Reviewer's report

Title: Using psychological theory to inform methods to optimize the implementation of a hand hygiene intervention

Version: 3 Date: 22 March 2012

Reviewer: Jill Francis

Reviewer's report:

I thank the authors for addressing earlier reviewer comments so thoroughly. I consider that the major issues have been satisfactorily addressed. There are just a few minor changes that would further enhance the clarity of the m/s.

Minor Essential Revisions

1. Abstract, last sentence of Results: “Nurses described the importance of individual feedback and self-monitoring in order to increase their performance whereas administrators disagreed”. Care with wording is needed here. The current wording could imply that there was an interaction between nurses and administrators and that they directly disagreed in the context of a conversation.. I think you mean that the administrators reported different views.

2. Abstract, Conclusion: The authors conclude that “This study highlights the benefits of using a structured approach” but have not, at this point, said what the benefits are. Rather than asking the reader to take this conclusion on trust, it would be helpful to try (within the word limit) to report at least one specific benefit.

3. Methods: At “The TDF of behaviour change describes a Theoretical Domain Interview”, (TBI) should be (TDI). (Twice in this paragraph and again on the following page.)

4. Results: For describing results in each of the domains, the phrase “barriers or facilitators” is used, where I think it makes sense to refer only to facilitators, eg “use the EMS system as a barrier or facilitator to enhance HH and the EMS intervention”. It doesn’t make sense to refer to a barrier that enhances the desired behaviour.

5. Results: at “Nurses like the idea …” , it is better to say that they “reported being in favour of …”, as it does not imply that you know (with certainty) the inner (unobservable) psychic states of the participants.

6. Conclusion: At “behavioral domains” it would be preferable to be consistent in the use of the key term: “theoretical domains” or, perhaps “theoretical domains of behavior change”.

Discretionary Revisions (minor issues not for publication)

1. Introduction: “yet this information has not been implemented in intervention design and implementation” would be better as “yet this information has not been
translated into intervention design and implementation”.

2. Introduction: “because education alone does not translate into practice change and the demanding clinical environments in which staff practice”. Do you mean “in” the demanding clinical environments”?

3. Introduction: The apostrophe is still in the wrong place at “No data was collected on staffs’ responses”.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.