Reviewer's report

Title: Guideline implementation: an exploratory investigation using psychological theory

Version: 1 Date: 14 August 2006

Reviewer: Shaun Treweek

Reviewer's report:

General

Changing human behaviour is hard. The successful implementation of many healthcare innovations requires clinicians and managers to change their behaviour and it ought be natural to consider psychological theories as one way of providing a framework for this process. That this is rarely done is odd given that human behaviour is the bread and butter of psychology. The work described in this article makes a useful contribution to the investigation of how to make practical use of psychological theory to distil in a systematic way the factors that must be addressed if implementation is to be successful. I look forward to the further development of this work.

I have a number of specific comments, which are listed below under the headings used by Biomed Central. I have no major compulsory revisions.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

None

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Background

Page 3: I thought that the suggestion that having the pharmacological industry behind an intervention may explain why, for example, taxanes have higher levels of implementation that hearing aids was a bit too simple. Prescribing a drug requires a doctor to know about a drug and write a prescription. Prescribing a hearing aid requires a train of events and input from a range of health professionals. I would suggest that hearing aid-esq interventions, which involve several stages and a team of people to deliver, are inherently more difficult to sell to health professionals because the obstacles to be overcome are greater than with drugs. Support from the pharmacological industry is certainly important but presumably hearing aid manufactures try to sell their wares too.

Page 4: I’d be very interested in the reading the authors’ thoughts as to why theory is not used more in implementation research. The article written by some of the same authors as the current article (Journal of Clinical Epidemiology 58 (2005) 107–112), along with the linked dissenting articles, provided a neat outline of the arguments for and against the use of theory in implementation research. Mentioning this in the current article would help the reader to understand the context in which this exploratory work is being done; it would in other words help to explain why it is important.

Methods

Page 7: I think it is important to know who did the interviews. In other words what was the background of the interviewer and were there several interviewers or did the same person do all the interviews. If there were several interviewers, is there any reason to think that this might be a problem?

Results

Page 9 and Table 2: given that the number of interviewees in each professional group was small I think the presentation of the variation in scores is overplayed. I used http://www.causascientia.org/math_stat/ProportionCI.html to calculate a confidence interval around the percentages give for nurses (43% to 69%), psychiatrists (23% to 61%) and team managers (10% to 32%). There’s a lot of overlap with these CIs and I think the authors should present more than the proportion
estimates (eg. give CIs) in Table 2 and then say something to soften the impression given on Page 9 that there is a clear difference of, say, 38% between nurses and team managers. This difference could be much lower or much higher. The same goes for the data on trusts.

Table 1 and Table 2: the totals for North England and South London are not the same in Tables 1 and 2. For example, in Table 1 there are four participants from North England while in Table 2 there are five.

Discussion
Page 12: those who are critical of the use of theory in implementation research may read the article and conclude that much of this information could easily have come from non-theory based interviews or focus groups. I think the Discussion (or, perhaps, the Background section) should address this potential criticism head-on and state directly why the authors think a theory-based approach is likely to be more useful than a non-theoretical approach. There are a couple of sentences in the Background section that tend in this direction but a little more discussion of this point would be useful I think.

References

Discretionary Revisions (which the author can choose to ignore)

Background
Page 4: in the list of 12 domains it might be useful to use semicolons rather than commas to divide the 12 domains simply because the list is long and it is not immediately obvious where some domains end and the next one starts. I counted 13 the first time I read the list.

Methods
Page 6: the subheadings would be clearer in italics I think.

What next?: Accept after minor essential revisions

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.