Reviewer’s report

Title: Explaining the effects of a randomised controlled trial to implement evidence-based diabetes care: a theory-based process evaluation.

Version: 1 Date: 30 May 2006

Reviewer: Dianne Parker

Reviewer’s report:

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

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

General

1. a) Is the question posed by the authors new? No. Neither the question addressed nor the method used are novel. However, I have not previously seen a study that uses this method to address this question. So the combination is both innovative and worthwhile.

b) Is the question well defined. Yes

2. Are the methods appropriate and well described?

Yes the authors explain the theory of planned behaviour, and the way in which it is operationalised very well. They take great care to describe how this theory and model of attitudes and behaviour can be used to evaluate the reasons underpinning the decision to take up (or not) evidence based care.

The paper would be improved by providing more detail on the actual questions used to measure the TPB constructs. This would allow replication of the study. There should also be more detail about the scoring method. Were the questions used for the indirect measures of attitude, subjective norm and perceived behavioural control, originally on 1 to 7 scales, converted to bi-polar scales (-3 to +3)? If not, the decision not to do this should be explained and justified. Overall, more needs to be said about the multiple composite approach mentioned at the top of page 8.

3. Are the data sound and well controlled? Yes

4. Does the manuscript adhere to relevant standards for reporting? Yes, although I have some minor suggestions for improvement

a. Page 9. please spell out the design of the MANOVAs (specify IVs DVs, number of levels etc)

b. Page 9 Please justify why both direct and indirect TPB measures were used in the same regression analysis. What did this test and what were the results? I am not convinced that it is useful for those interested in intervention to know that direct TPB measures are predictive of intention.

c. The authors mention the effects of demographics such as professional group, size of practice etc, but do not present the analyses that highlight these effects. I suggest they either add a new table or include the demographic variables in the regression analyses before the psychological variables.
d. P19 2nd para “insert % after 64.

e. P11 first para. A brief discussion of the difference between and the relative usefulness of measures of descriptive and injunctive norms would be useful here

f. Conclusions p12. Might the influence of practice size relate to factors such as workload or facilities that in turn could impact on PBC?

g. The data presented in table 4 are strange and I had some trouble interpreting them. Are the beta weights reported those relevant after both steps of the regression or after step one? Can the authors come up with an explanation as to why the total variance explained should be higher for the control group than the intervention group, for two of the three behaviours? In short, I think the authors need to provide quite a lot more explanation and comment about the results of these key regression analyses.

h. As the study has an experimental and a control group, it seems obvious that the TPB scores for the two groups should be compared, as a way of assessing if the DREAM intervention altered cognitions. This is a key question and I cannot understand why this direct comparison analysis has been omitted.

5. Are the discussion and conclusions balanced and supported by the data? Yes, although see above points

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

7. Is the writing acceptable? Yes, the writing is admirably clear and succinct.

Discretionary Revisions (which the author can choose to ignore)

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: Yes, and I have assessed the statistics in my report.