



# HL7 EHR Work Group Interoperability Sub-Group



## Proposed US Realm Federal Health Architecture (FHA) EHR System Functional Model (EHR-S FM) Profile **FHA EHR-S FM Profile**

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### Presented to:

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# **Mission Needs Statement**

## **FHA EHR-S FM Profile**

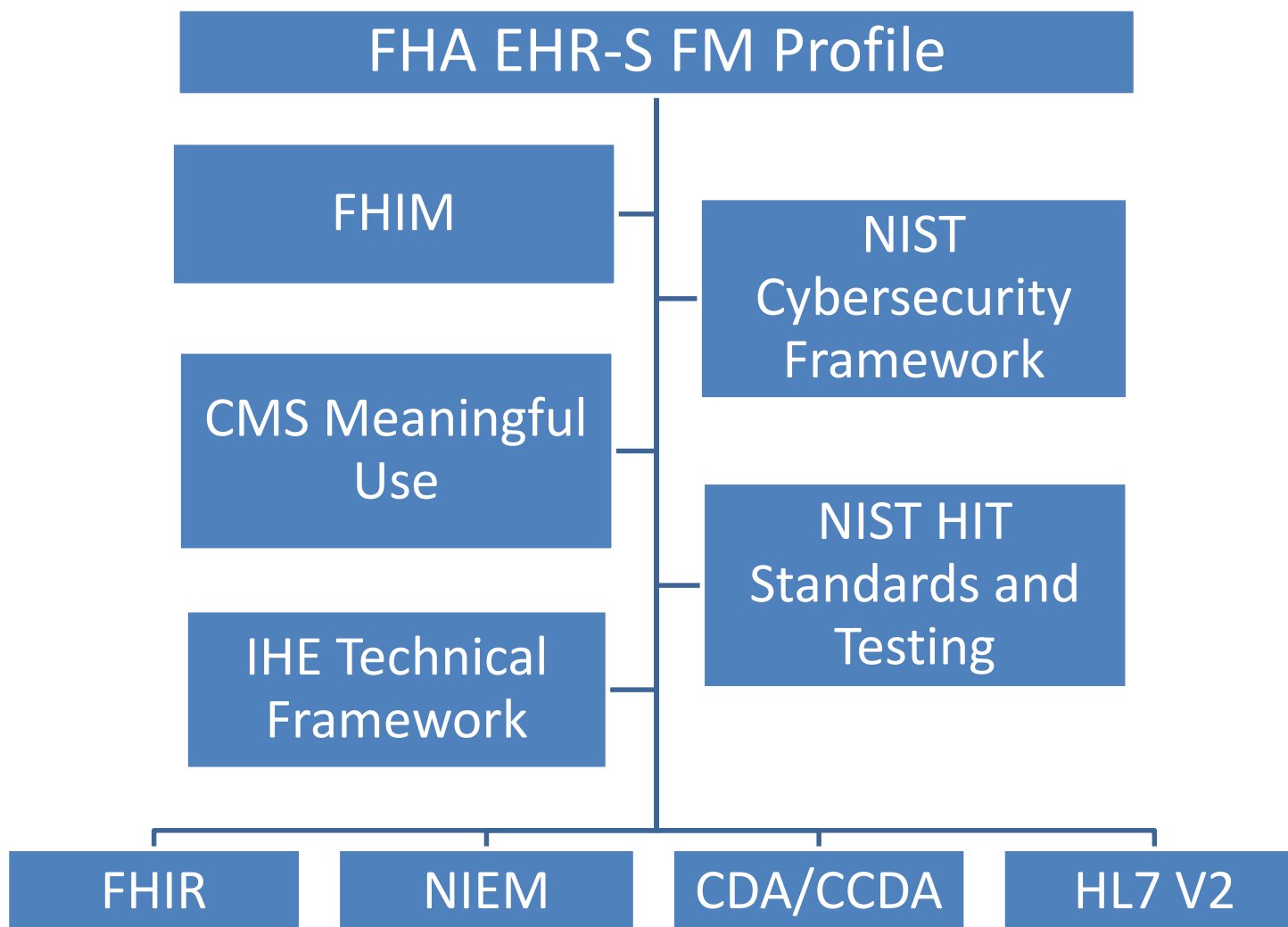


- Advance the national agenda for health IT
- Facilitate use of HHS mandated standards
  - rapidly and efficiently implement government-wide solutions for interoperable and secure health information exchange (HIE) that address federal agency business priorities while protecting citizen privacy.
  - efficient coordination of shared services.
- Empower federal agencies’
  - strategic planning, business analysis and architecture
  - adoption of nationally-recognized standards and policies for
  - use of efficient, secure HIE.



