Author's response to reviews

Title: Designing effective visualizations of habits data to aid clinical decision making

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Author's response to reviews: see over
Dear Sir/Madam,

Manuscript title: ‘Designing effective visualizations of habits data to aid clinical decision making’

Please accept our revised submission to the BMC journal of medical Informatics & Decision Making. A detailed point-by-point account follows at the next page.

Please do not hesitate to contact us if you require further information or documentation.

Yours faithfully,

Malcolm Clarke, Reader, Department of Computer Science, Brunel University
Response to review

We want to thank the reviewers and the editor for their valuable comments.

We have made extensive revision to the English in the paper.

Reviewer 1

1. Page 4, line 138: It is stated that "in our work we determined that optimum presentation of data ..." There needs to be clear evidence as to how this conclusion was reached.

We have revised the sentence and expanded the explanation.

2. Page 5, line 168: It is stated that individuals were asked to score each visualisation for effectiveness ..". Detail needs to be provided of this scoring process.

Revised and further details on the scoring process are added in this section.

3. Page 6, line 194: Reference is made to a "normal" pattern. In what way is this normal? How is it defined?

We refer to “usual” pattern to better explain that this was determined from analysis of a period for each patient and explain how this was accomplished.

4. Page 7, line 261: It is stated that there were no suggestions. Suggestions of/for what? Please explain.

We have clarified what was meant by this.

5. Page 8, line 308: Some brief text needs to be included in this section to accompany the figures.

In printed form the visualizations will appear together for easy comparison. Descriptions for each figure appear in the caption, and in the text as appropriate.

There are some corrections of spelling that are needed (global changes):
Centred (not Centered)
behaviour (not behavior)
labelling (not labeling)

We have adopted American spellings as this is an American journal.

Reviewer 2

In the Introduction section: A background about “User Centered Design method” and its’ relation to your aim would help the reader to understand the whole idea.

Further text is added to provide background.
In the introduction section, page no.3 line no. 79: You mentioned “Good visualization techniques” in this section. Perhaps using scientific words would improve your statement here. Because how can we see that a visualization technique is good or bad? Maybe we can see if it's effective or efficient or satisfying (terms from ISO standards)

We have changed ‘good’ to ‘effective’.

In the introduction section, page no.3 line no. 82-86: Maybe more details about you aim (Or research type) helps the readers to understand the value of your work instead of describing different methods (approaches).

Further text is added to provide explanation.

In the introduction section, page no.3 line no. 87-91: Is this your work limitation or inCASA project’s limitation? It might improve the paper if you put your work’s limitation at the end of the discussion.

This is reworded to clarify the context of the research.

In the introduction section, page no.3 line no.92: It would be better if this sentence comes earlier in the introduction since you have already used “Clinicians”.

We have moved this line as suggested and made further changes to improve English and flow.

In the method section, page no.3 line no. 96: A section about your target group or participants would help the readers to get a better idea about the context of the work. Since you have used user centered design, a section about user characteristic is needed as well. You have mentioned your participants in section 2.4 but not any special characteristic.

We have added text to clarify the purpose of the research and thus the targeted user. Furthermore, we have added text describing the user characteristics.

In addition, there is a confusion about the word “researchers”. In section 2.4 you have mentioned that there was one independent researcher in your participant group but in your discussion (Line no. 316) you address him/her as “researchers”. Did you mean the authors of this manuscript or that independent researcher? In case you meant that researcher, it might be a risky generalization, because it depends on that person’s background not the fact that he/she was just a researcher. In the other hand you have to address authors as authors (if it’s the case here)

The section is rewritten to clarify.

In the method section 2.3, page no.5 line no. 152: You have to describe: what the initial needs and requirements are.

General requirements are described in the first two sections which we have sought to clarify, and we describe detailed requirements in section 3 along with the UCD approach, which we believe the more appropriate.

In the discussion section: Many sections in the discussion belong to the results. For example line no.346-350 might be pure results (except the last sentence) (also line no. 351-355). It would improve your paper if you just provide the interpretation of your results in the
In the discussion section, we refer back to specific results to emphasize important findings. We have now separated out results from these paragraphs as much as possible, and made sure corresponding text was moved to the results section.

**Editor**

"The paper addresses aspects of effective visualization of patient data on clinical decision making. According to the reviewers the article is a relevant contribution to the field.

Nonetheless, the authors should revise the paper according to the recommendations of the reviewers, before a final decision about accepting it for publication can be made. In particular, the authors should reorganize the discussion section in order to avoid giving additional results there."

We have taken into account all the reviewer comments and suggestions, and ensure no new results are given in the discussion chapter.

1. We recommend that you copyedit the paper to improve the style of written English.

The paper is extensively revised to improve the style of the English and content of the paper.