Reviewer's report

**Title:** Challenges in identifying barriers to adoption in a theory-based implementation study: lessons for future implementation studies

**Version:** 3  **Date:** 7 September 2012

**Reviewer:** Matthew Menear

**Reviewer's report:**

Overall impressions:

This is an interesting article that I think has a nice potential to shed light on issues that are commonly encountered by implementation researchers yet remain understudied. Hopefully the following comments will help improve the paper’s focus and allow the authors to develop their messages and ideas further.

Major compulsory revisions:

1. The authors seem to have received comments from a previous review that highlighted a lack of clarity with their research question. Despite their efforts to refocus their paper, my main concern is that I find that the primary purpose of the paper remains unclear.

In reading the abstract and most of the introduction, the reader is led to believe that the authors will provide helpful insights into the process of operationalizing theory and gathering and synthesizing data on local context. This includes understanding why they chose certain facets of their theoretical framework to focus on (why the trio of adopters, communication + influence, system antecedents?), how they defined those specific facets given a range of alternative definitions, and operationalized these specific constructs, all the while taking into consideration the modalities of data collection and synthesis that are appropriate and feasible. Insights into the rationale behind their methodological choices and the outcomes of these choices are useful as theory-based approaches are increasingly adopted in implementation projects.

Yet, the authors finish their background section stating that their main research question revolves around identifying the key factors influencing referrals for psychological treatments and throughout the methods and results there is only limited discussion of the choices and challenges they faced over the course of the process. Certain conclusions are drawn based on the findings of the survey and questionnaire but the reader is left wondering what other influential factors would have been identified had other theoretical constructs been explored or methodological approaches adopted.

The reader is thus left to wonder: is this an article focusing on the science of studying contextual factors or rather one focused on the results of an implementation project in the developmental phase?
While I personally feel that an article that places greater emphasis on the science of implementation offers the potential for providing more valuable contribution, especially given the somewhat lacklustre survey results presented here, the authors should feel free to choose a specific focus for their paper and adjust it accordingly so that it tells a more coherent story.

Here are some specific comments and questions related to this point:
- In the 2nd paragraph of the background, the authors identify Greenhalgh’s conceptual model of diffusion and implementation of innovations in health organizations as their theoretical framework. The authors identified three aspects of that model to focus on but could have also looked at aspects such as the outer context or assimilation process regarding referrals.

- With respect to the design of the questionnaire, I thought the paragraph on system level factors was most successful at highlighting the balance between need for rigour and application in practice. I wish similar tensions were described more fully in the other sections detailing the design of the questionnaire. For instance, what other dimensions of adopters, if any, were considered by the research team? Did the authors try to operationalize Greenhalgh’s conceptualization of adopters first? Regarding the communication and influence section, were other constructs explored and other approaches other than social network analysis considered? Were there any apprehensions within the team when choosing this approach over others (it turned out to be the section least responded to)?

- For the qualitative component of the study, what led the authors to focus their questions on the three topics they chose (for instance, team dynamics could have been explored as well)? Were professionals other than GPs targeted?

- The authors may be aware that other researchers have made attempts to operationalize Greenhalgh’s conceptual model (notably Cook and colleagues, Implementation Science 2012 7:59) – some discussion related to these efforts and how they compare with the authors’ experience is clearly warranted.

- Depending on the choice of focus that they ultimately take, the authors should ensure that their abstract captures the same aims that they describe in the rest of the manuscript.

2. Additional information should be provided regarding the methods adopted to improve clarity:
- In the 1st paragraph of the methods, the authors describe their study as a case study approach but the actual “case” (or cases) under investigation is unclear. Is it the Primary Care Trust (single case)? The GP practices (multiple cases)? How many practices were involved? Further precision about the case(s) involved and units of analysis is needed here as it has clear implications for how the concept of local context should be conceptualized and studied.

- When describing the adopters section of questionnaire, they authors mention that they compared respondents’ ratings with “objective ratings” from their own research team. How these ratings were actually made should be clarified further.
- It is not clear whether the authors intended to perform a study using multiple methods (quantitative and qualitative) from the start or whether this was done as a result of their first plan (a multilevel analysis) not working out due to small sample sizes and poor response rates.

3. My last major issue concerns the discussion section and some of the conclusions the authors draw from their data:

- Firstly, in the 1st paragraph the authors mention that their study illustrates the challenges of eliciting the views of health professionals to inform implementation research. One issue however is that the reader is not informed of the specific steps the authors have taken to secure a strong engagement from study participants. The authors mention that consultations with key stakeholders have occurred and that such issues as “system readiness” had been accounted for during this process, yet no details are provided regarding the strategies used prior to survey administration to garner support for the project and hence greater participation.

- The authors then suggest that using theory-based approaches (relative to non theory-based approaches we assume) are particularly challenging to apply in this context. Is this a justifiable conclusion to draw from their study? It could be argued that difficulties in collecting data were due primarily to the adoption of a survey method as opposed to the fact that the survey was based on theoretical constructs. It is also possible that some theoretical constructs lend themselves better to certain methodological approaches (quantitative or qualitative) than others. It is notably that other research teams have used theory-based approaches to study contextual factors in primary care settings with success (the PARIHS framework comes to mind) and I think the authors need to reflect carefully on where the challenges related to using theory-based approaches really lie.

- While the authors discuss some challenges they encountered, there is no clear discussion of limitations of their study.

Minor essential revisions:

In the opening paragraph of the methods section, the authors state that they adopted an “overarching case study approach”, though this creates the impression that they synthesized findings across case studies. They should consider removing the term overarching. Also, while the authors state that transparency in synthesis is a key criterion for evaluation, the quality of case study approaches also depend on the quality and depth of description of the phenomenon and case(s) being investigated.

Discretionary revisions:

None.

Reviewer:
Matthew Menear, PhD candidate
School of Public Health
University of Montreal

**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