Author’s response to reviews

Title: MHealth and Perceived Quality of Care Delivery: A Conceptual Model and Empirical Validation

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Response to Reviewers Comments

Thank you for taking the time to review my paper and provide valuable insights that would enhance this work. Please find appended below the response to all of the reviews received.

Reviewer 1

R1: I like the idea of using PQoC as the key outcome.

Response: Thank you.

R1: The way that the 9 hypotheses are presented and described is hard work for the average reader. As far as I can see there are main variables PQoC, TTF, utilization, Task, Technology and Characteristics. These could be presented as a logic model as a simplification of Figure 1 (which is already too complex).

Response: Thank you for your observation. SEM/PLS papers are structured very similarly to that presented in this paper. We followed recommendations for presenting PLS models and reporting the results of the analysis based widely acknowledged guidelines (e.g., Hair Jr JF, Hult GTM, Ringle C, Sarstedt M. A primer on partial least squares structural equation modelling (PLS-SEM): Sage Publications; 2016.) Hence, to adhere to the consistently reporting standards, we decided to leave this section as-is.

R1: 3000 iPads are in use. It is not very clear how many surveys were done. At first reading I asked is it 20 or 187. Also, it is not stated which year the data was collected.
Response: We are sorry for this confusion.

We have clarified and an updated the revised version of the final manuscript:

• 20 medical experts were for the pilot study of the online survey. This was the initial pre-test surrounding the instrument design.

• 3000 iPads are available for use. This is now reworded to provide more clarity to the reader (Methods, line 263 and 264 page 11 and 12).

• Thereafter, there was 157 responses but only 102 was included in the analysis (Please see line 285, page 12). Period of data collection is also added (Methods, line 261 page 11).

R1: It would be useful to describe the survey in terms of how many items etc. These items come from multiple sources, so it would be useful to have comments on the suitability of existing survey tools.

Response: All survey items are presented in Additional File 1. All items were validated for the content and construct validities. A paragraph is provided in the Additional File addressing the use of pre-existing survey items.

R1: What does the acronym stand for? So I cannot comment on this area. PLS and SEM are not in the list of abbreviations.

Response: The acronym is expanded on page 12, line 287 (Methods). Both PLS and SEM are included in the list of abbreviations.

R1: On Page 14 line 331 and elsewhere there are missing references

Response: Table 1 (on page 14, line 331) is now updated and not linked to the specific table. A thorough proof read was also performed to ensure no more references were omitted.

R1: It is a shame that training and implementation management were not included in the model. I have been involved in an as yet unpublished study to assess the spread of an mHealth application, where the implementation approach (as measured using Carl May's Normalisation Process Theory) emerged as the key variable that affected utilisation. This might be added to the discussion.

Response: Training is currently discussed on page 20. However, this is extended to include the normalisation process theory – Discussion (Lines 466 – 469, page 20).
R1: It needs to be made clear that this relates to hospital physicians (if this is the case).

Response: Thank you. Hospital physicians are mentioned throughout the paper.

R1: I note that most of the references are fairly old (about 95% more than 3 years old). This is a fast-moving field.

Response: We updated the reference to include the most current publications related to the objectives of the study. The following references were added:

Background (Lines 71, 72, 80, 86, 88 & 93, 157; 166, 179; 215, 226)

Methods (line 282)

Discussion (lines 449; 470; 478)

Conclusion (Lines 527)

Reviewer2

R2: All the figures must enhance their quality.

Response: Figure quality is improved.

R2: Write complete algorithm represent the novel method suggest by them based on suitable format or pseudo code

Response: This paper explores a conceptual model as opposed to developing and testing algorithms. As mentioned above we following the guidelines s for analysis and reporting of PLS models (e.g., Hair Jr JF, Hult GTM, Ringle C, Sarstedt M. A primer on partial least squares structural equation modelling (PLS-SEM): Sage Publications; 2016.)

R2: Add new section under title the hypothesis and limitations of the develop method present by author(s).

Response: – Limitations are discussed on page 23. Lines 547 – 563.

R2: Multi points in this manuscript need justification and prove by the author(S), [JUSTIFICATION MEANING MORE discuss FROM THE AUTHOR]
Response: As the reviewer was not explicit with regards to this point, we hope that our revisions (as per Reviewer 1) will address this issue.

R2: Update the references list by adding the following reference related to your work and all these references indexing in ISI and Scopus Database, 8 research articles by Al-Janabi, S.

Response: Not all references provided align with the paper. However, where alignment was identified then the papers were included as references.

R2: Add section under title discuss explain on it the advantages/disadvantage of this Construction in soft computing based on the researcher(s)'opinion to become as Guide of the other researchers work at the same field , at the same time to increase the weight of your manuscript.

Response: Soft computing as a field of applied computer science and falls outside the scope of this paper.

I would like to draw the senior or associate editor's attention to an inappropriate request made by reviewer two. The reviewer asked to include half of her publications (based on the google scholar). However, only one of the references is related to our paper.