Reviewer’s report

Title: Beyond pros and cons – Developing a patient decision aid to cultivate dialog to build relationships: Insights from a qualitative study and decision aid development

Version: 0 Date: 04 Mar 2019

Reviewer: Yew Kong Lee

Reviewer's report:

This paper attempts to present a broad overview of the process of developing an interprofessional PtDA for PwD. Due to the breadth of the paper, it has both strengths and weaknesses. The strength is that it is able to capture for readers the whole process of development. The limitation is that the article is heavily weighted in Phase 1’s results.

I find that the overall structure of the paper is unclear as it "aims to explore decision making experiences and then develop an intervention to facilitate IP SDM." So, it describes the process / phases of development, but spends a large amount of text on the exploration of decision making. There is not much description on the intervention developed (e.g. what is this MyDiabetes website like?) and how values were incorporated into the intervention from decision making barriers identified in Phase 1. I would suggest to either report just the decision making interview analysis, or to be more balanced in presenting the overall development. For the latter perhaps report how findings from preliminary phases informed subsequent ones, or how the tension between value weightage and user friendliness was resolved in iterative versions.

Besides the overall structure, some individual terms and components were also not too clear:

- What is the format of the MyDiabetes PDA- not clear that it was a website until quite far into the paper, why was the decision made to develop a website and not a book for e.g.

- Some terms need to be defined for readers: Interprofessional team approach (pg 5 line 93). What do you mean by that, why is this important in your setting?

- Phase 1 Feasibility refers to a toolkit- what is the difference between a toolkit and a PDA? (pg 7 line 139)

- What are the multi-component materials developed in this study? You mention patient, doctor and point of care materials, but what really are these?
- The structure and content of MyDiabetesPlan. I would suggest to include some description and screenshots in the Appendix as without a rough idea of the PDA website, it is hard to grasp how processes like compatibility testing and probability testing (pg 20) were incorporated.

- The title mentions "a decision aid to cultivate dialog to build relationships" but these design features (cultivating dialog; building relationships) are not described in the article.

Methods:
- Some clarification is needed around the reason for the role play. What is the rationale for the role play as patient or clinician when testing the PDA? Was any data collected from this or was it just a preparation for the interview?

- Is this role play done with the website, and is this the planned protocol for implementation that patient and clinician use it together? Sometimes websites are meant to be used alone by the patient as a preparation for SDM in the consultation.

- What is the rationale for excluding pregnant women / considering pregnancy?

Results
- There is no demographic table for Phase 3

- Illustrative Quotes in Additional File- Suggest to include an identifier on whether the participant being quoted is a patient or a doctor.

- In the demographic table: the age for the clinicians is wrong (starts from <5, to >20); CDE does not total 10, why include Other in Profession if the count is 0.

- How was interprofessional SDM incorporated into the PDA?

Discussion
- The primary discussion points center around Phase 1 only, i.e. the negotiation between goals and preferences for patients and healthcare professionals. The topics of goal negotiation and decisional preference are quite well established as you have pointed out a number of systematic reviews on this. You found that there is a process of autonomy vs shared-ness, and discordant goals being negotiated in the treatment decision making process...how did your PDA attempt to address these issues? It would have been good to see some discussion of the rationale, pros and
cons of your approach taken in the Methods and Results was for users (i.e. the nine-point goal weighting process).

- In the Discussion, some of the Results are mentioned here e.g. how some decision making facilitator designs were incorporated into the website; try not to mention new results in the discussion section.

- Phase 2-4 seem to be missing from the Discussion (and are given only minor paragraphs in the Results). This makes the manuscript a bit top heavy as the methods detail 4 phases in detail, which are then cut down to only Phase 1 in the results and the discussion. Please see comment on overall structure.

- What is the value of the heuristic evaluation, it would be good to discuss your view on the value of this step, given that many do not have access to a human factors engineer, how feasible is the process for other people and how valuable was the contribution of this step to refining the PDA.

- Under limitations, it is stated that the participants were representative of a primary care population. This is hard to claim given that there were only 7 patients.

**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.

No

**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:

Acceptable
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

None

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal