

2020-02-18 - SNOMED on FHIR Meeting (TB)

Date/Time

20:00 UTC on Tuesday 18 February 2020 - 90 minutes.

Objectives

- Bindings to FHIR Clinical Resources (e.g. value set bindings)

Meeting Details

Online: <https://snomed.zoom.us/my/snomedhl7>

Phone: See <https://zoom.us/join> for available phone numbers (meeting id **242-348-6949**)

Chat: [#snomed-hl7-fhir](https://snomedintl.slack.com)

Attendees

[Daniel Karlsson](#), [Jeremy Rogers](#), [Rob Hausam](#), [Andrew Perry](#), [Suzy Roy](#), [Jim Case](#), [Yongsheng Gao](#), [Pete Salisbury](#)

Apologies

[Peter G. Williams](#)

Meeting Recording

<https://drive.google.com/a/ihtsdo.org/file/d/12EAQw3wyq5AN-O5MQ07rKRxC2V03ySAX/view?usp=sharing>

Discussion items


Item	Description	Mins	Owner	Notes & Actions
1	Welcome and introductions	5	Rob Hausam	Recording + Notes.
2	Summary of previous week (TS) and previous TB	5	Rob Hausam	<ul style="list-style-type: none"> • 2020-02-11 - SNOMED on FHIR Meeting (TS) • 2020-01-28 - SNOMED on FHIR Meeting (TB)
3	Future meetings	1	Rob Hausam	<p>Upcoming events: 2 - 3 Connectathon Feb 2020 HL7 Sydney (followed by Business meeting)</p> <p>SNOMED International Business Meeting April 5 - 8 SNOMED on FHIR meeting Sunday 5 April</p> <p>San Antonio HL7 Meetings + Connectathon May 16 -17</p> <p>FHIR DevDays - June 16-18, 2020 Cleveland, OH</p> <p>SI Business + Expo October</p>
4	URI Standard update	2		<p><input checked="" type="checkbox"/> Peter G. Williams document SLPG counter proposal - basically agreed that ValueSets are not FHIR specific and they'd like to use the more general <code>http://snomed.info/<resource type>/<resource name></code></p> <p>The SPLG workgroup discussed this</p> <p>http://snomed.info/valueSet/GPS</p> <p>Update this causes a problem in the tooling as it demands a capital V in ValueSet.</p> <p><input type="checkbox"/> Peter G. Williams discuss with Lloyd MacKenzie. Also specifying a different terminology server for expansions. Also output/qa.html should we start again from a template project.</p> <p>http://snomed.info/fhirStructureDefinition/example</p> <p>Update 3 Dec: Publisher tooling has specific requirements around URI construction that isn't compatible with the proposed URI standard.</p> <p><input checked="" type="checkbox"/> Daniel Karlsson to supply code line(s) that's causing the problem to Rob Hausam</p>
5	Free Set Response	1	Jane Millar	PWI Update: After our meeting in KL with Grahame Grieve where we agreed to go back to Keith Campbell to explore his use case, we had a call with Keith where it was agreed that the value set mapping and "turning a FHIR Resource into a Post Coordinated Expression" is not a high priority for the VA, although Keith is keen to see more support for PCEs going forward and this is on SI's radar for 2020.

