Reviewer's report

Title: Audit-based education to improve the management of people with a family history of breast cancer in primary care

Version: 3 Date: 5 February 2013

Reviewer: Nadeem Qureshi

Reviewer's report:

Review of Rafi et al “Audit-based education..” paper

(MAJOR): =major compulsory revisions

Rest discretionary revisions

Overall

This a valuable paper that would add to the current literature in the field. However, I would consider there is enough material to write two papers (1) Structured review of effective interventions to reduce the risk of breast cancer; (2) Evidence that audit-based education improves management.

1. (MAJOR): I am a bit confused whether this is an intervention study of education outreach with audit feedback (as per conclusion page 14) or a quality improvement study to improve the quality of the recording certain variables (as per implications of findings on page 12).

Abstracts

The results are pretty clearly presented.

2. (MAJOR): I would suggest in the method section that the actual design of the study be stated (? Before and after observational study).

Introduction (see comments in the other sections)

Methods

On page 6 the authors describe a clear presentation of baseline and follow up data at 6 months.

Possible suggestions in this section include:

3. As mentioned above, suggest literature review may be unnecessary in this paper. This could be presented as a separate paper and simply describe the key intervention findings in the methods section. (see comments in results).

Page 5 Audit process

4. (MAJOR): I wondered if some of the references and text here could go into the introduction.
5. (MAJOR): Page 6: There appears to be some duplication within the text in the quote below:

We planned a data quality workshop (DQW) to share baseline levels of data recording between practices and to promote increased awareness of genetic predisposition to breast cancer. The objective of the DQW was twofold: (1) To share baseline levels of recording between general practices and their general practitioners; (2) To recognise the value of recording family history and implementing an action plan for improved recording and management.

6. (MAJOR): Could I get clarification on 2 points (1st paragraph page 6):
   • Was the data reported as 2 different cross sections at 2 different time points or the same cross section at 2 times period? (assume former)
   • I did not understand the statement “this was done so that the data included recordings of lifestyle factors about new patients that registered during the audit period”.

Results

7. On page 9 (bottom paragraph) the authors clearly present the effective interventions in reducing the risk of breast cancer. As previously suggested, this could be summarised in the methods section.

8. (MAJOR): On page 11 (1st paragraph: at the end of this paragraph) the authors present a useful description of information on coding data after a discussion with practitioners. I wonder if this could be presented separately to the quantitative data?

9. (MAJOR): Also the finding that there is no improvement before and after the family history recording is useful and should be highlighted earlier in the results.

Further secondary outcome measures were also nicely presented in the second paragraph on page 11.

Suggestions for other areas for improvement include:

10. Pages 7-9, as mentioned previously I wonder if the structured review should be a separate paper.

Page 10 (The Audit Tools section)

11. (MAJOR): I wonder if this section should be re-titled as a profile of practices, with presentation of the data from figures S1 to S3, as well as describing the setting of the practices (for example, proportion inner city, proportion rural, proportion affluent practices).

12. Similarly in this section I am not sure how useful it is to include technical information.
13. (MAJOR): Similar to my other suggestion, it may be worth presenting the quantitative data first and then a separate paragraph or sub-section of the descriptive qualitative data.

Page 10, section “Pilot-based educational intervention”
14. (MAJOR): This appears to be a mix of information about the methods and results. Can they be presented separately?

Page 11, (2nd paragraph)
15. I wonder if it is necessary to state 95% confidence interval and parity in this section. The odds ratio with the 95% confidence interval results should suffice.

Looking at the results presented:
16. Table 2 was very useful and I would suggest that the discussion should be expanded in the text.

17. I am unclear of the value of Table 1, it deviates from the primary outcome measures of the study (I assume).

18. (MAJOR): In the supplementary tables box S2 (Components of audit-based education) would be useful to summarise in the main text.

19. (MAJOR): Can I get clarification, was S1 (Epidemiology of Breast Cancer), part of the teaching material used?

20. (MAJOR): Also further explanation of Figure S4 would be useful: I have not previously seen the use of bar charts to describe odds ratios. This is usually presented as a point measure with a 95% confidence interval.

Discussion
Page 11 Principal Findings

21. There is a useful descriptive information at the start of this “The practices we approached readily agreed to participate, and saw value in improving their data, and participating in the audit” (MAJOR): I suggest that this should be added to the results section.

22. (MAJOR): Further the principal findings should describe the quantitative data first.

23. (MAJOR): Also there was a useful statement:
“The practitioners who participated in our audit placed their emphasis on improving the quality of recording after doing new patient medical examinations”

This should be stated more explicitly in the results

On page 13 (1st paragraph) the authors make a good point: “Recording of these data per se does not mean that a risk assessment has been carried out.”
Further on page 14 (1st paragraph) the suggestion of re-visiting trials with computerisation was a salient point.

Other areas that might need improvement in the discussion include:

24. Page 11 (We found that a wide range of different codes were being used to represent the same clinical problem, some practitioners coded in a highly specific way while others were much less specific using high level codes) Can this be stated more explicitly in the results (? earmarked as a sub-section).

25. (MAJOR): Page 12 (last paragraph): I am not sure the quote below is a limitation of the study rather the nature of this sort of intervention.

“so the effect being measured was practice specific, rather than focusing on the care of individual primary care Professionals”

26. Similarly I would not have considered the statement:“There were gaps in the data collection, particularly BMI data; however this aspect of the project is probably the easiest to put right” on page 13 as a limitation rather a study finding.

27. (MAJOR): I suggest there is a section about relationship to existing literature. This could include comparison with the CDC family healthcare study.

Other areas for clarification include:

28. (MAJOR): Page 12 (implications of the findings) as described in the overall summary at the top of this review, is this study about data quality rather than impact of audit-based education (or is it the same?).

29. (MAJOR): Page 13 (1st paragraph) could the authors clarify the statement. “We made the same assumptions looking at diabetes, or vascular care data which were recorded purposefully as comparators.”

30. Page 13 (5th paragraph) The authors describe at the start of this section “Theory of Diffusion of Innovation”. Can they expand how this theory can change data recording.

Overall I consider this manuscript is publishable but would need significant editing and revision.

Level of interest: An article of importance in its field

Quality of written English: Not suitable for publication unless extensively edited

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

Declaration of competing interests:

I declare that I have no competing interests