Author's response to reviews

Title: A randomised trial and economic evaluation of the effect of response mode on response rate, response bias, and item non-response in a survey of doctors

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Author's response to reviews: see over
Response to referees comments (8th August 2011).

Our response to referees comments are shown below in italics

Referee 1.

Minor essential revisions:
• While you present the distribution of the responses by actual mode of completion in Table 5, this concept needs to be carried out throughout. When looking at things like item nonresponse, for example, the mode of completion can be thought of as more important than the contact protocol. At the very least this line of thinking should be addressed in the discussion.

We disagree. In randomised trials it is very important to present results on an ‘intention to treat’ basis. Intention to treat analysis maintains treatment and control groups that are similar in all respects apart from randomisation. Departure from this would therefore introduce bias into the results. (Hollis S, Campbell F. What is meant by intention to treat analysis? Survey of published randomised controlled trials. BMJ, 1999;319:670)

• While you appropriately include a cost per complete analysis, it would be helpful to introduce this earlier in the manuscript itself and in the abstract. This provides a common metric to simultaneously consider the response rate and the cost.

We introduce this in the introduction (page 6), but it has now been mentioned earlier in the introduction as well (3rd para).

• Abstract, results: I found the discussion of bias hard to follow and the conclusions drawn from it not entirely explicit.

The abstract has been clarified.

• Methods, paragraph 1: The discussion of logging on seems misplaced and would be better suited after an introduction to the overall study design.
This has been moved to the beginning of page 10.

• The length of the questionnaire varies by type of MD. This could be an important confounder that should be discussed and included as a study limitation.

This is not a confounding variable as randomisation has ensured that there are approximately equal numbers of each doctor type in each arm of the trial. This should not therefore influence the difference in primary outcomes across each arm of the trial.

• Results, paragraph 2: The incentive should be introduced and fully described in the methods.

This is now expanded on page 9.

• Discussion, paragraph 3: The statement that paper surveys are more convenient and flexible is speculative – paper also requires the additional step of physically getting the survey to a mailbox.

The text has been altered (p18)

Minor discretionary revisions:
• You discuss the relationship between response rate and bias. Another important consideration that you may want to address is that between response rate and statistical power resultant from the number of completed cases.

We have referred to this in the first para of the introduction

• Background, end of paragraph 3: You discuss the issue of an MD not getting an email that is addressed to them, there is some speculation in the literature that this is also a problem in mailed surveys that you may want to address.

This has been acknowledged in the text at the end of the para.

Minor editing issues:
• Use decimal points consistently throughout for your reported estimates.

These have been checked and altered where necessary

Referee 2.

No comments to address.
Referee 3.
The last paragraph of the Discussion should be reformulated. First, economic evaluation has been included in previous studies. See for instance Bjertnaes OA, Garratt A, Botten G. Nonresponse bias and cost-effectiveness in a Norwegian survey of family physicians. Eval Health Prof. 2008 Mar;31(1):65-80.

Bjertnaes was not a randomised trial, so we have altered the text in the final para to reflect this. We also now refer to this study in the background section.

Secondly, clarify that the sequential mixed mode seems preferable compared to the two other specific models in the study. There are a number of ways to design a survey like this, and this study only includes a comparison of the three chosen models.

This has now been noted in the final para