2020-01-28 - SNOMED on FHIR Meeting (TB)

Date/Time
20:00 UTC on Tuesday 28 January 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/zoomconference for available phone numbers (meeting id 242-348-6949)
Chat: snomedintl.slack.com #snomed-hl7-fhir

Attendees
Daniel Karlsson, Jeremy Rogers, Rob Hausam, Zac Whitewood-Moores, Kristine Rosenbeck Gaeg, Simon Kne, Jim Case, Peter Jordan, Andrew Perry

Apologies
Peter G. Williams

Discussion items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Mins</th>
<th>Owner</th>
<th>Notes &amp; Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome and introductions</td>
<td>5</td>
<td>Rob Hausam</td>
<td>Recording + Notes.</td>
</tr>
</tbody>
</table>
| 2    | Summary of previous week (TS) and previous TB | 5    | Rob Hausam | 2020-01-01 - SNOMED on FHIR Meeting (TS)  
2020-01-14 - SNOMED on FHIR Meeting (TB) |
| 3    | Future meetings | 1    | Jane Millar | Upcoming events: 2 - 3 Connectathon Feb 2020 HL7 Sydney (followed by Business meeting)  
We will skip 4 February TS during HL7 Meeting and re-jig the meetings to bump TS to the 11th.  
Terminology Services Track Proposal: https://confluence.hl7.org/display/FHIR/2020-02+Terminology+Services+Track  
Business Meeting Agenda: https://confluence.hl7.org/display/VOC/Feb+2020+-+HL7+Sydney+WGM+-+Meeting+-+Agenda+-+for+-+Vocabulary  
SNOMED International Business Meeting April 5 - 8 SNOMED on FHIR meeting Sunday 5 April  
San Antonio HL7 Meetings + Connectathon May 16-17  
FHIR DevDays - June 16-18, 2020 Cleveland, OH  
SI Business + Expo October |
| 4    | URI Standard update | 2    | Peter G. Williams | The SPLG workgroup discussed this  
http://snomed.info/valueSet/GPS  
Update this causes a problem in the tooling as it demands a capital V in ValueSet.  
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.  
http://snomed.info/fhirStructureDefinition/example  
Update 3 Dec: Publisher tooling has specific requirements around URI construction that isn't compatible with the proposed URI standard.  
Daniel Karlsson to supply code line(s) that's causing the problem to Rob Hausam |
| 5    | Free Set Response | 1    | Jane Millar | Peter G. Williams progress 4 step actions from 27 October meeting  
Update 3 Dec: Draft of notes arising from KL and subsequent SNOMED on FHIR meeting being reviewed. Intention to reach out to Graahne and Keith to discuss further. Amber mappings outstanding, but value of partial implementation questionable so need to discuss before further work is done. RH has given Keith an update. |
6 Implementation Guide
   Did we conclude on the best approach(es) for semantic overlap between fields as discussed in "Terminology Binding"?

   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.

   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.

   Update 15 Oct -2 issues:
   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/IHTSDO/snomed-ig/ValueSet/bodyheight.html) - does not exist) and navigating from the ValueSet itself uses a dash (eg. http://build.fhir.org/ig/IHTSDO/snomed-ig/ValueSet-bodyheight.html)

   Rob Hausam: Check with Lloyd McKenzie and Eric Haas if their two frameworks have been fully

2020-01-28:
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.

7 Procedure Resource
   Procedure Expert assistance for CarePlan:
   Jane Millar: please mention our discussion to Zac Whitewood Moores (NHS) and provided with dial in details to attend a Terminology Binding group call
   Rob Hausam please mention our discussion to Michelle Millar (HL7), Stephen Chu (AU), Emma Jones.
   Read Workflow https://www.hl7.org/fhir/workflow.html

   Procedure (not completed 3 Dec) followed by Care Plan
   KG: procedure code concern about overlap with reasonCode.

2020-01-28:
CarePlan resource was discussed. Zac Whitewood-Moores provided a comparison with Contoso ISO standard. In FHIR CarePlans are always instantiated (subject is 1..1).

The status element was discussed and compared to SNOMED CT context values for action, e.g. in this UK reference set: http://diseasesdatabase.co.uk/snomed/refset_metadata.aspx?id=999000081000000105

In implementations, other kinds activity status values are relevant, and agreeing on a standard set of activity status values can be a challenge.

8 Observation resource
   See updates here: Observation binding

9 Cancer Disease Status
   Carmela Couderc:

   Peter G. Williams Fill in current values and parents

Query about qualifier values used. Would it be better to use < 418136009 |Patient condition finding (finding)| ? (JR suggested immediate children ie "<" rather than descendants)

See also 373117000 |Pathology examination findings indeterminate (finding)| (child of 250537006 |Histopathology finding (finding)|)
### Exemplar Profile

#### Observation

Update from Rob on his progress with a new FHIR Template infrastructure. Required migrating/juggling what we had already built on ImagingStudy.

#### Update from Daniel

Interpretation

Plan to publish profile for the October conference (8 sessions + working between meetings. Completion for review Tues 14 October (or discuss). UK working on pathology reporting - diagnostic / observation.

#### Vital Signs

15

Daniel Karlsson

Plan for Profile discussion:

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Allergy Intolerance (DK)</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication</td>
<td>Vital Signs (DK)</td>
<td>Procedure (see also CarePlan (activity:detail:code)</td>
</tr>
<tr>
<td>Immunization</td>
<td>ImagingStudy</td>
<td>Observation Interpretation</td>
</tr>
<tr>
<td>Procedure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes 26 Feb: UK working on pathology reporting - diagnostic / observation.

Suggestion that we try out two types of profile, both of which avoid issues of conflict between fields within the information model:

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.

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)?

- Build implementation guide
- Setup FHIR server with relevant value sets

Toolsing for profiles: Forge (.NET) is now R4

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/g/HTSDO/snomed-ig/branches/new-template/as Option 6: SNOMED Specific Profiles

Differential Table view shows the difference between the parent resource and our SNOMED-specific further profiling of it.

Discussion around practicabilities 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.

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.

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?

#### Published Profiles

- Suggestion that “published” value sets would be read-only.

#### Vital Signs Panel binding

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.

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#### Vital Signs

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Daniel Karlsson

Vital Signs Profile of Observation Resource

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.

See Spreadsheet attached to: SNOMED on FHIR Meeting (TB) - Tuesday 21 August 2018

Issues / Discussion:

- Normative vs. descriptive purpose - 1, 2, or 3 profiles?
- Unresolved modeling issues

2019-08-20:

- Update of the Vital Signs panel binding page.

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.

2020-01-28:

For reference, the UK vital signs profiles are available here: [https://fhir.hl7.org.uk/STU3/StructureDefinition/CareConnect-VitalSigns-Observation](https://fhir.hl7.org.uk/STU3/StructureDefinition/CareConnect-VitalSigns-Observation)

The Vital Signs 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.
### Questions:

- 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?

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.