2019-06-10 - OBSERVABLE Meeting

Date and time: 2019-06-10 20.00 UTC

Zoom Details: https://snomed.zoom.us/j/992630241

Attendees:
- James R. Campbell
- Sarah Harry
- David Sperzel
- David Rocha
- Farzaneh Ashrafi
- Penni Hernandez
- Suzanne Santamaria
- Toni Morrison

Apologies:
- None

Objectives:
- Decide on susceptibility modelling

Discussion items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Owner</th>
<th>Notes</th>
<th>Action</th>
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<tbody>
<tr>
<td>1</td>
<td>Welcome &amp; apologies</td>
<td>Daniel Karlsson</td>
<td>• Remember recording!</td>
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<tr>
<td>2</td>
<td>Conflicts of interest</td>
<td>Daniel Karlsson</td>
<td>• None stated</td>
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<td>• Sarah Harry is not acting as a delegate of the NHS Digital</td>
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<td>3</td>
<td>Minutes from previous meeting</td>
<td>Daniel Karlsson</td>
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<td>4</td>
<td>KL meeting</td>
<td>Daniel Karlsson</td>
<td>Planning of meeting in KL, Malaysia. A request was submitted previously. There will be a meeting on Tuesday Oct 29 13.30 local time (5.30 UTC).</td>
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Background

Draft editorial guidelines: Editorial Guidelines for Diagnostic Products Used for Susceptibility Testing

It was decided to recommend representation the physical form of the susceptibility test product, and also to use the | has presentation strength...| attributes (as opposed to other strength attributes).

Two issues were discovered while re-reading the Inception/Elaboration document for susceptibility testing: 1. "oral form antibiotic susceptibility" exists as components in LOINC tests. 2. When other methods than culture are used, e.g. PCR or sequencing, to determine susceptibility, we might need to use another way of modeling, e.g. beta-lactamase producing - resistance towards beta-lactam antibiotics.

While the Susceptibility test products are needed for the mycobacteria tests (with strength-specified antibiotics), we might reconsider the approach for other cases, and use substances where products are not needed, together with a role chain | towards | o | ingredient | | towards |.

Rob: Aren’t all susceptibility tests strength-specified, even though the strength is not part of the definition?

Xavier: EUCAST breakpoint for diffusion disks: http://www.eucast.org/clinical_breakpoints/ the xls is at http://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Breakpoint_tables/BreakpointTables_9_3_0_Species_Centres_431314004_Peripheral_oxygen_saturation.xlsx

Most tests (mycobacteria tests being an exception) are based on there being a concentration gradient (e.g. disk diffusion, eitet, MIC procedures) and thus not a single concentration.

2019-02-11:

An OWL ontology with Diagnostic test products and susceptibility observables is attached.

The combination substances are to be inactivated, so modeling cannot rely on use of such concepts.

2019-03-25:

An alternative version not using combination substances was presented and discussed.

Current objective

Presentation

Give recommendations on representation given two alternatives: (1) use | Susceptibility test product | as values of the | towards | attribute OR (2) use Substance together with | direct substance | = | Susceptibility test product | only when needed.

2019-04-08:

Presentation of alternatives for susceptibility observables modelling.

Has use with information models, e.g. FHIR Observation, been tested? No, but given that the observables are expression representations of LOINC content, for which there is ample experience, that is assumed not to be a problem.

Can Susceptibility test products be categorized as Pharmaceutical products, and thus be placed under 37387005 (Pharmaceutical / biologic product (product)) ?

Comparison with allergy tests (skin or blood) can be explored further.

The project group voted to have a full example of using Test products as values for towards presented at next meeting | Motion: James R. Campbell | , second: Raj Dash, Against: 0, Abstain: 1, For 5, Tori Morrison to be invited to discuss placement of Susceptibility test products.

At a meeting 2019-05-15 with the HoT Jim Case it was decided to again look into using Medicinal products, first checking with the Drug project.

2019-06-10:

There was agreement in the group that Medicinal Products should be used as value of the | towards | attribute for susceptibility observables. The Medicinal Products will be of the "containing only" flavor. No decision made yet about strength-specified susceptibilities.

6 Oxygen saturation

James R. Campbell

Proposed modeling of Oxygen saturation by pulse oxymetry: Re: Technology preview and application of col/cept model

See modeling of 431314004 | Peripheral oxygen saturation (observable entity) | | using device | should be removed from the definition as there are other ways of observing the peripheral oxygen saturation.

2019-04-08:

Presentation of work done by James R. Campbell et al. at UNMC. Observables had been developed for MMSE (Mini-mental state examination). Process, scale type, and property concepts had been created in order to define the MMSE observables. Also, the section about function observables in the Observables I E document was expanded.

The level of detail of Observables for individual instrument parts, such as the individual questions of MMSE, was discussed. Alternatively, generic observables, not specific to the instrument, could be used. UNMC preferred having specific observables.

The function observables are, according to the current pattern, defined by reference to the processes which are realized by the function, e.g. Orientation in time is realized by the function Ability to orient in time. Other observables can be defined by reference to the processes, e.g. performance of processes. Alternatively, these observables could be defined in terms of the function rather than the process.

2019-05-20:

Updates to be presented.
<table>
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<tr>
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<th>Lab observables interoperability</th>
<th>James R. Campbell</th>
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<tr>
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<td>2019-04-08:</td>
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<td>6</td>
<td>James R. Campbell presented a request to SNOMED International to publish an OWL ontology including the LOINC expressions and expressions for any other lab terminology (e.g. NPU Terminology or the NHS pathology subset and content in SNOMED to allow classification, and comparison, of lab content.</td>
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<td>The group was supportive of the proposal.</td>
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<td>2019-06-10: James R. Campbell will provide a report on progress so far and a presentation help for the LOINC committe last week.</td>
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<th>TUSS Observable</th>
<th>Suzanne Santamaria</th>
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<tr>
<td>8</td>
<td>Next meeting</td>
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<td>8</td>
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<td>Next meeting is 2019-07-15 20.00UTC</td>
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<td>9</td>
<td>AOB</td>
<td>Daniel Karlsson</td>
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**Meeting Files**

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<tr>
<td>File susceptibilityObservables_v4.owl</td>
<td>2019-Jun-07 by Daniel Karlsson</td>
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**Recordings**

[https://snomed.zoom.us/recording/share/fCGgjv9-DrKrNzFwFDxvKTRxtkgY56BFLZde-PMNqyvvlumekTzI/Mw](https://snomed.zoom.us/recording/share/fCGgjv9-DrKrNzFwFDxvKTRxtkgY56BFLZde-PMNqyvvlumekTzI/Mw)

**Previous Meetings**

**More zoom details**

Topic: Observables meeting

Time: this is a recurring meeting Meet anytime

Join from PC, Mac, Linux, iOS or Android: [https://snomed.zoom.us/j/992630241](https://snomed.zoom.us/j/992630241)

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Meeting ID: 992 630 241

International numbers available: https://snomed.zoom.us/zoomconference?m=AQWV2VqAIQYWMcMapl9CoYjsaj1TVS7K