Reviewer’s report

Title: Software Tools to Support Title and Abstract Screening for Systematic Reviews in Healthcare: An Evaluation

Version: 0 Date: 30 Sep 2019

Reviewer: Ba' Pham

Reviewer's report:

The authors A) conducted a reasonably comprehensive search to identify software tool candidates that support titles and abstracts screening; B) assessed the candidates for eligible tools; C) designed, implemented and carried out a feature analysis of the eligible tools; and D) piloted a set of promising tools to elicit the users' experience.

The methods and results are reasonably well described and overall, the manuscript is well written. I however have a few specific questions.

Overall question: Did the authors come up with the items A-D that I could delineate above as part of a study protocol from the beginning?

Item B: Were the selection criteria developed by one author or all three authors?

Item C: Why did only one of the three authors involve in the design of the feature selection? What was the process to consult with medical researchers involved in systematic reviews? How many of the researchers did the authors consulted? Was the assessment of the eligible tools with respect to each of the selected features conducted by one author? Did the authors verify to see if the ranking of the tools might depend on alternative coding of the feature scores (e.g., 1-3 instead of 0-2) and weighting scores (e.g., 1-5 instead of 0-4)?

Item D: How did the authors identify the sample of the six researchers? Why were these six researchers selected? Did the authors take steps to ensure a sample of researchers with different experience in using tools that automate titles/abstracts screening?

I generally agreed with the discussion, with a few questions. Some considerations regarding the performance of the tools with respect to sensitivity and precision are needed, especially if the authors wanted to recommend some tools over the others. The authors need to confine the way they make sense of the results from the perspective that their study is confined to usability of these tools - data pertaining to the performance characteristics of the tools are also important in selecting a tool for use in practice.

The conclusion and recommendation would need to be from the perspective that this study is about accessibility and usability of the tools (not taking into account how the tools perform the task with selecting eligible abstracts with high sensitivity and high precision).
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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

Unable to assess

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

Unable to assess

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 am able to assess the statistics

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

Acceptable

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