

SNOMED CT in HL7 value sets – messages, FHIR and CIMI

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Delivering

SNOMED CT

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Presentation

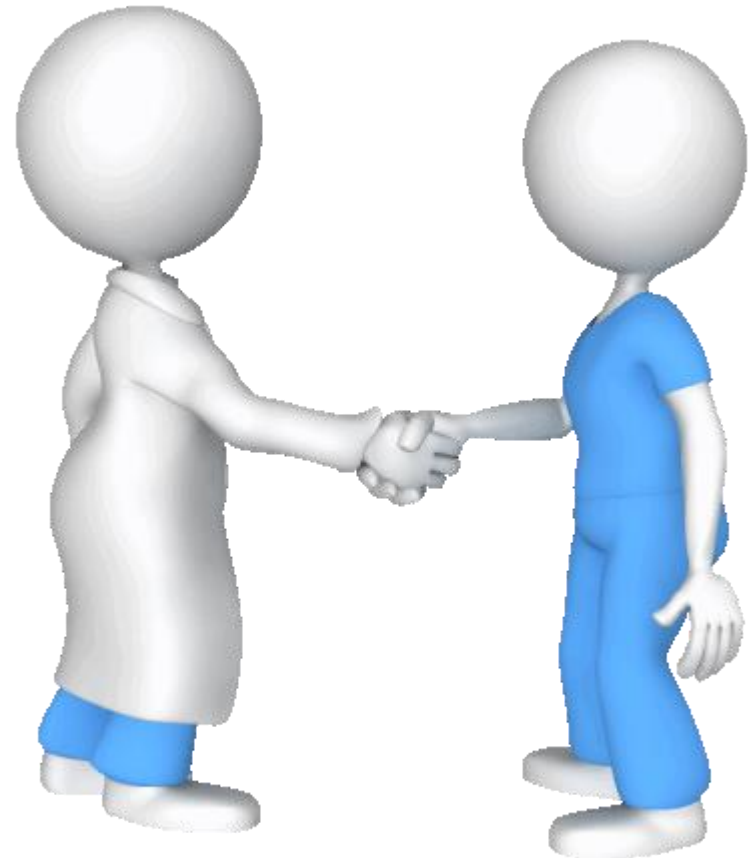
- HL7 International and IHTSDO collaboration
 - HL7 International and IHTSDO collaboration agreement
 - Specific areas for collaboration
 - Management of terminologies in HL7
- SNOMED CT licensing and binding
 - SNOMED CT licensing in HL7 International products
 - SNOMED CT binding



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HL7 International and IHTSDO Collaboration



HL7 International and IHTSDO

- HL7 and IHTSDO are both committed to harmonization and avoidance of duplication in health informatics area
- Members of the Joint Initiative on SDO Global Health Informatics Standardization (JIC)
- Focus is on meeting the needs of users internationally – government agencies, vendors, clinicians and information specialists
- Understanding of each others governance structures and requirements of Members/Affiliates
- Both organisations recognise that approaches developed and lessons learned can apply to similar agreements they might have with other organisations

HL7 International and IHTSDO

- HL7 International and IHTSDO signed a new Collaboration Agreement August 2014
- *‘Purpose is to support adoption of working practices that facilitate the use of IHTSDO standards with HL7 standards’*
- Focus on specific collaborative areas
 - Licensing of SNOMED CT in HL7 products
 - Facilitate and promote the use of SNOMED CT in HL7 products
 - Exploration of HL7 using some of IHTSDO Open Tool Framework
 - Education opportunities in each organisation
- Scope of the Agreement is HL7 International but principles can be applied for HL7 Affiliates

HL7 Terminology Authority (HTA)

Purpose

- HL7 International management of terminologies
- Ensuring that HL7 standards are provided with timely and high quality terminology products and services to meet its business needs.
- The point of communication concerning terminology and / or code systems with other Standard Development Organizations and with the Working Groups within the HL7 organization.

HL7 Terminology Authority (HTA)

Scope

- The HTA is focused on coded content and descriptions specified in HL7 Standards, specifically about:
 - Choice
 - Composition
 - Use
 - Meaning
 - Interpretation

HL7 Terminology Authority Responsibilities

1. Advice

- Provide advice, where needed, on the acceptability of vocabulary proposed for inclusion in HL7 vocabulary
- Provide advice on the tooling requirements to meet the objective of consistency of meaning representation across HL7 products.
- Provide advice to support the governance of terminology content across HL7 standards.

HL7 Terminology Authority Responsibilities

2. Quality

- Develop and maintain HL7 International quality processes and measures related to HL7 terminology to support interoperability and clarity of meaning across HL7 standards.
- Develop quality standards for a HL7 licensed user community when using external terminology systems in HL7 standards and support sustainable interpretation of that terminology.
- Prepare updates for consideration by the Board

HL7 Terminology Authority Responsibilities

3. Relations

- Maintain relationships with external terminology providing organizations (e.g. IHTSDO) to ensure licensed, up to date and safe use of their products in HL7 standards.
- Provide guidance to the HL7 Technical Steering Committee (TSC) on the implementation processes and policy changes that impact the Working Groups.
- Work with the HL7 Vocabulary Working Group who will implement the processes and governance.
- The HTA serves in an advisory capacity to the existing HL7 harmonization process. All final terminology decisions are made as part of the harmonization process.

