Reviewer's report

Title: An Exploration of Different Methods to Promote the Enrollment of Black Subjects to a Large Cohort Study

Version: 3 Date: 4 February 2014

Reviewer: David McLernon

Reviewer's report:

I thought this was a very interesting, successful and useful study to informally explore different recruitment methods in black subjects. I agree with the previous reviewer comments which have been appropriately answered by the authors so I do not have much further to add. Most of my comments are to do with improving the clarity in the article, particularly in the methods section.

Major compulsory revisions

In the statistical methods, I think some of the terminology in the Poisson model could be explained better. Can you explain what the ‘Sum()’ term means in the model? Can you explain what the ‘1’ subscript means in the bij term? Can you explain in a sentence why an over-dispersed Poisson model was used?

Minor essential revisions

In the background section, page 3, third paragraph, at the end it states that in most of the sub-studies subjects would have already requested and received a questionnaire, but not yet returned it. The last sentence then says that the exceptions were the two ‘enrol another’ studies. Why are these exceptions? It is true that this involves getting church members who had returned their questionnaire to persuade others who hadn’t, but surely the subjects here are those who the former are trying to persuade? If the authors agree then I would delete the last sentence. Otherwise I would reword the last sentence as this is the first mention of ‘enrol another’ and without explaining what this means until well into the methods section it is quite confusing to the reader what it is.

Methods:

Where is Figure 1? This sounds like it is Table 3? In which case, it should be renamed Table 1 as this is the first mention of a table in the paper.

How were the goals worked out for each church? Since this was the denominator of the proportional increment it must have been an integer rather than just >30 or <30 as mentioned in the methods.

In the statistical methods it says that where churches acted as their own control one of three different control periods were used. For the first approach, where there were unequal sizes before and after intervention, what was the likelihood used in the statistical test weighted by? The third approach listed was ‘chose a single control period before the intervention period...’ This does not appear in
Further, the authors don’t discuss the different control period methods used in the discussion. It would be useful to discuss whether they felt one method was less biased or better than the others.

The last paragraph of the methods before the ethics statement is difficult to understand. As a result I wasn’t quite sure how the authors analysed the ‘enroll another’ sub-studies. Can they make this clearer?

Discretionary revisions

It might be worthwhile inserting a sentence in the first paragraph of the background which explains the purpose of the AHS-2 cohort. It just goes straight into the recruitment issues with Black participants.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.