Reviewer’s report

Title: Designing a Multifaceted Telehealth Intervention for a Rural Population Using a Model for Developing Complex Interventions in Nursing

Version: 0 Date: 01 Nov 2019

Reviewer: Avantika Saraf Shah

Reviewer's report:

Overall Summary
The authors describe a theory-based structured approach to design telehealth intervention program for a vulnerable population with multiple chronic conditions in a rural area. This manuscript fills a gap in the literature by specifying the details on how theory-based models can implemented and operationalized to develop telehealth interventions for vulnerable groups. However, the manuscript will be strengthened if the introduction and discussion specifically lay out the current gaps in the literature in relation to implementation of telehealth interventions and provide evidence to rationalize the primary objective of this paper. Additionally, the combined methods and results section are hard to follow and reformatting the paper will significantly improve the readability.

Introduction
* Page 3, Lines 60 - 71: Is the intent of this study to design for telehealth services for those with long-term needs in the community or propose a model that can help design telehealth interventions? If the latter, then the first paragraph of the introduction makes the reader think otherwise. If the former, then it would be helpful to include some statistics on the need for long-term care services at rural communities.
* Page 4, Lines 75 - 80: The considerations and challenges of "designing" and "implementing" telehealth seem to be incomplete. It would strengthen the rationale for this study if the authors include models that have been used by other groups and if or not they were successful. Additionally, the article by Vassilev and colleagues (see below) conduct a review on what are the key elements for a successful intervention that might help rationalize the author's proposed model approach.

Methods & Results
* Provide details on who participated in the meetings and how the decisions were made- Who were the participants of the meetings (background) and how many were part of the core group? How were they selected? Were decisions made using a vote?
* Pages 5 - 13: The readability of the paper will significantly improve if the authors separate the methods from the results. Additionally, a summary table with the meeting number, intent/goals/process, actions/results might help orient the reader of what was done and then what was ultimately accomplished.
* Page 6, Line 142 - 144: What was the rationale for selecting the target population? In order to reuse this model the authors might want to mention the basis for each decision instead of just stating it.
* Page 17, Line 380: It would be nice to amend Figure 2 to better visualize the ways the chronic care model was operationalized for this project. Therefore, instead of using the original the model as figure 2, recreate the figure to include how the intervention fits into this model.
Discussion/Conclusion
* Is this model only applicable to state and local government run programs or can health systems and hospitals use it to? As of now, it is unclear who is the audience for this manuscript.
* The authors should elaborate in this section on how these "results" fill the gap in the literature.
* Please include any limitations to this approach.

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

No

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.

No

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

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