Reviewer’s report

Title: An ontology-aware integration of clinical models, terminologies and guidelines: an exploratory study of the Scale for the Assessment and Rating of Ataxia (SARA)

Version: 1  Date: 26 Sep 2017

Reviewer: Nicole Vasilevsky

Reviewer's report:

Overall comments:

The authors have addressed the majority of the comments from the reviewers. However, further revision and editing is still needed to improve the readability and quality of the written English. Additional comments are below.

Abstract:

Rather than 'cut-down', I would use the term 'scaled down'

Results: 'purpose' should be plural

Background:

Page 4/Line 12: revise 'which is crucial to compare results across studies' to 'which is crucial [for comparing] results across studies'

Page 4/Line 25: Revise sentence to: "Ontologies, on the other [hand], aim [to]represent the meaning [and relationships] between clinical [terms]."

Page 5/Line 3: this sentence is awkward, do you mean that the archetype was mapped to an ontology?

Methods:

"reduced version" still sounds awkward to me. A slim version or scaled down version sounds better.

Please note how many classes are contained in your scaled down version of the HPO. Which file is the reduced version? Is it the Ontology modules.owl? Please refer to this by name in the text.
It looks like you removed all the annotations and logical axioms from your scaled down version? (I am looking at the file Ontology modules.owl) This takes away a lot of the value and functionality of the ontology.

I don't see that you requested new terms to the HPO via their tracker as you mentioned in the response to reviewers.

Page 11/Line 17: Missing the figure number (also missing the figure number in the caption: Fig. GDL rule for absence of cerebellar syndrome)

Results:

You should mention in the text that the SMS is just a local version and not available for download.

A description of the Weighted Kappa test would be helpful to include.

Discussion:

You should restate your research questions before you discuss them.

Tables 4 and 5 should go in the results.

Figures:

I think Figure 1 and Figure 2 could be combined into one figure.

Figure 4 doesn't really add much to the paper.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

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