**August 1, 2017 Working Meeting Agenda**

**Purpose**

* Given that DoD and VA have selected Cerner Millennium EHR, underscore the continued value and relevance of the HL7 IIM&T from the perspective of DoD, VA and our healthcare partners
* Afford the HL7 IIM&T project team the opportunity to review progress, one year since the Aug 2016 initial IIM&T Stakeholder Meeting and in turn, produce an updated Plan of Action and Milestones (POA&M):
  + Assess and validate the soundness of the methodology
  + Review the impact of the 10 pilot efforts
  + Review HL7 IIM&T tenets of Pilot, Communications, and Governance activities
* Strategize on how to more seamlessly integrate the methodology into IPO/Department operations
  + Enhance / simplify messaging necessary to promote awareness and operational use
  + Continue to work with IPO S&T and create a graphical standards-based lifecycle of efforts all projects would leverage
  + Prepare for planned Nov 2017 IPO-sponsored Consolidation Event via HL7 IIM&T Stakeholder Track

**Executive Summary:** As announced June 5, 2017, VA will joinDoD in using the Cerner Millennium EHR system. The use of one EHR vendor greatly enhances the potential for computable semantic interoperability, but leaves much work to be done. Cerner EHR technology, as with other EHR technology, must meet the demand for increased health information exchange within and across systems, including between DoD and VA as well as with private entities, where disparate systems, lack of shared information models, structure and terminology result in information which is not computable across systems. HL7 IIM&T is a consensus harmonization approach to semantic interoperability with computable data and shared meaning and supports progress toward a learning health system comprised of precision medicine, expanded clinical decision support, patient safety, quality analysis and reporting, research and population based analytics.

**Notional Agenda, 1 Aug 2017**

1. Review agenda (**10 Minutes**)
2. Prime the Pump: **(10 Minutes**)

Reaffirm that existing standards alone do not meet the needs for seamless interoperability without a unified terminology and modeling approach addressing:

* integration/harmonization of the information models SOLOR (terminology base), CIMI, FHIM and CQF/US Core
* integration to be enabled by tooling allowing the models to become implementation assets
* further development of FHIR and other assets (C-CDA) in order to address data inconsistencies, variability
* further more predictable and operational use within DoD and VA
* HL7 IIM&T emphasis on consistent and traceable model driven development

1. Recap Expectations via perspectives from clinicians, vendors, implementers, and other stakeholders (**10 Minutes**)
2. Assess Core Efforts & Pilot Progress / Outcomes against Methodology; update POA&M(**3.0 Hours**)

* CORE: SOLOR (editing and server tooling and efforts; planned deliverable Oct 2017)
* CORE: FHIM (FHIM refactoring; CIMI harmonization and tools)
* CORE: CIMI (FHIM harmonization; models, architectural framework, principles, tooling, ballots and FHIR artifacts)
* CORE: CQF/QI and US Core (alignment with CIMI architectural framework, principles, tools)
  + FHIM integration of CIMI Clinical BMM & Archetypes (Patterns) (Galen Mulrooney)
  + US Core / QI Core integration of CIMI BMM & Archetypes (Patterns) (Claude Nanjo);
  + Refine PROCEDURE and CONTEXT based on Pilots (Galen Mulrooney and Claude Nanjo);
  + Patient Care Project "CIMI Clinical Model Proof of Concept" (Skin Wound Assessment)
  + Pediatric Bilirubin Management CDS, needs code generation library (Ken Kawamoto);
  + Zika measure (Ken Kawamoto and Claude Nanjo);
  + Immunization Management EHR Functional Model Profile (Steve Hufnagel and Gary Dickinson)
  + Family Planning Annual Report (FPAR) – HSPC pilot with ACOG (Stan Huff, Susan Matney)
  + Device interfaces MDEpiNet #3 (Julia Skapik, ONC and Terri Reed, FDA)
  + DoD/VA IPO FHIR JET (Joint Exploratory Team -tooling contribution)- Nona Hall, IPO
  + FHIR Vitals Resource Harmonization (Richard Esmond)

1. Highlight Parallel Efforts (Synergy Opportunities): **(10 Minutes**)

* DoD and VA Industry Day Roundtable
* DoD/VA JIF Project DaVinci & ONC Integration of Models – both with research interests
* VA FHIR Transition Plan
* HSPC: Specification of SOA Architecture, i.e., SMART on FHIR Reference implementation
* Clinical Information Interoperability Council meeting on July 13 at the NIH (Interest to evolve a US Realm Data Dictionary)