6	Implementation Guide	31	Peter G. Williams	<p>Did we conclude on the best approach(es) for semantic overlap between fields as discussed in Terminology Binding</p> <p>Update: Option 4 seems the most elegant - "BodySite must always be a specialization or self of finding site" although BodySite is an easy example since the mapping to the SNOMED concept model (finding site) is well understood. It would not work for Condition.Status where resolved/remission is not represented in attribute values.</p> <p>Update 17 Sept: If we were to express ValueSets for profiles using Refsets (which this group would have to curate and publish) then National Centres could add to those refsets using their own module.</p> <p>Update 15 Oct >2 issues:</p> <ol style="list-style-type: none"> 1. We're still seeing only the differential in the profiles, no option to view the snapshot 2. The link from profile to a ValueSet uses a slash (eg http://build.fhir.org/ig/HTSDO/snomed-ig/ValueSet/bodyheight.html - does not exist) and navigating from the ValueSet itself uses a dash (eg http://build.fhir.org/ig/HTSDO/snomed-ig/ValueSet-bodyheight.html) 3. Only the first element in the differential is being displayed. The page appears to cut off early. See http://build.fhir.org/ig/HTSDO/snomed-ig/StructureDefinition-AllergyIntolerance-SubstanceFocused.html <p>Rob Hausam Check with Lloyd McKenzie and Eric Haas if their two frameworks have been fully</p> <p>2020-01-28:</p> <p>Use ECL in compose in the ValueSets where possible. More consistent, more elegant, more expressive, more powerful, more readable (descriptions can be added). However, also fewer terminology servers might support profile, adds complexity. Complex value set definitions will give complex (and hard to read) ECL, but likely also complex and hard to read compose structures.</p> <p>2020-02-18:</p> <p>The Implementation Guide is now building fine. Please everyone have a look and share comments.</p> <p>http://build.fhir.org/ig/HTSDO/snomed-ig/index.html</p>
7	Procedure Resource	25		<p>Procedure Expert assistance for CarePlan:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Jane Miller please mention our discussion to Zac Whitewood Moores (NHS) and provided with dial in details to attend a Terminology Binding group call <input checked="" type="checkbox"/> Rob Hausam please mention our discussion to Michelle Millar (HL7), Stephen Chu (AU), Emma Jones. <input type="checkbox"/> Read Workflow https://www.hl7.org/fhir/workflow.html <p>Procedure (not completed 3 Dec) followed by Care Plan</p> <p>KG: procedure code concern about overlap with reasonCode.</p> <p>2020-01-28:</p> <p>CarePlan resource was discussed. Zac Whitewood-Moores provided a comparison with Contsys ISO standard. In FHIR CarePlans are always instantiated (subject is 1..1).</p> <p>The status element was discussed and compared to SNOMED CT context values for action, e.g. as in this UK reference set: http://diseasesdatabase.co.uk/snomed/refset_metadata.aspx?id=999000081000000105</p> <p>In implementations, other kinds activity status values are relevant, and agreeing on a standard set of activity status values can be a challenge.</p>
8	Observation resource		Jeremy Rogers	<p>See updates here: Observation binding</p>
9	Cancer Disease Status		Carmela Couderc	<p>http://hl7.org/fhir/us/mcode/2019Sep/StructureDefinition-onco-core-CancerDiseaseStatus.html</p> <p>http://hl7.org/fhir/us/mcode/2019Sep/ValueSet-obf-datatype-ConditionStatusTrendVS.html</p> <ul style="list-style-type: none"> <input type="checkbox"/> Peter G. Williams Fill in current values and parents <p>Query about qualifier values used. Would it be better to use < 418138009 Patient condition finding (finding) ? (JR suggested immediate children ie "<!" rather than descendants)</p> <p>See also 373117000 Pathology examination findings indeterminate (finding) (child of 250537006 Histopathology finding (finding))</p>

10	Exemplar Profile	Daniel Karlsson Jeremy Rogers	<p>Publishing Profiles</p> <ul style="list-style-type: none"> • Wrapped by implementation guide - in this case https://github.com/IHTSDO/snomed-ig • Value set publish to a live SI hosted Snowstorm instance. Alternatively Michael Lawley has offered to host. • Additional hosting on Simplifier (STU3, not yet R4 - January?) • Suggestion to review work already done to ensure R4 compatibility • Would value sets also be published as reference sets? Maintain via Refset tool and published in MLDS. Note: UK experienced substantial 'getting off the ground' effort in this area. Sweden have worked through ~10 (will request promotion of content to International Edition where appropriate). • HL7 FHIR Registry? • Option to have multiple profiles available at the same time using slicing. • Chance to do some technical work at HL7 San Antonio <p><input checked="" type="checkbox"/> Peter G. Williams discuss Rory Davidson</p> <p><input checked="" type="checkbox"/> Peter G. Williams re-run tooling to include existing profiles in appropriate hierarchy.</p> <p>Options for Profile discussion:</p> <table border="1" data-bbox="504 555 1439 719"> <thead> <tr> <th>Specimen</th> <th>Allergy Intolerance (DK)</th> <th>Condition</th> </tr> </thead> <tbody> <tr> <td>Medication distinct from previous work on MedicationRequest etc (PWI)</td> <td>Vital Signs (DK)</td> <td>Procedure (see also CarePlan (activity.detail.code) - KR)</td> </tr> <tr> <td>Immunization</td> <td>ImagingStudy</td> <td>Observation Interpretation</td> </tr> <tr> <td>CarePlan</td> <td></td> <td></td> </tr> </tbody> </table> <p>Notes 26 Feb: UK working on pathology reporting - diagnostic / observation.</p> <p>Suggestion that we try out two types of profile, both of which avoid issues of conflict between fields within the information model:</p> <ol style="list-style-type: none"> 1. Where we only use the code field for clinical content (plus the administrative fields) 2. Where we restrict the code field to atomic values and all other resource fields should also be populated. Note that this does not solve the role group problem. <p>28 May: Plan to publish profile for the October conference (8 sessions + working between meetings. Completion for review Tues 14 October (or earlier since we'll need time to complete the IG?)</p> <ul style="list-style-type: none"> • Build implementation guide • Setup FHIR server with relevant valusets <p>Tooling for profiles: Forge (.NET) is now R4</p> <p>14 Jan 2020: Update from Rob on his progress with a new FHIR Template infrastructure. Required migrating/juggling what we had already built on older infrastructure. Sits under our implementation guide materials at build.fhir.org/ig/IHTSDO/snomed-ig/branches/new-template/ as Option 6: SNOMED Specific Profiles</p> <p>Differential Table view shows the difference between the parent resource and our SNOMED-specific further profiling of it.</p> <p>Discussion around practicalities of handling bindings where the ECL isn't very pretty, but the enumerated membership list could change very frequently e.g. a list of codes for vaccine preparations (or procedures) that are specifically relevant to some national childhood immunisation programme, and which can therefore change monthly as new vaccine preparations become available. Preferred implementation solution would be for suppliers to be able to consume ECL, however complex.</p> <p>Discussion about what kind of separation should exist between the Implementation Guide (which should list things we think everybody should be doing in some certain way) and any more discursive musings that have not reached that level of consensus or experience.</p> <p>Thoughts on whether the IG should be balloted, and how to assess the maturity of any of it? Should each SNOMEDonFHIR published profile have its own (1-5) maturity metric stated?</p> <p><input checked="" type="checkbox"/> Daniel Karlsson to try loading existing Allergy Intolerance profiles into Forge R4. The STU3 profiles loaded fine in Forge R4 as just STU3 profiles. There are almost no changes between STU3 and R4 for AllergyIntolerance, so by manually changing the XML files from "3.0.1" to "4.0.0" the files showed as R4 profiles with no errors displayed. Files uploaded to profile page.</p> <p><input type="checkbox"/> Rob Hausam to take Observation questions to OO group.</p> <p>RH: Suggestion that "published" valuesets would be read-only.</p>	Specimen	Allergy Intolerance (DK)	Condition	Medication distinct from previous work on MedicationRequest etc (PWI)	Vital Signs (DK)	Procedure (see also CarePlan (activity.detail.code) - KR)	Immunization	ImagingStudy	Observation Interpretation	CarePlan		
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CarePlan															
11	Allergies	Daniel Karlsson	<p>Revisit any outstanding questions on Allergies.</p> <p>External publication of v0.1 of the AllergyIntolerance resource</p>												

