Author’s response to reviews

Title: Mixed-Method Approaches to Strengthen Economic Evaluations in Implementation Research

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Bryan Weiner, Ph.D.
Associate Editor, Implementation Science

Dear Dr. Weiner:

We greatly appreciate the opportunity to revise and resubmit our manuscript, “Mixed-Method Approaches to Strengthen Economic Evaluations in Implementation Research” (#IMPS-D-18-00711), for possible publication in Implementation Science. We are encouraged that the reviewers had generally positive assessments of our work. We also found the revisions suggested by the reviewers to be very useful in improving the quality of our manuscript. A revised version of the manuscript accompanies this letter, which outlines the changes that we have made. Changes are also highlighted within the manuscript itself. Next, we address each reviewer’s comments (listed verbatim below) in turn:
1. “The CHEERS guideline was appropriately used to illustrate the example, however, the authors need to factor in the ethics of using qualitative approach in economic evaluation.”

We agree with this reviewer that the integration of qualitative methods into economic evaluation introduces important ethical issues. We have addressed this point in two places in the manuscript. First, in the section about qualitative methods for economic evaluation (p. 7, first paragraph, last four lines) we now state that such an approach is also compatible with calls for an ethical imperative to include participants’ voices, using qualitative methods, in theoretical and empirical representations of the economic forces that shape their lives (including in health care) [19,21]. Second, in the Conclusions section, we have added a paragraph (p. 14, last paragraph) discussing how future research needs to consider the best ways to address ethical issues introduced by using mixed methods in economic evaluations of implementation efforts. We go on to explain that inclusion of participant perspectives via qualitative methods certainly advances ethical principles of justice and respect for persons [19,21], but the level of detail captured by qualitative data also results in increased risks to participants [36]. For instance, collection of detailed qualitative information about implementation costs could threaten confidentiality by increasing the likelihood that participants are individually identifiable, as well as increase the potential harms of a breach in confidentiality (e.g., proprietary information could result in financial or legal ramifications in the event of a breach). We conclude by noting that it will be important to consider what types of training and guidelines will be necessary for researchers with a background in economic evaluation to learn and use established ethical practices for qualitative research (see [16,17]). We anticipate that relevant topics might include confidentiality (e.g., de-identifying narrative data using pseudonyms and generic language) and data integrity (e.g., ensuring complete [non-selective] reporting of data, reporting quotations in context, determining when enough data have been collected to draw robust conclusions), among others.

Finally, as part of the above changes in the body of the manuscript, we now cite two additional references that we have added to the Reference list. These are #21 (Ruccio, 2008) and #36 (Corti, Day, & Backhouse, 2000).
Issues Highlighted by Reviewer 2

1. “Page 8, Lines 21-26: For the referenced study, it would be useful to elaborate on the mixed methods used for economic evaluation.”

We have revised the sentence in question (p. 8, first paragraph, last four lines) to explain that Mumford et al. (2013) integrated qualitative (focus groups, expert panels) and quantitative (cost information collected via surveys and semi-structured interviews, indicators of patient safety and quality of care extracted from administrative datasets) methods to identify, quantify, and validate the costs and benefits of the Australian acute care accreditation program.

2. “Page 12, Line 22: The authors mention that many challenges and unanswered questions remain in this area of research. Are there universal challenges that could be made explicit in this paragraph outside of the case study presented by the authors?”

We had intended the challenges and unanswered questions discussed in the Conclusions section to represent universal issues beyond our case study; however, this reviewer’s comment highlighted for us that our intention was not clear. We have revised the paragraph in question (p. 12, last four lines, through p. 13, first two lines) to emphasize that rigorous engagement with our proposed research agenda by many experts – working across a variety of implementation strategies, settings, and target evidence-based practices – will be necessary to reach scientific consensus on best practices in mixed-method economic evaluation. We then introduce the list of five research questions (pp. 13-14) as examples of topics that could advance implementation science while providing opportunities to explore and further refine mixed methods for economic evaluation.

3. “Table 1: For the 4 categories under Structure, it may be helpful to the reader to see examples for each category, consistent with the other sections in the table where examples are provided.”

We have revised the “Structure” section of Table 1 to provide an example alongside the definition for each category (i.e., Qual → QUAN, QUAN → qual, Qual + QUAN, QUAN + QUAL). For instance, the example for a QUAN + QUAL study reads as follows: “E.g., while measuring costs as an implementation outcome, collect exploratory qualitative data about factors that increase or decrease implementation costs in different settings.”
Thank you again for your willingness to consider our manuscript for potential publication in Implementation Science. We want to produce the best manuscript possible and would be pleased to make additional changes if you so desire. We look forward to hearing from you.

My best,

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