Reviewer's report

Title: Behavioral and Technological Interventions Targeting Glycemic Control in a Racially/Ethnically Diverse Population: A Randomized Controlled Trial

Version: 1 Date: 10 June 2013

Reviewer: Lincoln A Sargeant

Reviewer's report:

This trial investigated whether behavioural and technological interventions separately or in combination could improve glycaemic control in a racial and ethnically diverse population of people with type 2 diabetes. The interventions were not significantly more effective when compared to usual care.

Major compulsory revisions

1) The introduction notes that diabetes is more common in ethnic minorities compared to non-minorities but does not make the case for the hypothesis that "reductions in HbA1c will be more marked in minority persons with type 2 diabetes."

2) A planned subgroup analysis was done to determine the impact of race/ethnicity on the results but no explanation given as to why 50% minority was selected. Details of the sample size calculation for the subgroup analysis should be included.

3) Participants and their clinicians were not blind to the study groups. If participants in different arms of the study were managed in the same clinics it is possible that the behaviour of participants and clinicians could be affected by contact with the protocols in the different arms. More details are needed to help readers judge whether this could have affected the standard of usual care in the control group.

3) Additional clinical details about the participants would be helpful in comparing the results to other studies. It would be useful to know the average duration of diabetes and what proportion were controlled with insulin.

4) Tables 2 and 3 would be more accessible if clinical data were presented showing the baseline and change in HbA1c and other variables in each study group. Similar data by ethnic subgroup would also be useful.

5) The conclusion needs to emphasise the null finding that the interventions were not significantly better than usual care in achieving glycaemic control.

Minor essential revisions

1) Page 4, last paragraph - sentence should read "... serves large racially/ethnically diverse populations."

Level of interest: An article of importance 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