyst	MDHT	Model Driven Health Tool
DCM	Detailed Clinical Model	MDMI	Model Driven Message Interoperability
CIMI	Clinical Information Modelling Initiative	NIEM	National Information Exchange Model
EHR-S FM	EHR System Functional Model	NIST	National Institute of Standards and Technology
FHIM	Federal Health Information Model	NLM	National Library of Medicine
HIE	Health Information Exchange	ONC	Office of the National Coordinator
HIT	Healthcare Information Technology	S&I	Standards and Interoperability
HHS	Health and Human Services Agency	SDO	Standards Development Organization
IBRM	DoD-VA Integrated Business Reference Model	SME	Subject Matter Expert
ICIB	Interagency Clinical Informatics Board	V2	HL7 Version 2 Messaging