Author's response to reviews

Title: Sandwell Cardiovascular Prevention Project: evaluation of a pilot project for primary care based prevention

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Author's response to reviews: see over
To whom it may concern,

Re: 1414187621573800
I have made a number of revisions to this paper in response to the reviewers’ comments.

The revisions are detailed on the following pages.

Yours sincerely,

Tom Marshall
Senior Lecturer in Public Health
Reviewer: Jonathan S Einbinder
The reviewer found that the main result was “certainly reportable” but went on to suggest that certain revisions should be made before publication.

Major compulsory revisions
1. The study should be reported as a controlled trial with a clear statement of hypotheses, specific aims and outcome variables

_The paper has been renamed and redrafted to reflect this suggestion._

2. The results are hard to follow and some aspects of the results can be dropped (eg: it is unnecessary to report a comparison of patients seeing a project nurse 2 or more times versus patients seeing a GP 2 or more times)

_The results have been simplified._

3. Simplify the numbers of patient groups referred to, include a flow diagram and drop the reference to patients whose CVD risk is known. The reviewer also suggested presenting the results of intervention and control practices side by side.

_A flow diagram has been included that presents the results of intervention and control practices side by side. The number of patient groups referred to has been simplified._

Reviewer: Serguei Pakhomov

Major compulsory revisions
4. The reviewer comments that the findings could be due to greater availability of risk factor information in the practices provided with a project nurse. This could be explained simply by the presence of the project

_It is correct that we found that the presence of a project nurse increased the numbers of patients assessed (and therefore found to be at high risk). However our findings also suggest that patients identified as high risk were more likely to be started on treatment if the project nurse was present. This suggests that this is more than simply a matter of assessing more patients’ risk factors. I have made this point clearer in the article._

Minor essential revisions
Page 2: Abstract Methods: insert "years old"

_This has been corrected._

Page 2: Abstract Conclusions: delete repetitive "patients" and a preposition "with"

_This has been corrected._

Page 4: replace "treatment of those eligible" with "subsequent treatment"

_This has been corrected._

Page 5: PCT - first use of abbreviation - deabbreviate

_This has been corrected._

Page 5: revise "and the matched"

_This has been corrected._

Page 6: "reschedule" should be "rescheduled"
This has been revised as it is misleading.

Page 7: Results. First paragraph. This need to be better motivated. Seems that 15% is a very low proportion of patients for whom risk factor data is complete. What are the characteristics of the patients with missing data? Morbidity? Age? Do patients with missing values tend to be in better health? The fact that they tended to see their GP's less than those who had missing data would suggest that as well.

This information has been removed in response to the other reviewer’s comments that the results were confusing and should be simplified.

Page 7: Risk factor information and numbers of probable high-risk patients. How is this different form the first paragraph "Among individuals aged 35 to 74, not on antihypertensives and free from CVD, there was sufficient risk factor information to calculate CVD risk (a smoking history, two blood pressures and a total cholesterol) in 14.8% (95% CI: 13.5% to 16.1%) of the 2,997 in the comparison group and 15.3% (95% CI: 14.2% to 16.5%) of the 3,916 in the intervention group."? If these are different groups, that needs to be stated explicitly. Need to define the populations more clearly here.

Some patients had risk factor information collected during the course of the study. Others had existing risk factor information recorded in the electronic medical records. The other reviewer has also commented that this is confusing. At his suggestion I have therefore removed all mention of patients in whom risk factor information was already recorded in the electronic medical records. This has simplified the results.

Page 7: "Of these, 10.6% (range 1.9% to 30.8%) had sufficient risk" This is confusing. If these patients had insufficient risk factor data for full risk factor calculation, then how was it determined that these patients' had over 20% CVD risk?

In response to Dr Einbinder’s comments that the reporting of results was confusing and should be simplified, I have removed the figures on the numbers of patients with existing risk factor data from the Results and included a brief report on this in the Discussion.

The paper uses a method of calculating a best estimate of CVD risk using a method that is described in more detail elsewhere.

This is stated clearly in the Abstract “High risk patients were identified in six practices by extracting risk factor data on all untreated patients 35 to 74 years old from electronic medical databases and calculating probable ten-year CVD risk. Default risk-factor values were used for all missing risk factor data.”

It is also clearly stated in the Methods:

“In each of the six practices, extracted CVD risk factor data were downloaded into an Excel spreadsheet and an estimated CVD risk was calculated for all the included patients using the Framingham risk equation. Where more than one blood pressure or cholesterol measurement was available, the average of all the available measurements was used to calculate risk. Where a risk factor was not known, a default (or prior estimate) of the risk factor status was used instead. In other words, CVD risk was calculated using whatever risk factor information was available on patients. In most cases this information was incomplete because of missing cholesterol levels, blood pressures or smoking status. This approach follows a previously described method.”
Page 10: revise "but there is clearly.." remove "but"
This has been corrected.

Page 11: "Use information technology to identify patients." This is a fragment and so are several subsequent sentences. Needs to be revised.
This has been revised.

Page 11: revise "the way in it is used"
This has been revised.

Page 11: Confusing sentence: "It is of note that the weakest part of the strategy was prescribing, which relied on changing behaviour within the existing system."
This has been revised.