Reviewer’s report

Title: "Developing a patient decision aid for the treatment of women with early stage breast cancer: the struggle between simplicity and complexity"

Version: 2 Date: 30 Mar 2017

Reviewer: Elina Farmanova

Reviewer’s report:

1. The introduction needs to be improved: the authors need to explain early on and clearly why they undertake the development of a new PtDA when 11 similar DAs already exist but have not been alpha-tested. Moreover, I would recommend that the authors try to convey the complexity of the decision-making surrounding BCT (what is problematic? why? who is affected?) and sharpen the message around how this new alpha-tested PtDA could resolve the issues related to SDM, available options, potential impacts, etc.

2. If authors decided to follow a systematic development process recommended by Coulter et al. (2013), they need to clearly state it. Please also explain your motivation (is it because the development process is difficult as you say?)

3. If you are only developing a PtDA, you really need to focus on aspects of usability and acceptability from that perspective. I think you are mixing a lot of concepts in your introduction that might confuse the reader. Please state clearly what exactly you are pursuing, for what reason, how you propose to do it and who your potential users are (women with the diagnosis of breast cancer? Professionals providing therapy for these women? Both?).

4. Please state clearly how many professionals were invited to take part in the testing and how many responded. If that is not possible, then please explain how many hospitals were targeted and why those hospitals were chosen (e.i. do they all have a breast health clinic?)

5. In Methods, Design you might want to describe the PtDA that you developed. What did it include? (see comment 10 below)

6. Did you recruit new participants for each round? If not, please explain why and also address that in your limitations.

7. It is quite interesting how you developed the prototype, it appears that the format and content has changed drastically from round 1 to 4. Can you comment on that in more detail as for how format was first chosen and how you ended up developing the web site, etc.

8. Why could you not comply with (you might want to say "consider") all the recommendations? Were they not reasonable? Please explain. It is an interesting and important discussion topic in a participatory research, how do we find the balance between researchers-driven and user-participatory design of DAs, who owns it in the end?
9. You say it was difficult to reach consensus among the professionals. Please summarize and explain in one sentence or two why it was so difficult. Differences of visions and academic backgrounds among different professionals? Different perception of their roles as providers? What was the obstacle exactly and how you dealt with it exactly? (i.e. one on one basis, group session, what exactly did you employ as a tactic to reach consensus?)

10. You need to tell your reader much earlier in the paper what format of DA was chosen first to help us understand how it developed and figure out why. It is a little too late to talk about it at the end of your discussion.

It is a very interesting project and it is important to communicate as many details as possible to support other DA developers. However, I continue to struggle with the organization of this paper, lack of important details not reported and the quality of writing. Please consider engaging an editor to proof-read and revise the text.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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