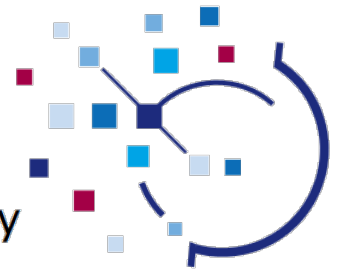


- IHTSDO delivering
- SNOMED CT®
- the global clinical terminology



SNOMED CT and HL7

Bringing Standards Together

HL7 – Stand at HIMSS 2012

IHTSDO

International Health Terminology
Standards Development Organisation

Bringing Standards Together

What we'll be talking about:

- What is SNOMED CT and IHTSDO?
- CTS2
- The IHTSDO Workbench
- Proposed HL7 Terminology Authority for SNOMED CT
- Making HL7 and SNOMED CT interoperable

SNOMED CT and IHTSDO

- SNOMED CT is the most comprehensive, multilingual clinical terminology in the world.
- SNOMED CT consists of around 400K concepts, arranged in a hierarchy, connected by relationships.
- SNOMED CT semantics are based on Description Logic, allowing automated reasoning to enable interoperability and cross-platform reporting.
- IHTSDO is a not-for-profit association that owns, develops and promotes use of SNOMED CT to support safe and effective health information exchange.
- IHTSDO is owned and governed by the following countries (next page)

