CIMI Sponsored Investigative Study
HL7 Project Scope Statement (PSS) for

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 CIMIT/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@ApprioIncc.com

REQUESTED ACTION: Send questions/comments to facilitator

1/9/2016 This investigative study is not currently "sponsored" by a Federal Agency
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 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.
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
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

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

MDHT-MDMI

NIEM  FHIR  CDA/CCDA  XML / JSON

Objective is consistent data formats and semantics across implementation paradigms IAW ONC 2015 Interoperability Roadmap
1/9/2016

This is a working document; it is not approved for official use / public distribution.
Approach: Common Health Interoperability Model
Model Driven Architecture (MDA)

Business Architecture
Information Exchange Requirements (IERs)

FHIM / DCMs / CIMI-Archetypes

CLIM
- ONC OBJECTIVE
  Structure, Semantic, Security, Service, And Transport Interoperability

EHR-S FM
- Conformance Criteria

FHIR NIEM
- Resource/IEPD IG

CDA CCDA
- Document IG

Solution Architecture
Interoperability Components (Data Msgs., Srvcs. & APIs / Transport / Security)

XML JSON
- Terminology Value-Set
- Terminology Value-Set and Semantic Assertion

LEGO Semantics
- SNOMED extension including LOINC and RxNorm

Dotted lines are traceability links
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
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<tr>
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<td>CDA</td>
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<td>Consolidated CDA</td>
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<td>CLIM</td>
<td>Common Logical Information Model</td>
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<td>Implement Guide</td>
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<td>Integrating the Healthcare Enterprise</td>
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<td>Information Technology</td>
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<td>Model Driven Message Interoperability</td>
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<td>National Information Exchange Model</td>
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<td>National Institute of Standards and Technology</td>
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<td>National Library of Medicine</td>
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<td>ONC</td>
<td>US Health Office of the National Coordinator</td>
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<td>Subject Matter Expert</td>
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<td>VLER</td>
<td>Virtual Lifelong Electronic Record</td>
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Health IT4IT Value Chains & Reference Architecture
Model-Driven Architecture (MDA)

Prioritized Lists
ISA

IBRM & EHR System
Functions Model

Health Information
Exchange Model

FHIR, NIEM, CDA, CCDA,
XML, ASTM, DICOM, NCPDP,
X-12, etc.

Business
Use Cases

Common Logical
Information Model

FHIM, DCMs,
CIMI Archetypes

Physical
Repository Model

IHE Framework

NIST Risk-Security
Framework

1/9/2016
This is a working document; it is not approved for official use / public distribution.
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.

1/9/2016  This is a working document; it is not approved for official use / public distribution.
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 \(\rightarrow\) 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
1. Project Name and ID

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

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☑️ Jan-Sep 2016 Investigative Project

Date: January 9, 2016 DRAFT

2. Sponsoring Group(s) / Project Team

<table>
<thead>
<tr>
<th>Primary Sponsor/Work Group (1 Mandatory)</th>
<th>CIMIT</th>
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<tbody>
<tr>
<td>Co-sponsor Work Group(s)</td>
<td>EHR, PC, CIC, SOA</td>
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<tr>
<td>Co-Sponsor Group Approval Date</td>
<td>Co-Sponsor Approval Date CCYY-MM-DD</td>
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Indicate the level of involvement that the co-sponsor will have for this project:

☐ Request formal content review prior to ballot

☒ Request periodic project updates. Specify period: Monthly, at WGMs, etc.

