Reviewer’s report

Title: Multi-part Quality Evaluation of a Customized Mobile Application for Monitoring Elderly Patients with Functional Loss and Helping Caregivers

Version: 1 Date: 15 Feb 2019

Reviewer: Mona Choi

Reviewer’s report:

Thank you for your effort on your manuscript.

This dealt with an interesting topic of development and implementation of mhealth application for caregivers of dementia patients, which provided simple solutions to help users.

Major suggestions

This is generally well written but too long that would make readers get lost. The authors should make this paper little bit more succinct. In addition, this manuscript needs some restructure of manuscript because a part of Results section should move to Methods, which you don't have. I strongly recommend to create the section of "Evaluation Methods"

In addition, the authors should use terms, tense, upper/lower letters, and citation numbering in the main text consistently throughout the manuscript, including tables and figures, even in titles, which requires very thorough English and format editing.

Minor suggestions

BACKGROUND

-p. 3, left, line 20: please change "...[22] surveyed" to "...[22] reviewed"

-p. 3, left, line 61-62: Please rewrite the sentences, which are very awkward.

-p. 3, right, line 11-14: Please provide some examples to elaborate the case.

-p. 3, right, line 17: please change "...a group of ~30" to "...about 30"

METHODS

-please provide the description of IRB approval and number.
-p. 4, left, line 59-60: please delete (but not childish).

-p. 4, right, line 9: please change to "SMAI are presented [26]."

-p. 4, right: please change subtitles of "Caregivers' App" "Health professional's App" to, "SMAI Caregiver Interface" and "SMAI Doctor Interface", respectively.

-p. 4, left, line 6: please change " …of study" to "of education"

-p. 5, left, line 33: please change 28 to Twenty eight.

RESULTS

-p. 6, right: there are many part that can go to Methods, for example from lines 5-11, 14-25, p. 8, left, line 52~right, line 9, right, line 57~p. 7., left, line 8, etc. Please move other parts that described methods to Methods section.

-I don't think that median and IQR is necessary to be presented because it has only 5 likert scale (Tables 5 and 6 have the same issue). I suggest to delete medians and IQRs from text and tables.

DISCUSSION

-This section should compare and contrast your findings to relevant studies previously published. It is currently mere repeat of results section. This should be rewritten entirely.

CONCLUSION

-This also needs to make a short, strong deliberation based on your findings. It just seems some part of discussion.

TABLES

-please use lower/upper case letters consistently as well as tense (e.g., improves vs. improved; are vs. was)

-Table 1: study should be education. Please change the title to "Demographic characteristics…"

-Table 3: basic education should be education.

FIGURES
-please spell out abbreviation as a note if necessary.

I hope the review is helpful to revise your manuscript. Thank you.

**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.

Yes

**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.

I am able to assess the statistics

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

Acceptable

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