Reviewer’s report

Title: Identifying Effective Retention Strategies: A Research Agenda

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Reviewer: Gillian Shorter

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This is an interesting piece of work, and I concur with the authors of the importance of evidence in attrition, and indeed evidence for priorities for attrition research. A few parts were unclear; the justification for including HTA CI's and CTUs in one part, but not another, and explaining the findings in the discussion rather than reiterating them. These and some other queries to address are given below:

1. Title is a bit vague "a research agenda" doesn't tell me much of what it is about, is it best practice and future priorities? Or something else? Might also be good to mention Delphi in the title.

2. Abstract - background: failure to retain or collect data reduces statistical power, it does not threaten to.

3. Methods - identify research priorities is a bit vague also- perhaps identify strategies that need evidence to support

4. Could you also consider rewriting the methods section for the abstract? As it currently reads, one might assume the same questionnaire was used for both groups. The strength of this study is the bringing together of the focussed experience on one trial (from the HTA CI's) and the broad experiences of those in CTU's to get the right list for the Delphi analysis, and to understand current practice. You might also want to stress this if you feel appropriate in lines 73-8 of the introduction (i.e. what is the advantage of both these groups being targeted to participate).

5. Introduction: Line 58- retaining all patients is hoped for; but remember ethical responsibilities; individuals can withdraw without reason, and without penalty. As such the retention of all patients is perhaps an unfeasible request, "as many as possible" would acknowledge the rights of participants to withdraw.

6. Similarly Line 61 - this is the pragmatic vs explanatory trials dimension, and I'm not sure that this statement on page 61-63 is correct, it would depend on the aims of the trial. Consider rephrase or remove.

7. Could you merge paragraphs starting on line 64 and 67 into one paragraph?
8. Line 65, I don't think it is always a failure of clinical staff measuring outcomes, perhaps "the failure to capture" as sometimes questions can be missed on patient completed questionnaires, or online, or otherwise. This work has importance to trials in the community also, so please consider widening the frame of reference to maximise the impact of the work (i.e. maybe don't refer exclusively to clinicians and patients).

9. Line 76-8: Could you remove the word "final" from this sentence, and include what the priority is based on; is it for empirical research, is it for review work, etc?

10. Lines 84-6: Could you separate the sentence with inclusion and exclusion criteria, it took several reads to work out which was which. I was also unsure as to why these were the inclusion or exclusion criteria, I understand parallel trials for example as an inclusion, but why not three or more arms

11. Lines 103-4. Who filled out the survey in the CTU? Similarly Lines 110-12, who filled out the Delphi at the CTU?

12. Lines 113-114: The additional missing data strategies- did these come from the HTA CI's or the CTUs? Could you provide a breakdown? If it comes from both sources, it strengthens the methodology for including both HTA CI's and CTUs.

13. Line 107 onward: Why were the HTA CI's not invited to participate in the Delphi study? A rationale would be helpful here.

14. Around line 210- could you put in a paragraph about the similarities and differences between HTA CI's and CTU strategies. To what extent is there overlap, and to what extent is there a separation.

15. Lines 2010-237: Again not including HTA CI's in the Delphi appears incongruent with the presentation. A rationale should be given for including HTA CI's at all if the intention was not to include them in the Delphi. In addition, point 15 might give a rationale for doing so, such that if there are mostly similarities, it might be thought that CTU's could speak on behalf of the HTA CI's. If not, a clear rationale for exclusion should be given.

16. Who are UK trialists- the CTUs or the HTA Cis? Line 242

17. You might want to note the lack of evidence could be addressed by some of the initiatives such as MRC Start or SWATs Lines 249-53; if you choose to include these, please provide citations.

18. Lines 254-59- why do you think CI's and CTU's think this might work- i.e. is there a psychological reason behind site initiation training that feels like it might work for these groups, or a reason behind the doubt that it does not. This paragraph (and indeed most of the discussion) needs a little more thought and anchoring in the literature.
19. Lines 260-3 seem like they would belong in the introduction as they offer no explanation or extension of the findings. It's more of a justification for the study, and as such you might wish to move it, or remove it.

20. In general, the discussion is very descriptive and offers little explanation of what was found, rather more a reiteration of what was found. I would have liked to see some exploration of decision making in the absence of evidence as much of this work would suggest- why are individuals recommending newsletters or staff training if we don't know that it works. What might this prioritisation mean, that they are sure it works, or that they have doubts that it does not.

21. Great retention rates for your Delphi- perhaps you might comment on the strategies that you used in the strengths section given the relevance to the overall work.

22. Tables were great- very clearly presented.

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