12	Vital Signs	15	Daniel Karlsson	<p>Vital Signs Profile of Observation Resource</p> <p>Jeremy's work to compare Vital signs profile and SNOMED Subhierarchy - issues with eg blood pressure. Complex expression constraints available which cover the use of observables by the NHS(UK). Mapping to LOINC codes.</p> <p>See Spreadsheet attached to: SNOMED on FHIR Meeting (TB) - Tuesday 21 August 2018</p> <p>Issues / Discussion :</p> <ul style="list-style-type: none"> • Normative vs. descriptive purpose - 1, 2, or 3 profiles? • Unresolved modeling issues <p>2019-08-20:</p> <p>Update of the Vital Signs panel binding page.</p> <p>Discussion about the Vital Signs FHIR profiles and how to profile those to SNOMED profiles. We are going to create SNOMED profiles on the specific FHIR Vital Signs profile (e.g. Heart rate) and declare conformance with a generic SNOMED Vital Signs profile.</p> <p>2020-01-28:</p> <p>For reference, the UK vital signs profiles are available here: https://fhir.hl7.org.uk/STU3/StructureDefinition/CareConnect-VitalSigns-Observation-1</p> <p>The Vital Signs (misnomer...) profiles contain additional slices on Observation.code adding SNOMED CT bindings on top of existing magic number /LOINC bindings. No other constraints have been added to the profiles. Descriptions or notes about any terminology binding overlap issues should be added, e.g. for the bodySite element of the core body temperature profile.</p> <p>2020-02-18:</p> <p>Andrew Perry showed UK work on the blood pressure profile and discussion followed:</p> <ul style="list-style-type: none"> • Is the "vital signs" scope too limited for the needs. What to do with blood pressures not fitting the profile? • How are body position and precondition best represented? Snomed has codes for some of these. There are also extensions to manage some aspects, e.g. http://hl7.org/fhir/R4/extension-observation-bodyposition.html • How to represent the "panel" code? • How to work with interaction between panel and component codes, e.g. panel = sitting BP, syst = standing syst BP
13	v3.0.1 ProcedureRequest ReferralRequest v3.4.0 (publication Aug 19?) ServiceRequest		Daniel Karlsson	<p>These two separate resources existed in the FHIR 3.0.1 Spec. Rob Hausam but have been removed in 4.0 and replaced with ServiceRequest http://build.fhir.org/servicerequest.html ServiceRequest</p> <p>Questions:</p> <ul style="list-style-type: none"> • What determines which FHIR resource to use: the location of the data item in the sending system's information model, or the semantics of the particular code regardless of where it was found? Some hybrid of both? • If the resource to be used is determined at least partly by the location in the sending information model, how does a requesting system cope with the fact that different implementations (or different users of the same implementation) both can and do secrete essentially the same clinical info in very different parts of the host information model? <p>Need to revisit the original questions raised in this group wrt the two separate resources of yore, and consider whether the same issues persists wrt the new single ServiceRequest resource.</p>
14	Next meeting	5		3 March 2020

Meeting Files

File	Modified 
Microsoft Powerpoint Presentation Terminology binding.pptx	2020-Feb-13 by Peter G. Williams
PNG File image2019-6-26_10-43-2.png	2020-Feb-13 by Peter G. Williams

 [Download All](#)