

# LexEVS Meeting Minutes - Value Set Architecture Planning Session - 2017.01.06

## Attendees

| Name              | Role        | Present |
|-------------------|-------------|---------|
| Wright, Larry     | NIH/NCI     | x       |
| Fragoso, Gilberto | NIH/NCI     |         |
| Safran, Tracy     | NIH/NCI [C] | x       |
| Ong, Kim L        | IS          | x       |
| Wynne, Robert     | NIH/NCI [C] | x       |
| Lucas, Jason      | NIH/NCI [C] | x       |
| Bauer, Scott      | Mayo        | x       |
| Stancl, Craig     | Mayo        | x       |
| Endle, Cory       | Mayo        | x       |

## Agenda

### Goals:

- Better understand the struggles and issues associated to loading value sets. Once those are identified, understand the actual requirements.
- Once requirements are agreed upon, propose solutions to satisfy them.

|                                                                                                                                  |                                            |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| Additional requirements <ul style="list-style-type: none"><li>• Value set resolution</li><li>• Search and manipulation</li></ul> | Discussion Points:<br><br>Decision Points: |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|

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| <p>Review Value Set workflow process (Tracy and Rob)</p> <ul style="list-style-type: none"> <li>The goal is to identify the areas of the workflow that cause the greatest issues. (for example, long load time for 700 value sets)</li> </ul> | <p>Discussion Points:</p> <ul style="list-style-type: none"> <li>What are the requirements for resolving value sets? <ul style="list-style-type: none"> <li>Performance parameters?</li> </ul> </li> <li>Rob mentioned there are 760 resolved value sets - loaded over the weekend. Last one took about 2.5 days. <ul style="list-style-type: none"> <li>This is run once a month.</li> <li>Is there a simpler/quicker way to resolve these value sets?</li> <li>Better logging would help to determine if there were any failures for resolving the value sets.</li> <li>Rob suggested that if the script ran over night, this would be acceptable.</li> </ul> </li> <li>Scott mentioned we could make the value sets transitive. This would make loading resolved values sets perform better.</li> <li>Rob questioned if we can load multiple values in parallel.</li> <li>Kim asked if we need to resolve all of these value sets every month. <ul style="list-style-type: none"> <li>Produce a large OWL file that contains entities with the value sets.</li> <li>This file needs value set membership information.</li> <li>Can search against this large file.</li> <li>This is all in the LexEVS environment.</li> <li>Kim would need a convenient API method to generate this output file.</li> <li>There are a few value sets that are not from NCI Thesaurus.</li> </ul> </li> <li>We will need to verify that the value sets are consistent from the current method of generating them to any new method of creating them.</li> <li>Tracy mentioned that most value sets (about 700 of them) are concept in subset. The hierarchy of the targets are about 2 levels deep.</li> <li>Most of the value sets can be built off from the information in the NCI Thesaurus.</li> </ul> <p>Decision Points:</p> <ul style="list-style-type: none"> <li>Requirements <ul style="list-style-type: none"> <li>Ability to audit and simplify the workflow.</li> <li>Better logging to help determine if there were any failures for resolving the 760 value sets.</li> <li>Rob suggested that if the script ran over night, this would be acceptable.</li> <li>Ability to quickly resolve value sets on the fly.</li> </ul> </li> </ul> |
| <p>Discuss and capture issues for further review.</p>                                                                                                                                                                                         | <p>Discussion Points:</p> <p>Decision Points:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## REFERENCES

### Value Set Issues Identified during 2016.12 Technical Face-To-Face

- [2016.12 Technical Face-To-Face Prioritization List](#)

| Priority | Issue                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------|
| 1        | Investigate ability to be able to determine if Resolved VS coding scheme has changed.                                          |
| 1        | Investigate ability to update as needed (not have to load all 700 at the same time). Decrease time it takes to publish/deploy. |
| 2        | Investigate ability to be able to determine if Value Set Definition has changed.                                               |
| 2        | Investigate ability to capture "Hierarchal Value Sets" as coding schemes with hierarchy. (inside value set)                    |