

Reviewer Name: Anonymous

Review Date: 2020-01-16 15:17

Specific Comments To Authors: Telemedicine/Digital health intervention represents a modern concept in which health care services can be provided from afar and/or self-managed. A concept with many advantages for both eCare provider and patients as it might ease the communication, save time regarding out patients visits, time saved on laboratory test as they are becoming home-tests (POC-test), increase adherence to medical therapy and not least increase patients' disease and treatment knowledge. The latter is fundamental for self-managing with a chronic disease. In this review the authors document through literature review the need and relevance for digital health tools to improve medication-related quality of care for patients with hypertension (mild elevated blood pressure). I find the review extremely relevant for the westernized populations. Countries with long distances to health care professionals, like Australia, might benefit even more from this concept. 1. Telemedicine (Digital health) is based upon the concept of self-management (self-care), which has been defined by WHO as ..... Self-care is broad concept which also encompasses hygiene (general and personal); nutrition (type and quality of food eaten); lifestyle (sporting activities, leisure, etc.); environmental factors (living conditions, social habits, etc.); socioeconomic factors (income level, cultural beliefs, etc.); and self-medication..... (<https://www.who.int/reproductivehealth/self-care-interventions/definitions/en/>). I do believe that self-medication is important, however, so is other aspects such as nutrition and lifestyle – also for patients suffering from hypertension as these issues also impact risk factors/co-morbidities like diabetes, which potentially could reduce the need for medication and thereby improve your primary endpoint Medication-related quality of care (Your reference no. 47 is about non-pharmacological management of hypertension). I do believe that it is important to support chronic patients digitally and holistically, primarily because it increases patients' disease and treatment knowledge and gives the patients different tools (medication, nutrition, lifestyle) to manage their disease. self-medication is important, however, the most important thing is for the patients to self-manage their lives with a chronic condition long term – and that includes far more than self-medication. This leads me to the next point. 2. You conclude ..... 'A conjunction of findings from this reviewed and can be applied to future digital initiatives in conjunction with consideration on sustainability and long-term effectiveness on healthcare practices and patient outcomes. Therefore, future research on DHI for hypertension or chronic diseases considering WHO recommendations and developing through the evidence-to-decision framework is warranted.....' I believe the content of Tabel 4 is very important. You hardly discuss these important challenges for 'success', and I am not sure that WHO has included how to overcome these challenges in their guidelines. You recommend future research considering WHO recommendations and developing through the evidence-to-decision framework, however, future research should also be based on recommendation covering how to overcome challenges listed in table 4 (limited resources, technological issues, collaboration between stakeholders etc.). Challenges for reaching success is as important as WHO guidelines and should be written out (and not as a conjunction of findings from this review can be applied to future digital initiatives in conjunction with....).

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments To Authors (File):

**Conclusion: Minor revision**

**Scientific Quality: Grade B (Very good)**

**Language Quality: Grade A (Priority publishing)**

## Point-by-point response to reviewer's comments

Reviewer's comments	Response	Action
<p>1. I do believe that self-medication is important, however, so is other aspects such as nutrition and lifestyle – also for patients suffering from hypertension as these issues also impact risk factors/co-morbidities like diabetes, which potentially could reduce the need for medication and thereby improve your primary endpoint Medication-related quality of care (Your reference no. 47 is about non-pharmacological management of hypertension). I do believe that it is important to support chronic patients digitally and holistically, primarily because it increases patients' disease and treatment knowledge and gives the patients different tools (medication, nutrition, lifestyle) to manage their disease. self-medication is important, however, the most important thing is for the patients to self-manage their lives with a chronic condition long term – and that includes far more than self-medication.</p>	<p>We thank the reviewer for this suggestion. To address this comment, we have revised the manuscript and emphasized 'self-management' in regard to health behaviours, including physical activity and diet.</p>	<p><b>Section: Results,</b> <b><i>Digital health intervention</i></b> <b>Page 9</b> <b>Section: Results,</b> <b><i>Medication-related quality of care</i></b> <b>Page 10</b> “.....self-management, medication adherence, medication management, health behaviour modification (i.e. lifestyle, physical activity and diet) .....”</p>
<p>2. A conjunction of findings from this reviewed and can be applied to future digital initiatives in conjunction with consideration on sustainability and long-term effectiveness on healthcare practices and patient outcomes. Therefore, future research on DHI for hypertension or chronic diseases considering WHO recommendations and developing through the evidence-to-decision framework is warranted.....' I believe the content of Tabel 4 is very important. You hardly discuss these important challenges for 'success', and I am not sure that WHO has included how to overcome these challenges in their guidelines. You recommend future research considering WHO recommendations and developing through the evidence-to-decision framework, however, future research should also be based on recommendation covering how to overcome challenges listed in table 4 (limited resources, technological issues, collaboration between stakeholders etc.). Challenges for reaching success is as important as WHO guidelines and should be written out (and not as a conjunction of findings from this review can be applied to future digital initiatives in conjunction with....).</p>	<p>We thank the reviewer for this advice. To address these issues, we have revised manuscript and added relevant information in discussion and conclusion sections.</p>	<p><b>Section: Discussion</b> <b>Page 11, Paragraph 2 and 3</b> “Although effectiveness of the DHI in various settings and population have been reported, growing body of literatures have identified key challenges for implementation and sustainability. Availability of resources[35], ..... were the major barriers in previous studies.”  These challenges are in consistent with the summary of this review described in Table 4. To emphasize, implementing DHI for hypertension management or other chronic diseases may encounter some challenges depending on various factors of each program. .... and users is a cornerstone of all programs.  <b>Section: Discussion</b> <b>Page 12, Paragraph 2</b> “The WHO (2019) recommends several sets of implementation considerations for DHIs based on its specific contexts and conditions reflecting the evidence on effectiveness, acceptability, feasibility, resource use, equity and human rights. Utilising these specific recommendations would help enhance the achievement of translating DHI into practice.”  <b>Section: Conclusion</b> <b>Page 13, Paragraph</b> “.....The findings of this review can be fundamental data for digital initiatives. A future DHI for hypertension or chronic diseases should be developed in accordance with WHO recommendations and the evidence-to-decision framework to warrant the sustainability and long-term effectiveness of on healthcare practices and patient outcomes.....”</p>