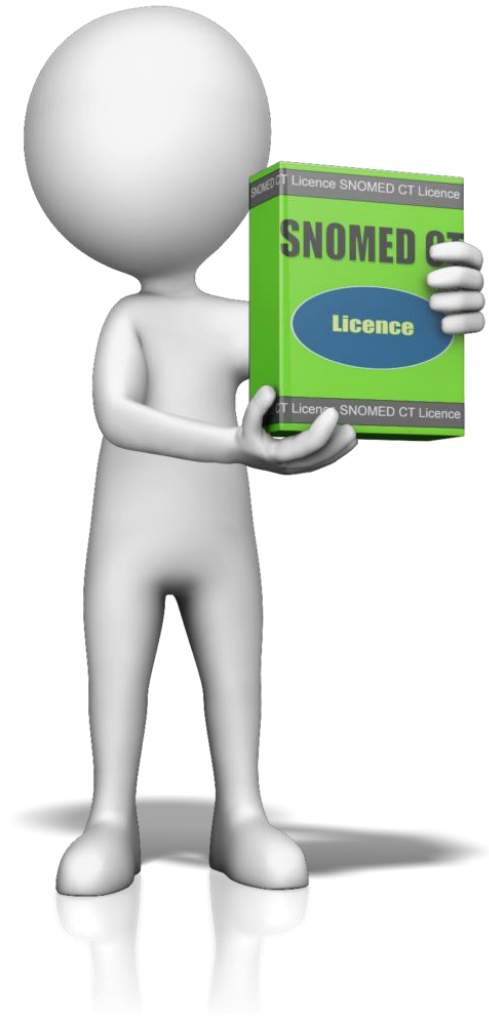
HL7 and Tooling

- As part of the agreement, HL7 has reviewed IHTSDO tooling to consider whether existing tools meet their requirements
- IHTSDO are currently updating their tools
- HL7 has completed an agreement with Open Health Tools (OHT) to become a part of HL7 International and has plans to use their tools
- In the future this may be reassessed

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SNOMED CT Licencing and Binding



Licensing of SNOMED CT in HL7 International Products

- Focus is to ensure that those using HL7 International Products containing SNOMED CT have a licence to use the IHTSDO product.
- This licence provides for user access to SNOMED CT and 6 monthly releases
- This supports use of SNOMED CT updates in line with latest clinical practice and also helps with any safety issues arising when current versions are not used
- Exploring the provision of a defined set SNOMED CT content that would be available free for use in all HL7 International products wherever they are used internationally.

Licensing of SNOMED CT in HL7 International Products

- Agreement on a SNOMED CT licence statement in HL7 International products including SNOMED CT
 - All users of the HL7 International product require a SNOMED CT licence, with possible fee in IHTSDO non-Member countries
 - In process of inserting this licence statement in relevant new documents/specifications and existing products
- HL7 International SNOMED CT Development Licence (draft status)
 - All those participating in development of HL7 International products through HL7 working groups can access SNOMED CT International for free in support of a specific development – managed by HL7 International
- Provision of guidance on how to get a SNOMED CT licence with specific example scenarios (in development)

SNOMED CT Binding in HL7 International products

1. HL7 TermInfo project
 - Implementation Guides to using SNOMED CT in HL7 products
2. HL7 FHIR binding collaboration
 - Development and testing of an approach to SNOMED CT binding
3. HL7 Clinical Information Modeling Initiative (CIMI)
 - Initiated during a 'Freshlook' session at an HL7 meeting in 2011
 - Became an HL7 Working Group at October 2015 meeting
 - Development of an approach to terminology binding
 - Development of an approach for isosemantic transformations

The intention is for the HL7 HTA to adopt a harmonized approach to terminology binding across its products

SNOMED CT Binding – HL7 Terminology

HL7 Version 3 Implementation Guide: Terminology - Using SNOMED CT in CDA R2 Models, Release 1 Draft Standard For Trial Use (DSTU), October 2015

- Guidance on overlaps between RIM and SNOMED CT semantics
- Common Patterns
 - Observation, Condition, Diagnosis, Concern
 - Allergies, Intolerances and Adverse Reactions
 - Assessment Scale Results
 - Family History
 - Medication and Immunizations
 - Source of Information
- SNOMED CT Concept Domain Constraints (value sets)

www.hl7.org/special/committees/terminology/

SNOMED CT Binding – HL7 FHIR

- Collaboration to develop and test an approach to:
 - a) SNOMED CT Model Meaning Bindings to FHIR resources
 - b) Review of SNOMED CT value sets in FHIR resources
- Phase 1: Development of approach (April – Sep 2015)
 - Focus on the ‘Condition’ resource
- Phase 2: Testing of approach (Oct 2015 – June 2016)
 - Approach to be tested on the ‘Observation’, ‘Goal’, ‘AllergyIntolerance’, ‘Family history’ and ‘Specimen’ resources
- Phase 3: Adoption of approach (July 2016 onwards)
 - The intention is that the HL7 HTA will take responsibility for the approaches to develop terminology bindings for the remaining resources (with advice provided by IHTSDO)

<http://www.hl7.org/implement/standards/fhir/>

SNOMED CT Binding – HL7 CIMI

- Mission
 - To improve the interoperability of healthcare systems through shared implementable clinical information models
- Goals
 - Create a shared repository of detailed clinical models
 - Logical models supporting multiple implementation contexts
 - Using a machine-readable formalism
 - Archetype Definition Language (ADL)
 - Archetype Modelling Language (AML)
 - Based on a common reference model including data types
 - With formal bindings to standard coded terminologies
 - Both model meaning and value set bindings
 - Accompanied by example instances
 - Maps to various implementation models (e.g. HL7 v3, CDA, FHIR)
- Website – <http://www.opencimi.org/>

Thank you



Questions

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