Reviewer’s report

Title: Towards greater understanding of implementation during systematic reviews of complex healthcare interventions: the Framework for Implementation Transferability Applicability Reporting (FITAR)

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Reviewer: Alison O'Mara-Eves

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Towards greater understanding of implementation during systematic reviews of complex healthcare interventions: the Framework for Implementation Transferability Applicability Reporting (FITAR)

This manuscript describes the development of a tool for use in systematic reviews that focuses on the applicability and transferability of the implementation of an intervention to a different setting.

The issue of transferability and applicability of evidence on a given intervention is incredibly important and this is particularly true for systematic reviews, which are commonly consulted when making decisions about commissioning or designing new health initiatives. Anything to help the usability of systematic reviews is desirable, and this could be quite a timely contribution to a topic that is experiencing increasing interest.

There are some clear strengths of the work. The use of stakeholder engagement is commended, and the fact that it has been applied to a real systematic review is a positive attribute - it's not just a theoretical 'wish list'.

Whilst the significance of the work is clear to me, and there are some strong aspects to its design and development, the communication and intended use of the tool needs some consideration before this can be published. I'm left wondering about the usefulness and usability, which might be addressed through some elaboration on the individual items in the tool.

Starting with its intended use, it is essential that the authors reader and reflect on the recent publication by Burchett et al. (https://doi.org/10.1186/s12961-018-0364-3). It came out in September, so there's no criticism for not having included it yet, but the authors definitely need to address the concerns in their revision. In that paper, Burchett et al. make a case against checklist tools for assessing applicability. Their case revolves around four main arguments, many of which are actually supported in this draft manuscript (e.g., the limited reporting in primary
studies, the time it takes to complete the tool). The authors of this manuscript would be advised to address the arguments. I'd be particularly keen to understand how this tool addresses the issue of transferability of outcomes (i.e., the effectiveness of the original intervention) versus transferability of implementation (i.e., can it be done in another setting?). Also Burchett et al.'s concerns about not considering the mechanisms of action.

Moving on, another concern relates to how a systematic reviewer would use this framework in their synthesis and drawing of conclusions. In its current form, it reads as a descriptive tool - basically a data extraction tool that concentrates on issues that might be relevant to implementation. That's not a problem in itself, but I think that the authors could make it more clear what one might do with this information. A more accurate title for the tool would be "Framework for Implementation Reporting", because there's nothing inherent in the tool about transferability or applicability - the authors just propose that it could be used for looking at transferability and applicability with little suggestion for how. Inclusion/exclusion criteria? Subgroup analysis? Other?

Related to the last point, is this something that can or should be used in the synthesis, or is it mainly about making reporting of these issues more standardised and clear? In which case, would a systematic reviewer simply present the FITAR responses for each individual primary study, so that the reader can make their own transferability judgement calls to their own local context? To be clear, I certainly don't think that the authors need to be prescriptive about how the tool should be used, but offering some suggestions would help make the utility of this clearer - at the moment it feels like a rather onerous checklist with unclear usability.

My final major concern is the inconsistent way in which each item in the checklist is discussed in the results. Some items had rather uninformative text, along the lines of the checklist ensured that the reviewers looked for that particular detail, or that the item could be useful, or that the reviewers noted a finding in the report. They're a bit too generic and I think statements like that can be made for the tool as a whole and don't need to be repeated for each item. Some items had text that was presented more like substantive results/discussion (e.g., "We noted reports of an increase in healthcare spending, or particular funding streams around the time of the introduction of initiatives. This would have provided a particularly positive context for their introduction."). But not all items had substantive 'results' of this nature. I finished reading the Results section and felt that I had differing levels of understanding as to why the items were included and what they each contributed to the review process or conclusions.

I suggest rewriting the Results section with a very clear structure for each item, such that each would include:
1. The source of the item (was it identified in the primary studies, through stakeholder discussion, reviewer knowledge, another published tool, etc?)

2. The reviewers’ experiences of extracting data on this item (e.g., there was lots of missing data, variation in primary study presentation of data, disagreement amongst reviewers in interpreting what it means, straightforward, etc)

3. If available, a brief summary of the findings from the substantive review.

4. Example of how it was considered in the review (i.e., what was done with the data extracted for that item? Did it influence the synthesis and/or conclusions?)

The authors could possibly present this as a table if it starts to feel a bit repetitive. The manuscript already has some of this information in there, it just needs to be more structured and consistent across items.

As a reader, I want to understand the usefulness of this tool and its component items (what did you do with it? What can I do with it?) and the ease of use (was there a lot of missing data? Are some items not worth the return on time invested in trying to extract them?). Presenting the information in the way I suggest above would help me to decide whether to use this (in whole or in part). I also think the discussion section could be more meaningful if the authors reflect on the items in this way - for example, are the items of most interest to the stakeholders typically the hardest to extract? Analyse the items and the experience of using the tool a bit more.

Finally, should the stakeholders be mentioned under the ethics approval and consent to participate declaration?

**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

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Unable to assess
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Please indicate the quality of language in the manuscript:

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