Reviewer’s report

Title: Physicians' Pharmacogenomics Information Needs and Seeking Behavior: A Study with Case Vignettes

Version: 0 Date: 02 Jun 2017

Reviewer: Ira M. Lubin

Reviewer's report:

The study "Physicians' Pharmacogenomics Information Needs and Seeking Behavior: A Study with Case Vignettes" provides useful insight to how a limited number of physicians access two internet resources in finding answers to clinically relevant pharmacogenomics questions. The manuscript is clear and well written. This reviewer has a few comments that are recommended for inclusion:

1. There are inferences to "evidence" throughout the document. This reviewer believes it important to recognize that 'evidence' has different meanings. As such, it should be stated, and perhaps expanded upon, that recommendations available in the professional community range from consensus opinions to those that are evidence-based; the latter meaning that there are a sufficient number of robust studies to support the concept. Recognizing the strength of evidence for what is found in internet searches, including what information is presented on the resources targeted within this manuscript, is an important factor for informing clinical decisions.

2. Under the discussion section, the authors state "Our study finding provide design guidance for online resources to reduce barriers of effective use of pharmacogenomics in patient care decisions." However, the specific design guidance is not presented, at least in a way that is obvious to this reviewer. It is recommended that this be included in text or preferably in a table or figure. One thought is that in understanding the time allotted to searching, it seems reasonable to develop and evaluate web resources that take into account the need to have the sought after information available within an allotted time. For complex topics, some websites have search term assistance during the course of the search as a means to refine what is being asked.

3. This intersects with the topic of clinical decision support that is alluded to within this manuscript. I would also like to see a more direct inference to how their work contributes supporting clinical decisions with respect to internet searching and search term generation.

4. Under limitations, the authors make the statement that "we believe this small number of subjects was sufficient to provide important insights that can help guide the design of pharmacogenomics information resources". This reviewer only partially agrees with this
assertion. There should be additional recognition that this small number may not be representative and a repeat of this study may result in different findings. This observation suggests that the authors should consider expanding this study to other groups or a larger group to corroborate what had been found.

**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.

Unable to assess

**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.

Not relevant to this manuscript

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

Acceptable

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