1. Update / Crystalize Challenges & Opportunities; feed Nov 2017 HL7 IIM&T Track **(15 minutes**):

* Strengthening FHIR Appeal: Prominent concern / premise of HL7 IIM&T: There is an ever-growing volume of related (FHIR) efforts which extends data inconsistencies -- legitimately allowed with FHIR 80:20 design. The HL7 IIM&T intends to intervene and produce CIMI-based FHIR resources, profiles and extensions and augment missing governance and communications practices
* Dependencies: Tooling, Model repository, Sustainability / scalability
* Communications: Newsletter / HL7 Ballot development and submission
* Governance: Harnessing / managing outcomes / evolution and CM of artefacts

1. Conclusions and Next Steps (**5 Minutes**)

* Sept 2017 HL7 WG Meeting (HL7 IIM&T Sep 2017 Ballot Artifact Preparation)
* Nov 2017 IPO Consolidation Event Tiger Team for multi-day, multi-track consolidation event.

**APPENDIX: Additional Background**

The HL7 information Models and Tools (IIM&T) methodology, developed via collaborative pilot studies, provides a consistent standards-based foundation designed to support data collection and data in motion. IIM&T recognizes it is no longer an acceptable state for providers to operate via singular and disparate information models. IIM&T is integrating/harmonizing SOLOR-based HL7/ISO CIMI, FHIM, CQF models in effect producing a standard common logical information models (CLIM) to empower the consistent and traceable model driven development of computable semantically-interoperable FHIR and CDA profiles and extensions, specifications, implementation guides and implementation artifacts.

**The HL7 IIM&T Methodology, as foundation to Semantic Interoperability, is made up of the following pillars:**

* **Pilots** to refine and demonstrate the comprehensive Methodology
  + *Promotes the Integration / Harmonization of Logical Information Models initially via* CIMI[[1]](#footnote-1), FHIM[[2]](#footnote-2), CQF[[3]](#footnote-3)*, based on a unified terminology base of VA’s SNOMED with LOINC and RxNorm extensions (SOLOR);*
  + *Guided by an architectural framework and associated principles;*
  + *Enabled by* ***Tooling*** *to streamline creation of models in many healthcare domains,* 
    - recognizing users can’t be expected to be SMEs in data models to get the benefit of consistent information
    - *making these resources more meaningful to implementers*
  + *applied wherever relevant such as but not limited to FHIR and CDA Resources*
* **Governance** to manage change of data discussions and decisions and CM information modeling artifacts and resources / repositories
* **Communications** to disseminate results in support of today’s projects by informing all levels of stakeholders and support the associated HL7 standards development efforts

The proposed 1 Aug 2017 meeting capitalizes on the 2-4 Aug 2017 HSPC event given many of the SMEs and goals supporting the HL7 IIM&T are common to both. The agenda will include:

* Updates on unification (harmonization) efforts and report on the interim successes and challenges of the HL7 IIM&T project methodology via pilot / project activities (approximately 10 exist – including the IPO FHIR JET)
* Further crystalize the efforts and outputs via updates to the roadmap and the HL7 standards-based ballot
* Offer opportunity to identify additional use cases, discuss possibilities to maximize use of resources, provide feedback, and additional interested-parties for participation
* Event will also seek to engage additional interested parties or aligned activities, and consider possible dedicated resources and funding options with federal and industry partners (DoD, VA, IPO, HL7, HSPC, etc.)

There are items to accent. HL7 IIM&T plans to have the wound care pilot-project CLIM (SOLOR, FHIM, CIMI, CQF) and FHIR artifacts available by Sep/Oct 2017. FHIR, a relatively new and powerful interoperability solution is suffering from what can be termed “the HL7-V2 Z-segment syndrome,” resulting in a higher proportion of point-to-point custom-solutions than necessary. This extends data inconsistencies and implementation variability. HL7 IIM&T directly addresses consistent-and-traceable reusable solutions obviating the need for a custom-based approach, delivering a more sustainable use of FHIR and standards in general. Further, an operational instance of SOLOR will be demonstrated along with inroads to automate what has since been manually demonstrated.

1. CIMI is HL7 Clinical Information Model Initiative [↑](#footnote-ref-1)
2. FHIM is FHA Federal Health Information Model [↑](#footnote-ref-2)
3. CQF is ONC Clinical Quality Framework [↑](#footnote-ref-3)