Reviewer's report

Title: Quality Improvement, Implementation, and Dissemination Strategies to Improve Mental Health Care for Children and Adolescents: a Systematic Review

Version: 0 Date: 08 Aug 2016

Reviewer: Rinad Beidas

Reviewer's report:
The authors have embarked upon an impressive undertaking to identify the effectiveness of quality improvement, implementation, and dissemination strategies for children's mental health. I was impressed by the quality of the methodology and the goals of the review. However, my enthusiasm was tempered by some of the limitations of the review. Below, I detail my major concerns thematically. I also delineate more minor critiques.

Major Critiques

1. Terminology and lack of grounding in broader implementation science literature. In general, I did not feel that the authors grounded this review in the broader dissemination and implementation (DI) literature; nor did they use DI terminology. Given that they are targeting Implementation Science as the journal, this seems like an important omission. I can provide many examples, including the terminology they used to define their outcomes (i.e., not referencing implementation outcomes seems strange on page 6), not meaningfully using a DI model (they briefly mention CFIR but in the methods and not tied into their approach), and not referencing seminal papers on implementation strategies (e.g., Powell et al., taxonomy paper). A reconceptualization of the manuscript with an eye towards this issue is necessary.

2. Lack of conceptual clarity with regard to how quality improvement and DI strategies fit together. There is little literature on how QI and DI come together and they are lumped together within this report. More rationale for this approach and operationally defining how
they are similar seems important. In some ways, it almost seems like 2 papers are warranted rather than 1 that lumps them together (unless the authors define QI as under the DI strategy umbrella which would simplify things).

3. Overlap with technical AHRQ report. At times, particularly during the methods, I found the manuscript to be overly technical and seemingly to overlap with the AHRQ report. I recommend that the authors streamline some of the technical aspects and detail that in an appendix/supplement to make this read more like a manuscript. Then, in the results, they reference the report without going into details - be consistent please.

4. Editing is needed. Throughout the manuscript, I noted many typos, small mistakes, and inconsistencies in language (e.g., inconsistency in referencing implementation strategy and intervention in introduction). Close editing is needed throughout (e.g., p 6, line 31).

5. Novelty of findings. I am not sure how novel the findings are or how this paper moves the field forward. There is general consensus that implementation strategies are poorly defined and that we don't have a lot of evidence for them yet. I'd like to see a paper like this really push the field to think about how to move forward.

Minor Critiques (Organized by section)

1. Background
   - We are now in DSM 5 - I recommend using an updated citation from at least DSM IV-R or V.

2. Methods
   - Please provide a rationale for why the authors used the SAMHSA NREPP criteria rather than other potentially more rigorous criteria (e.g., Chambless & Hollon) - and the benefits/costs of various approaches.
   - Please operationally define implementation strategies and be clear how QI strategies fit within them or are different.
   - Please ground outcomes in Proctor framework.
- Please reference CFIR in background.
- On page 11, line 14, fidelity is described as a moderator, but it is also described as an implementation outcome, please clarify.
- Please describe how the Proctor et al reporting guidelines for implementation strategies fit into the methods used in the review.

3. Results
- I found this section disorganized and hard to follow. It would be easier if they organized the implementation strategies and outcomes in a way that is similar to Powell and Proctor's work and that would further ground the results in that literature.
- The methods and results for the QCA was the most interesting part of this paper from my perspective, and the least clear.

4. Discussion
- I don't find the discussion of the results to really push the field to think about how to improve studies to better address the limitations of the results identified. I would like to see the authors recommend how the field can move forward.
- This section was devoid of the broader IS literature.

5. Tables and Figures
- Figure 1 needs to be better explicated in a note and more grounded in the IS literature

Level of interest
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An article of importance in its field

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