Reviewer's report

Title: The Global Evidence Mapping Initiative: Scoping research in broad topic areas

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Reviewer: Michael G Fehlings

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In the current paper Bragge and colleagues present their algorithmic approach to creating evidence maps in the realm of neurotrauma with an intent to identify gaps in the present knowledge pool that can be exploited as targets of future in depth research. The following points are offered:

1) The Background information on the topic is interesting however the second paragraph discussing anecdotal exchange between the clinician and CEO is informal and inappropriate for inclusion in a scientific article. The authors would be better served to focus on the history and application of knowledge mapping in other branches of medicine. It would be interesting for the authors to describe other situations in which it has shown to be a useful modality.

2) The idea of polling experts in a particular field is an important way to develop an understanding of the relevant issues within that field. However how does one avoid incorporating the biases of a particular expert and allowing those biases to shape the landscape of the evidence mapping process?

3) Although the review of the literature is systematic it remains troubling that there is no assessment of the methodological quality of the studies included. The authors have acknowledged the differences between mapping and systematic review, however this shouldn’t preclude the use of one of many available ranking schemes that judge the quality of the evidence that is being incorporated.

4) In the discussion the authors should expand more on how they plan to use the global evidence map once completed to direct future research in the field. How will topics and gaps be prioritized for future study once the map has been completed.

5) The authors should reflect on the limitations of their work and include this at the end of the manuscript in order to create a balanced discussion.

Overall this project represents a novel solution to “bridging the gaps” within the modern field of neurotrauma. Such projects may prove to be the impetus for identifying important areas of study that until now have remained neglected. I recommend publication of this work once the above points have been addressed.