Reviewer's report

Title: Technology assessment and resource allocation for predictive genetic testing: A pilot study of the perspectives of Canadian genetic health care providers

Version: 1 Date: 30 May 2008

Reviewer: Saskia Sanderson

Reviewer's report:

This manuscript reports the qualitative and quantitative findings from interviews with 31 senior lab directors and clinicians about their attitudes towards issues around predictive genetic testing. The findings are of interest to those in the field. However, the report could be significantly improved. For example, it is not clear up front what the main research questions are nor what the main methods (e.g. specific measures used) are, until the results sections. If the authors could re-write and rearrange the introduction, methods and results sections, I think this would make it significantly easier to read and to follow, and would engage the reader earlier in the manuscript.

Minor Essential Revisions

ABSTRACT

1. It would be useful to see the N of participants in the methods or results of the abstract.

2. The results section needs to be a little more detailed, and include the main findings from the study, or highlights of the main findings. Ideally, the results should directly inform the conclusions.

BACKGROUND

3. Page 3, para 1: It is not clear what is meant by ‘genetic health providers.’

4. Page 3, para 1: This paragraph and the introduction more generally needs to make clearer what is meant by ‘predictive genetic testing.’ A definition is needed. Additionally, predictive testing covers a broad range of tests from completely predictive (e.g. Huntington’s) through BRCA1/2, to the emerging predictive tests with Odds Ratios of only 1.2 or so being provided commercially by companies. The introduction therefore also needs to include a description of the range of tests covered in this study, i.e. its scope, and some examples of tests/diseases tested for.

5. Page 3, para 2: It would be helpful to have ‘genetic medicine’ defined.

6. The Background is lacking clear research questions and study aims.
METHODS

7. Page 4, para 2: The statement that this paper “presents the results of a pilot study of predictive genetic testing” is inaccurate. It could be made clearer by stating for example that the paper presents the results of a pilot study exploring key players’ attitudes towards allocation of resources for predictive genetic testing and associated ethical, legal and social issues.

8. Page 5: The measures section in general needs considerably more detail, particularly for the quantitative measures. These are mentioned later in the results, but could be inserted and described here in a ‘Measures’ subsection.

9. Page 5: A fuller description of the quantitative analyses is needed (e.g. were these chi-squares? ANOVAs? Linear regressions?) Ideally, there should be a ‘Statistical Analysis’ subsection.

RESULTS

10. Page 5, para 3: The first paragraph of the results section should be set up in the Background and moved to the Methods.

11. Page 5, para 4: Similarly, The paragraph starting “Funding for genetic testing varies widely in Canada… each province approaches funding in a slightly different manner” should be moved to the Introduction.

12. Page 6: The last sentence on this page (beginning “In all provinces surveyed…” ) appears to be body text but is currently presented as part of the quote.

13. Page 8, para 1: It would be very interesting to know what the tests were that participants wanted to provide but which were not funded. If this was asked, the results could be included here. If not, the authors may wish to mention this in the discussion as a limitation or pointer for future research.

14. Figure 1: The error bars are unusually wide. The authors may wish to double-check these, and re-do them if necessary (are they currently standard errors? 95% confidence intervals? They are so wide they look like they could encompass the whole range of responses. A fuller explanation of analyses done in the methods section would also help here).

15. Page 11, para 3: ‘Figure X’ should read ‘Figure 2’. See also comments for Figure 1.

16. Page 12: The questions asked of respondents here about the media come as a surprise. Why these questions were of interest (which they clearly are) should be set up in the introduction generally, as well as in the research questions, and described in the methods.

17. Page 12, para 2: The authors may wish to put the last sentence of the Results into the Discussion.
DISCUSSION

18. Page 13: ‘RESULTS AND DISCUSSION’ may be replaced with ‘DISCUSSION’.

19. Page 13, para 1: The manuscript would generally benefit from a greater consistency in terminology. For example, here, what is meant by ‘genetic professionals’ is not clear.

20. Page 14, para 2: It looks as though the references might be out of sync – refs 8,9 are described as referring to current UK frameworks, but one is from 1992 and the other is clearly referring to Canada.

21. Page 14: Generally, I like the Discussion and Conclusion sections. A ‘limitations’ section is needed though.

22. Page 15: In the ‘Author’s Contributions’ section should ‘improved’ read ‘approved’?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.