Title: Designing and implementing two facilitation interventions within the 'Facilitating Implementation of Research Evidence (FIRE)' study: A qualitative analysis from an external facilitators' perspective

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Reviewer: Mark Bauer

Reviewer's report:

This is a well-written post-hoc analysis of the FIRE cluster randomized trial, utilizing a predominantly qualitative approach to explore the relative difficulties in deploying two types of blended internal-external implementation facilitation, one focused predominantly on process improvement (Type A facilitation) and one focused predominantly on the development if individual and context characteristics that would be conducive to guideline concordance (Type B facilitation). The major focus of the trial was on enhancing continence guideline concordance in long-term care facilities.

There is much information in this report that will provide valuable lessons to those planning blended internal-external implementation facilitation. The authors align their analyses to the logic model for the study which is sensible, but may make the lessons learned somewhat less easily transportable to other studies. Nonetheless, the lessons learned are readily extractable from the text.

A few comments/questions:

* "Residential" programmes are on-site / face-to-face?

* In the data collection section the research fellows' interviews with internal facilitators (IFs) could be better described: Structured? Semi-structured? How long?

* In the data analysis section there is a quite succinct description of how themes were identified to address the issue of "how closely facilitation in practice at each site aligned with the logic pathway." However, there is a much more extensive set of data reported focusing not on this yes/no question but rather on the reasons behind the success or failure. More methodological detail as to how these themes emerged is needed.

* That said, there is much more that could be said about the "Why?" of the results. For instance, why was Type B facilitation apparently so much less tolerable (line 287)? Why
was building an implementation team achieved at less than half the sites (line 354) and why did IFs "report explaining to, but not involving nurses in implementation" (line 363)? What was the source of the "resistance or a lack of support" (line 370)?

* Overall, the paper describes how the interventions did not work, which is valuable in and of itself, but do not greatly help us to understand the reasons behind this. It seems a good bit more complex than finding "the right person" (line 402) or "fit and alignment" (line 403) of IF and other aspects of the context or facilitation.

* The recommendations in the discussion and Figure 4 are in large part along the lines of "do more"—e.g., being more exacting in the choice of IF, more face-to-face contact, more engagement with local leaders, more co-facilitation (presumably meaning more involvement of the external facilitator). This is all fine, I suppose, but you already have a very detailed and complex "Mercedes" of an implementation strategy. Most studies, I would guess, could not afford even this complex and expensive an implementation strategy. Are there lessons for those of us on a "Kia" budget?

* Finally, I would strongly advocate for disguising the IFs more thoroughly for their protection as human subjects. If, for instance, one knew about the specifics of the study one could readily narrow down, say, the "Ireland 2B" IF to one of two individuals. If a supervisor at one of the two Ireland 2B sites were highly invested in the implementation going well, and it did not, the IF could be vulnerable to retribution. This is a remote possibility, of course, but generally employees are considered human subjects "vulnerable populations" for exactly these reasons.

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