

# SNOMED International – Clinical Content requirements

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## Title

Assuring interoperation of observation results

## Version Information

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## Document review

<i>Reviewer</i>	<i>Review date</i>	<i>Comment</i>

## Statement of requirements as initially identified

**Purpose: Support full interoperation of observation results (<<363787002|Observable entities| henceforth referred as 'Observables') employed in healthcare delivery – laboratory, pathology, genomic, clinical and administrative – between and within all countries worldwide with priority attention to IHTSDO member nations.**

This will be achieved by: 1)compiling a pragmatic inventory of Observables in use within healthcare delivery scenarios in those nations, 2)systematically extending and applying the SNOMED CT Observables concept model and SNOMED CT content to fully define those concepts and any relevant codes or terminologies identified by those members as required for their national terminology architecture, 3)publishing for international use those concept definitions including all relevant SNOMED CT concepts required for those definitions and 4)maintaining a set of classified (inferred) OWL ontology snapshots of those codes or terminologies specified by members as required for their healthcare delivery system.

The immediate project scope will support interoperation of Observables between and within US, UK, Canada, Australia, Sweden and Norway. Inventories of laboratory, pathology, genomic, clinical and administrative (demographic) Observables in use for SNOMED CT, LOINC and NPU will be developed. Those inventories will define the scope of work for initial phase which will employ and extend ontology developments already begun by the IHTSDO-LOINC technology preview and the University of Nebraska Synoptic Pathology Ontology development. The Observables project team will guide development and use of the SNOMED CT concept model to model concepts within scope and to develop additional 'grouper' concepts as necessary to support useful deployment of an ontology snapshot for each codeset or terminology specified. For US, Canada and Australia, a LOINC OWL ontology snapshot will be supported. For UK, SNOMED CT Observables will be employed from the International release without additional modification other than modelling and full definition. For the Nordic countries, an NPU OWL ontology snapshot will be developed after the concept inventories are completed. In all cases, OWL files will be prepared with axioms employing the term identifiers and terminology tags of the affiliated SDO (LOINC and NPU).

*IHTSDO Content Development Fast Track Template*

*Version 1.0*

*19 March 2013*

The ontology snapshots will be provided by SNOMED International to the member NRCs or their designees including concept IDs, FSNs and preferred terms of all SNOMED CT concepts necessary to the definition of snapshot concepts. These releases will be in synchronization with the usual maintenance release cycle for SNOMED CT. These snapshots will include refsets of all relevant SNOMED CT concepts and terms necessary for defining axioms in the inferred OWL ontology snapshot. The release will include an OWL publication of inferred axioms and supporting artifacts with concept identifiers and terms supplied by the affiliate SDO. Members may designate publication of snapshot material by collaborating SDOs with unrestricted use of snapshot OWL ontologies and SNOMED CT snapshot content free for legitimate support of healthcare activities worldwide.

### Relevance to International release

The International release should contain all content developed as part of this project as the developments to SNOMED CT would be material to member data interoperability. The primary refset specifying core content for Observables should also be released internationally.

OWL ontology snapshots for related codes and terminologies would be of primary importance within their respective domains of use and should likely be published and distributed by the affiliated SDOs.

### Agreed scope statement

Statistical analysis of Observables deployment and use in the US suggests that 3-4,000 Observables will be required to support specified use cases. Application of the Observables concept model will probably require a maximum of an additional 20,000 SNOMED CT concepts total from Clinical findings, Substances, Medicinal products, Body structures, Organisms, Physical forces and Qualifiers. Therefore, a total of NMT 25,000 SNOMED CT concepts will be expected to define the scope of the project.

### Identify additional changes

Affiliate SDO agreements, initially with LOINC and NPU, would be required to manage intellectual property rights relative to the OWL files and SNOMED CT subsets specified.

### Impact assessment

This agreement would further collaboration with SDOs central to the healthcare terminology architectures of IHTSDO members and support interoperability of critical healthcare data for members.

Disseminating OWL ontologies of Observables concepts classified with SNOMED CT will expose the 'value added' features of the SNOMED CT concept model to sceptical SDOs and promote a rationale of cooperation rather than competition.

### Risk assessment

Publication of 25,000 SNOMED CT conceptIDs and associated descriptions may expose SNOMED CT material for misuse.

### Approval process

Complete	Approved sb	Approval Date
<input type="checkbox"/>	Clinical engagement team	
<input type="checkbox"/>	Global CSRM Exec	

<input type="checkbox"/>	SMT	
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### Priority

- Very high
- High
- Medium
- Low

### Specify the basis for the above priority assignment

<Short justification for priority assignment, including any related timelines, policies etc>

### Proposed release publication timeline

<Release, Year>