# Conceptual View

## FHA EHR-S FM Profile





# Approach

## FHA EHR-S FM Profile



HL7 tool resident **FHA EHR-S FM Profile**, incorporating:

- S&I Framework Use-Cases Simplification Framework, including
  - AHIC/HITSP use cases, NIST/CDC immunization use case,
  - Others as requested by Federal Agencies
- FHA Federal Health Information Model (FHIM), with bindings to
  - NLM's US Extension to SNOMED CT, LOINC, RxNorm, NCPDP etc.
  - HL7 Fast Healthcare Interoperability Resources (FHIR)
  - HL7 & CIMI detailed clinical models and archetypes
- CMS Meaningful Use objectives and criteria
- Clinical guidelines, pathways and quality measures which connect HIT to clinicians
- Implementation guides and reference implementations considering
  - Integrating the Healthcare Enterprise (IHE) Technical Framework
  - Healthcare-services platform-independent software-module APIs
  - NIST Cybersecurity Framework, Standards and Testing



# **Tool Support**

## **FHA EHR-S FM Profile**



**FHA EHR-S FM Profile** in XML/XMI format as FHA GFI supporting Model Driven Architecture, Design, Test, and Certification using:

- IBM Rational Software Architect (RSA)
- Sparx Enterprise Architect (EA)
- Open Source Papyrus
- Open Health Tools (OHT) Model Driven Health Tool (MDHT)
  - CDA, CCDA, NIEM, FHIR, HL7 V2 Implementation Guides
- NIST sponsored Prometheus Use Case Tool (UCT)
- Others as requested by Federal Agencies.



# **Schedule**

## **FHA EHR-S FM Profile**



- Sept/Oct 2015 – HL7 Project Scope Statement
- Sept/Oct 2016 – HL7 Immunization-Prototype Comments Only Ballot
- Sept/Oct 2017 – HL7 Informative Ballot
- Sept/Oct 2018 – HL7 Draft Standard for Trial Use (DSTU) Ballot 1
- Sept/Oct 2019 – HL7 Draft Standard for Trial Use (DSTU) Ballot 2
- Sept/Oct 2020 – HL7 Normative Ballot



# Benefits

## **FHA EHR-S FM Profile**



**FHA EHR-S FM Profile** enhances the national agenda for health IT by

- Open and transparent national HIE interoperability via SDO participation
- Empowering federal agencies and their contractors to rapidly and efficiently implement government-wide solutions for interoperable and secure health information exchange (HIE) that address federal agency business priorities while protecting citizen privacy.
- Providing Full Lifecycle Traceability
  - Clear, complete, concise, correct, consistent model driven arch./design/test/cert.
  - Consolidated HHS:ONC endorsed HIT artifacts in a freely accessible tool form.
- Supporting open-source development, education, training and innovation.
- Being a precursor to HL7/ISO/CERN EHR-S FM Release 3



# **HL7 Value Proposition**

## **FHA EHR-S FM Profile**



**FHA EHR-S FM Profile** supports HL7 Roadmap:

1. Expand, reinvigorate, and streamline HL7's production, processes, technologies and products - **YES**
2. Evaluate HL7's competitive environment and define HL7's roles, positions and actions - **YES**
3. Enhance communication and outreach: make HL7 more useable, useful and understandable and share the ideas worldwide - **YES**
4. Embrace EHR/Electronic Health Record System (ERH-S)/Personal Health Record (PHR) and Public Health Management capabilities as the focal point of technical development of health informatics standards - **YES**
5. Connect to the clinicians, an essential HL7 community. - **YES**





# **Requested Action**

## **FHA EHR-S FM Profile**



### **FHA sponsorship under FHIM contract to:**

1. Proceed with HL7 Project Scope Statement
2. Engage with Agency proponents/stakeholders
3. Submit periodic articles to
  - HealthIT.gov Newsletter and FHA The Pulse newsletter
  - Professional and Trade journals
4. Participate in HL7, IHE and HIMSS “Connectathons”
5. Present, promote and “Invite Participation” at professional conferences and otherwise promote

**FHA EHR-S FM Profile**



# **Stakeholders**

## **FHA EHR-S FM Profile**

### **(Proposed, Consent Pending)**



## **Sponsor**

- Gail A. Kalbfleisch Director, Federal Health Architecture,

## **Proponents**

- Steven Posnack, Director, ONC Director, Office of Standards and Technology
- Nancy Orvis, DHA,
- Catherin Hoang, VA,
- Nona Hall, IPO
- Rob Snelick, NIST
- Bob Deaderly, CMS