Reviewer’s report

Title: The demonstration of a theory based approach to the design of localised patient safety interventions

Version: 2 Date: 26 August 2013

Reviewer: Jill Francis

Reviewer’s report:

The authors propose a “TDF implementation” method comprising a “theoretical domains framework (TDF) of behaviour change” approach to understanding the barriers and levers to changing clinical behaviours, and a contextualised, collaborative, “implementation theory” approach. This TDF implementation approach is applied in three hospitals to improve the implementation of a patient safety guideline relating to safe nasogastric feeding. The study focuses on two research questions, the first being important for methodological / theoretical reasons (‘How important is context in identifying barriers and appropriate interventions?’) and the second being important for practical reasons (‘How feasible and acceptable is the TDF implementation approach?’).

This research is different from many other implementation studies in the following respects:

• The implementation problem to be addressed was selected by the participating hospitals
• The approach to change was managed by a clinically led interdisciplinary team rather than a research team
• The ‘implementation problem’ was assessed through a local audit of patient notes which also identified the specific behaviours to be targeted for change.
• Barriers to change were assessed first by using a validated instrument based on the TDF: the Influences on Patient Safety Behaviours Questionnaire (IPSBQ)
• Focus groups with clinical staff were used to interpret the IPSBQ findings and to design the intervention
• Following a time trend audit, hospitals were asked to assess the clinical significance of the observed change in practice.

The features of the research, listed above, are impressive. To me, this study stands out as a model of implementation research and practice that is systematic, collaborative and contextualised. Although the approach has limitations, these are well articulated and I agree with the authors that future research could be designed to address these. I think this paper would be of great interest to the readers of Implementation Science. Thank you for asking me to review this excellent paper.

1. Is the question posed by the authors new and well defined?
Yes.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   Yes.

3. Are the data sound and well controlled?
   Yes.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   Yes.

6. Do the title and abstract accurately convey what has been found?
   Yes.

7. Is the writing acceptable?
   Yes.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)
None recommended.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
1. Delete Reference 2 (duplicates Reference 3).
2. Typo in Reference 8 – Runciman
3. On Page 4, the list of theoretical domains includes “behavioural regulation” whereas in on Page 3 of the Focus group topic guide it is labelled “action planning”. The correct label is behavioural regulation.
4. End of Method section: analysis of the “Reflective log”. It would be helpful to identify, at this point, which research question this analysis addressed.
5. The 11 (domains) x 3 (sites) MANOVA tested two main effects. I am not clear that the between-subjects effect demonstrated that there were differences between organisations. Can this be re-worded so that the interpretation is clearer?
6. At the top of page 12, I could not follow the place of Table 6 in the intervention development process.
7. I am also unclear about the table numbering on page 13.

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

9. Results, page 10: At “questionnaire data were collected from 227 across each hospital”, I think you mean “across the three hospitals”, not 227 at each (which would be 681 in all).

10. At “combined mean barrier scores at each hospital were calculated”, it would be clearer to say “combined mean domain scores (assessing barriers) were calculated separately for each hospital”.

11. Table 1, Point 6. Should this be “…complexity of changing the behaviour…”?

12. Page 13, line 7: I am not clear about the meaning of the proposed benefit of this approach, “expanding impact”. Does this mean that the intervention continues to improve practice? If so, how does this differ from sustainability?

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.