INTEROPERABILITY: SNOMED CT & FHIR

SNOMED International

TERMINOLOGY AND INFORMATION MODEL, WORKING TOGETHER

SNOMED CT® can be thought of as a dictionary, specifying exactly what medical concepts mean. It does not, however, tell you how to assemble those concepts within a medical record in a way that can be transmitted to another system and understood.

An information model is required to achieve this; a standard for how records and messages should be laid out and populated. This role is being played globally by HL7® FHIR®.

By combining these two world leading standards, systems using SNOMED CT and FHIR together* are able to communicate clear and unambiguous meaning in a standard way that can be automatically understood worldwide.

About SNOMED CT

SNOMED CT is the most comprehensive, multilingual clinical healthcare terminology in the world. It provides a standardized way to represent clinical phrases captured by the clinician and enables automatic interpretation of these.

- Is a resource with comprehensive, scientifically validated clinical content
- Enables consistent representation of clinical content in electronic health records
- Is mapped to other international standards
- Is in use in more than eighty countries

About FHIR

FHIR – Fast Healthcare Interoperability Resources - is a next generation messaging standards framework. FHIR combines the best features of HL7's product lines while leveraging the latest web standards and applying a tight focus on implementability.

- Created and managed by HL7
- Solutions are built from a set of modular components called "Resources".
- Resources can easily be assembled into working systems that solve real world clinical and administrative problems.
- Suitable for use in a wide variety of contexts – mobile phone apps, cloud communications, EHR-based data sharing, server communication in large institutional healthcare providers, and much more.

SNOMED CT

HL7 FHIR

The Power of FHIR and SNOMED CT Together

This partnership harnesses the rich expressivity of SNOMED CT and maximizes the potential for semantic interoperability when exchanging FHIR Resources between systems.

⭐ Best in class Terminology combined with best in class Information Model

🔍 Capture unambiguous, structured clinical detail in patient data

⚡ Use the power of SNOMED CT's ontology to identify cohorts from FHIR resources and perform machine assisted reasoning for decision support and population analytics

🔽 Generate filtered ValueSets based on ECL

📱 Leverage Terminology Services directly in multilingual mobile & web-based applications

SNOWSTORM by SNOMED International

SNOMED CT's FHIR Enabled Tooling

Snowstorm - SNOMED International's FHIR Terminology Server

Open source SNOMED CT terminology server fully supports all SNOMED CT functionality, used for both authoring and querying the terminology. HL7 FHIR terminology services are also supported by this server.

🔗 github.com/IHTSDO/snowstorm

Get Involved

Join our SNOMED on FHIR working group

- Created in 2016 to support FHIR implementation, specifically using SNOMED CT.
- Provides an open supportive space for discussion of SNOMED CT- centric FHIR implementation best practices
- Produces and publishes concrete deliverables such as Profiles, ValueSets and a SNOMED FHIR Implementation Guide.
- Further progresses the collaborative work of using SNOMED CT with HL7 FHIR.
- Meets regularly focusing on two streams: Terminology Services (server implementation behaviour) and Terminology Binding (clinical resources).

More info: snomed.org/fhir

Attend an event

- **SNOMED International Business Meetings and SNOMED CT Expo:** In person SNOMED on FHIR working group meetings and presentations focused on SNOMED CT and FHIR at upcoming Business Meetings and SNOMED CT Expo. Check out upcoming dates here: www.snomed.org/news-and-events/events/

- **HL7 Connectathons:** Participants engage in hands-on, heads down development and testing, working directly with other FHIR developers and senior members of the FHIR standards development team. Check out upcoming dates here: www.hl7.org/events/fhir-connectathon/index.cfm?ref=nav