☐ Other Involvement. Specify details here:

<table>
<thead>
<tr>
<th>Project Team:</th>
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<tbody>
<tr>
<td><strong>Project facilitator (1 Mandatory)</strong></td>
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<tr>
<td>Steve Hufnagel Facilitator</td>
</tr>
<tr>
<td>Stan Huff CIMI Co-chair</td>
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<tr>
<td>Mark Janczewski EHR Co-chair</td>
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<td>Jay Lyle PC co-chair</td>
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<td>SOA co-chair</td>
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<td>Gary Dickinson S&amp;I Simplification co-chair</td>
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<tr>
<td>Nancy Orvis DoD Proponent*</td>
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<tr>
<td>Bob Bishop VA Proponent*</td>
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<tr>
<td>Nona Hall IPO Proponent*</td>
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<tr>
<td>Gail Kalbfleisch FHIM Sponsor*</td>
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<tr>
<td>Jason Lee The Open Group Healthcare Forum</td>
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Other interested parties and their roles

Multi-disciplinary project team (recommended)

<table>
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<tr>
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<tr>
<td>Steve Hufnagel</td>
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<td>Steve Hufnagel</td>
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<tr>
<th>Domain expert rep</th>
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<tr>
<td>Steve Hufnagel</td>
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</table>
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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- 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.

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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]

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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.”


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
» We combine a business and technology orientation with structured approaches—using models, frameworks and architecture-thinking—to help solve real-world business problems
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» 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.”

3.c. Success Criteria

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3.d. Project Risks

| 2016-01-09-DRAFT-I HL7-PSS for Common Health Interoperability Model.docx | 2015 Release | Page 4 of 8 |
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.

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

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

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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
- [x] N/A

### For V3, are you using the current data types?
- [x] 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?**
- [x] Yes
- [ ] No
- [ ] Unknown
- [ ] N/A

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

---

### 4. Products

- [x] Non Product Project: (Comprehensive HL7 PSS for FY2017)
- [ ] V3 Domain Information Model (DIM / DMIM)
- [ ] V3 Documents – Administrative (e.g. SPL)
- [ ] V3 Documents – Clinical (e.g. CDA)
- [ ] V3 Documents - Knowledge
- [ ] V3 Foundation – RIM
- [ ] V3 Foundation – Vocab Domains & Value Sets
- [ ] V3 Messages - Administrative
- [ ] V3 Messages - Clinical
- [ ] V3 Messages - Departmental
- [ ] V3 Messages - Infrastructure
- [ ] V3 Rules - GELLO
- [ ] V3 Services – Java Services (ITS Work Group)
- [ ] V3 Services – Web Services (SOA)
- [ ] V3 Services – Web Services (SOA)
- [ ] New Product Definition
- [ ] New Product Family

---

### 5. Project Intent (check all that apply)

- [ ] Create new standard
- [ ] Revise current standard **(see text box below)**
- [ ] Reaffirmation of a standard
- [ ] New/Modified HL7 Policy/Procedure/Process
- [ ] Withdraw an Informative Document
- [ ] N/A (Project not directly related to an HL7 Standard)
- [ ] Supplement to a current standard
  - 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):
      - [ ] Adopted
      - OR - [ ] Endorsed

**Comprehensive FY2017 PSS for Common Health Interoperability Model (CHIM)**

**And Practitioner's Guide for HIE Interoperability**

---

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

- [x] Comment Only for Investigative Project
- [ ] Informative
- [ ] DSTU to Normative

**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

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.

TBD for FY2017 PSS

For projects that have some of their content already developed:

How much content for this project is already developed? 100% for Investigative Project

Was the content externally developed (Y/N)? YES


Date of external content review by the ARB? TBD for FY2017 PSS

Is this a hosted (externally funded) project? (not asking for amount just if funded) Yes No

6.b. Realm

☐ Universal  ☐ Realm Specific

☐ 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)

Sponsoring Work Group Approval Date

FHIR Project: FHIR Management Group Approval Date

Steering Division Approval Date

PBS Metrics and Work Group Health Reviewed? (required for SD Approval) Yes 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.

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

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

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6.e. Synchronization With Other SDOs / Profilers

Check all SDO / Profilers which your project deliverable(s) are associated with.

- ASC X12
- AHIP
- ASTM
- BioPharma Association (SAFE)
- CEN/TC 251
- CHCF
- CLSI
- ASC X12
- CHA
- LOINC
- GS1
- IEEE
- NCPDP
- NAACCR
- IHE
- Object Management Group (OMG)
- NCPDP
- The Health Story Project
- GS1
- IHTSDO
- WEDI
- ISO
- Other (specify below)

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.