IHTSDO Current Members



Australia



Lithuania



Slovenia



Canada



Malta



Spain



Cyprus



**New
Zealand**



Sweden



Denmark



Poland



**The
Netherlands**



Estonia



Singapore



**United
Kingdom**



Iceland



**Slovak
Republic**



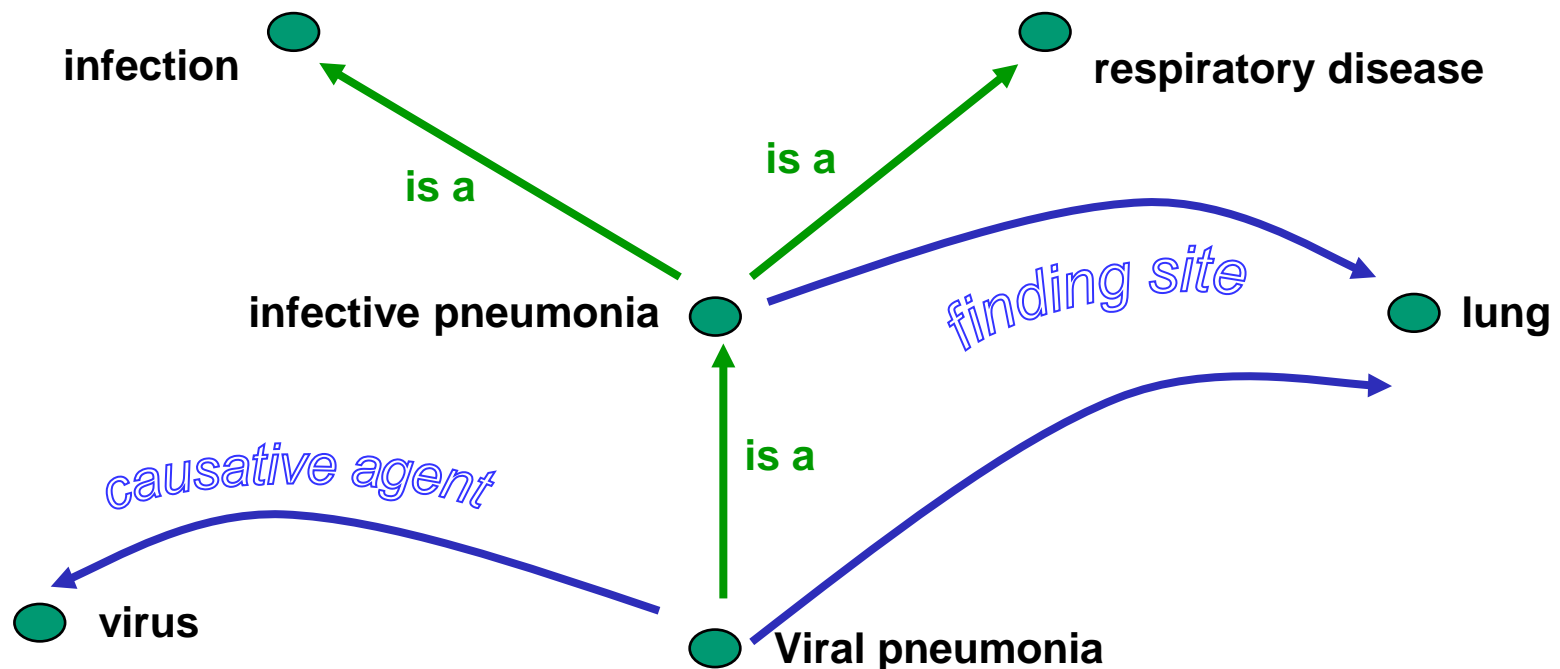
USA

SNOMED CT Constructs

- SNOMED CT consists of four primary constructs:
 - **Concepts** – identifies a clinical term, these can be primitive or defined.
 - **Descriptions** - the text used to describe a Concept. These can be in multiple languages.
 - **Relationships** – used to further define a concept.
 - **Reference Sets** – used to group concepts or descriptions into sets.

SNOMED CT Adds Meaning

- Every coded concept is linked to related concepts
 - Multi-axial subtype hierarchy ('is a' relationships)
 - Logical definitions (attribute relationships)



Common Terminology Services Version 2

- CTS2 is an HL7 and OMG standard, produced in collaboration with a number of organisations including Mayo and Apelon; it is supported by IHTSDO.
- CTS2 provides a framework for accessing different terminologies in a common way; however, further guidelines are required to enable consistent access to specific terminologies within the CTS2 framework.
- These additional guidelines are described within 'CTS2 Implementation Guides' for each terminology.
- A 'CTS2 Implementation Guide' for HL7 vocab has already been developed, by Mayo.
- A 'CTS2 Implementation Guide' for SNOMED CT is also being produced by the Mayo team, and this work is being made available on the IHTSDO Workspace.

The IHTSDO Workbench

A Terminology Management Tool

- IHTSDO owns and maintains a terminology management tool, called the IHTSDO Workbench.
- HL7 is reviewing the IHTSDO Workbench as a tool to manage the HL7 vocabulary.
- This tool is aimed at meeting the following use cases:
 - Authoring and release of the International edition of SNOMED CT, by IHTSDO-approved terminologists.
 - Maintenance of extension content, for Member countries that wish to create and maintain their own SNOMED CT extension.
 - Creation of language translations, for Member countries that wish to translate SNOMED CT Descriptions into their own language.
 - A demonstration release, for those interested in learning more about Workbench functionality.

Process for submitting requests for change to SNOMED CT

- Through an IHTSDO Member country National Release Centre who undertake triage and coordination
- Directly by Affiliate license holders in Non-Member countries
- Use of an online Request Submission portal
 - Individually
 - Batches
- Automated feedback and some tracking ability
- HL7 Vocab group is coordinating SNOMED CT use in HL7 messages
- HL7 has an Affiliate agreement

A 'Terminology Authority' in HL7

HL7 is putting in place a 'Terminology Authority' within Vocab group:

- To collate any requests for SNOMED CT change as a result of HL7 work
- To review and triage requests to establish:
 - The request is within scope of SNOMED CT
 - If the requested change is already in SNOMED CT but not been found
 - Duplicate request from elsewhere in HL7 work
 - There is correct information to process the request
- Manage requests across to IHTSDO and be the focal point for points of clarification through to inclusion (or not)

HL7 Terminology Project

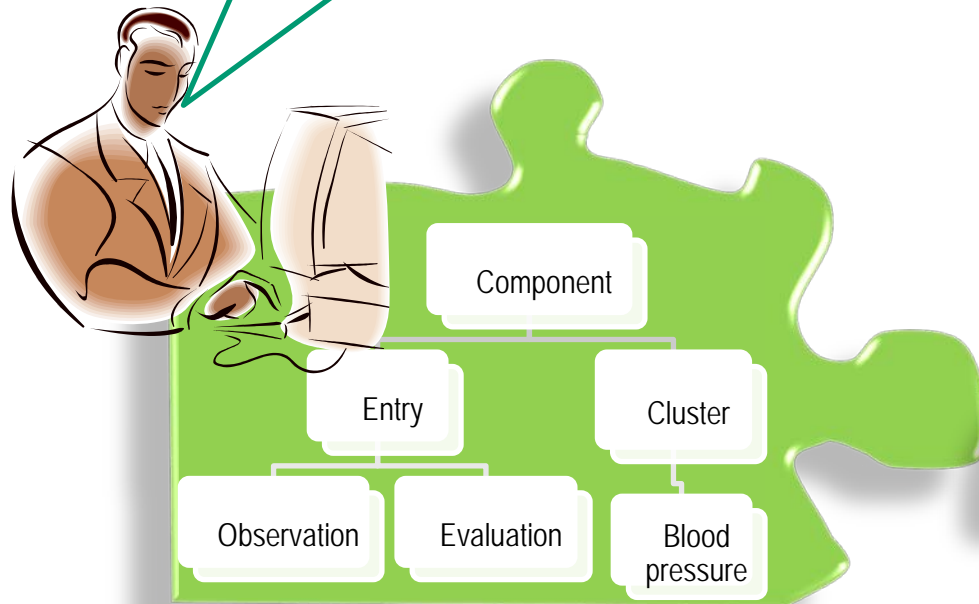
- Originated at NASA
 - They were using SNOMED CT in HL7 structures for retrospective analysis of astronaut records
 - Requested guidance on how to do this effectively
- Adopted by HL7
 - The Terminology Project and produced a DSTU called
- *“Guide to the Use of SNOMED CT in HL7 Version 3”*

Key results of TermInfo

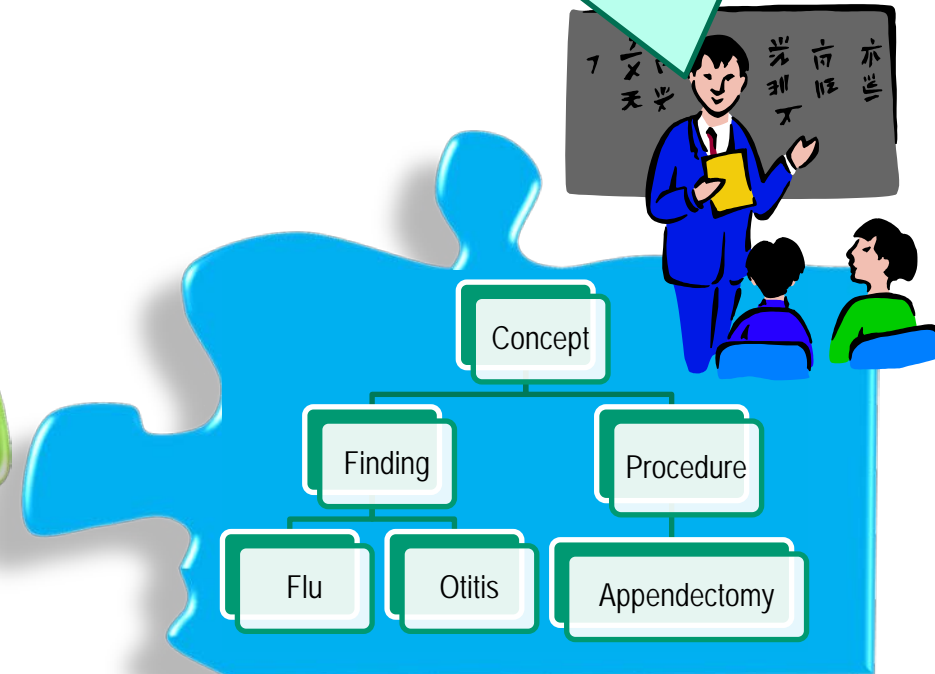
- Identified
 - Key issues related to binding a rich semantic terminology (such as SNOMED CT) to a rich semantic model (such as the HL7 Version 3 RIM)
 - The benefits of guidelines to address overlaps and gaps between terminology and information model semantics
- Publication of Guidelines
 - Recommended constraints on some aspects of SNOMED CT and some aspects of HL7 V3 when use together.
 - Designed to
 - Minimize ambiguity; and
 - Reduce the use of divergent approaches to representation of similar information
 - Resulted in an improved “semantic-fit” and clearer more consistent representation of meaning

Issues surfaced by TerminInfo have been found to apply more widely

Our information model is terminology independent



Our terminology can be used in any health record information model



HL7 Terminology and the other initiatives

- HL7 Terminology was the first standards-based initiative to address binding SNOMED CT to an information model
- Where HL7 led other have followed
 - Identifying similar issues
 - Proposing some similar solutions and some new approaches
- New project in HL7 Terminology Working Group
 - Extended scope
 - To include SNOMED CT and LOINC
 - Usage in HL7 Version 2 and Version 3
 - Who is involved
 - Led by HL7 Terminology Working Group
 - Leader - Rob Hausam
 - IHTSDO and HL7 are planning parallel standards processes with the intention of jointly adopting the new guidelines



Thank you for your attention

Questions?

- Contact IHTSDO: info@ihtsdo.org
- Web site: www.ihtsdo.org