PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	How can rural community-engaged health services planning achieve sustainable health care system changes?
AUTHORS	Johnston, Campbell; Belanger, Erika; Wong, Krystal; Snadden, David

VERSION 1 – REVIEW

REVIEWER	Krishnasamy, Meinir University of Melbourne, Nursing
REVIEW RETURNED	27-Jan-2021

GENERAL COMMENTS	Thank you for the opportunity to read and review this interesting paper. I have a few suggestions for strengthening the manuscript and hope that the commentary below is helpful: 1) Please add further explanation to indicate how informed consent was secured 2) The interview schedule requires a high level of English proficiency and health literacy; how were the needs of people whose preferred language was not English or whose health literacy was low, accommodated? How "representative" of the communities, were community participants? 3) Why was the selection/inclusion of nurses limited to Nurse Practitioners and why were so few nurses involved as participants? Given that nurses featured prominently in the qualitative data - was this an omission in the design? The lack of recognition of the key role of nurses in rural care is out of alignment with the 2020 WHO global statement on nursing and the centrality of investing in nursing to raise health among disadvantaged communities. There is no mention of allied health practitioners - were they included? Why include only 1 midwife? These are important issues that risk credibility/trustworthiness of data generated as they suggest a heavily biased orientation from a medical lens. The manuscript team are Drs and Health Scientists - how did this influence the lens brought to analysis of the data and consideration of potential solutions proposed/recommended back to communities? 4) How are the 6 monthly community reports used? By who? Is there evidence of these reports translating into system improvements/innovations? I recognise this detail may come in later manuscripts. 5) The paper offers an important insight into an under-described and much needed approach to build sustainable, fit for purpose, rural health services. For me, the strength of this paper is the potential for reporting detail about the process and approaches undertaken to carry out the work, that others can learn from or adopt. For example, providing more detailed examples of establishing connections/engagement/ or describing what aspects of data collection and recruitment worked well / didn't work; how feedback

	was shared to the community/to policy makers/ and what the barriers and enablers to meaningful sharing were, etc. Including the qualitative data distracts from this focus as those data talk about what was said in the interviews and focus groups- rather than being about the process. I would recommend that the qualitative data are reported separately where they can be afforded greater discussion because the are, in and of themselves, insightful. It would be good to have greater opportunity to learn more about the data within and across participant response groups. Was everything equally important to everyone? What were differences between key stakeholders and why? Whose "voices" were most dominant in the data? 6) There is reference to this process having early policy impact but there is little evidence to support this, other than the emergency transport initiative. Was this as a result of the project or COVID, or perhaps both? But again, I think these exemplars of impact need dedicated manuscripts to be able to provide enough detail of "cause and effect". This is an important paper and if the focus could be revised to provide a more detailed commentary on the process and approaches, it could be an influential publication for many of us looking to carry out meaningful rural community participation and engagement. Thank you.

REVIEWER	Strasser, Roger University of Waikato
REVIEW RETURNED	23-Feb-2021

GENERAL COMMENTS	The authors are to be congratulated on planning, implementing and now reporting this research which is groundbreaking and of great importance to people living in remote and rural communities. In my view, this paper merits publication in BMJ open and could be accompanied by an Editorial or Commentary to emphasise its importance. The manuscript is written clearly with each section providing sufficient information for the reader to understand and interpret each element beginning with the Introduction, Study Design and Methods, Results, Discussion, Limitations and Conclusion. In addition, the authors provide substantial supporting information about the design and implementation of the project, and links to publicly accessible information about outputs and outcomes. I have two substantive suggestions for improvement. The article title is too long and could finish with the "?" leaving out the second sentence in the title. Also, the word "affect" could be changed to "achieve" to clarify the intent of the question. My second suggestion is to remove Table 2 from the text and include it as an appendix. In its current place, it distracts the reader from the flow of the narrative. As stated, this article merits publication.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Dr. Meinir Krishnasamy, University of Melbourne, Peter MacCallum Cancer Centre
Comments to the Author:
Thank you for the opportunity to read and review this interesting paper. I have a few suggestions for strengthening the manuscript and hope that the commentary below is helpful:

Thank you for your very helpful comments on this article. We have found your perceptive questions have encouraged us to reflect on our methods and our explanations of them. We have addressed each of your comments below.

Please add further explanation to indicate how informed consent was secured

We have altered the explanation in the article on lines 142-150

1)The interview schedule requires a high level of English proficiency and health literacy; how were the needs of people whose preferred language was not English or whose health literacy was low, accommodated?

English is the common language in rural BC, while some Indigenous communities are trying to revive their traditional language, all are fluent in English. While there are immigrant populations in BC that prefer languages other than English most are centred in the urban areas around Vancouver. Smaller communities in rural areas do have a few immigrants whose first language is not English, but most speak English well.

2)How "representative" of the communities, were community participants?

The health partnership framework does not seek representation but seeks differing perspectives from different sectors and in general participants were either involved in health care, elected officials or leaders of community groups that brought community and patient perspectives. We have put a comment to that effect in the revised article on lines 123-127. Similarly we asked participants to talk about the issues they experienced in health care services, not in relation to specific health conditions. The table of themes shows the issues were more in terms of access, successes and health system issues and therefore health literacy did not seem to be a factor in the discussions.

3)Why was the selection/inclusion of nurses limited to Nurse Practitioners and why were so few nurses involved as participants? Given that nurses featured prominently in the qualitative data - was this an omission in the design? The lack of recognition of the key role of nurses in rural care is out of alignment with the 2020 WHO global statement on nursing and the centrality of investing in nursing to raise health among disadvantaged communities. There is no mention of allied health practitioners - were they included? Why include only 1 midwife? These are important issues that risk credibility/trustworthiness of data generated as they suggest a heavily biased orientation from a medical lens. The manuscript team are Drs and Health Scientists - how did this influence the lens brought to analysis of the data and consideration of potential solutions proposed/recommended back to communities?

Thank you for raising this important issue. This was an omission in our participant table and we have corrected it. Nurse practitioners were in a separate category as the ones we interviewed were solo primary care providers in small remote communities, or worked closely in remote areas with a physician. Many administrators were nurses and in the health partner group meetings nurses came to these often accompanying an administrator or physician colleague. The table lists interviews with the partner groups not individuals and we have reformatted the table around the 6 partner groups used in our framework and included groups that nurses were present in. We have put a note to this effect in the text. We also made an addition to the text to explain that Site Visitors are from the RCCbc span style="font-family:-webkit-standard; font-style:italic">membership *who volunteered to become site visitors. RCCbc members are mostly rural physicians, but there are some allied health members. Hence one midwife, who was the only non-physician to volunteer. We try to mitigate any medical power differentials by having guests and RCCbc staff on the visit teams, through training and using semi structured interviews as explained in the text.*
In terms of the manuscript team reflective statements are included as a supplementary file.

4) How are the 6 monthly community reports used? By who? Is there evidence of these reports translating into system improvements/innovations? I recognise this detail may come in later manuscripts.

The reports go to the JSC which is a government / physician association partnership and is used to inform their programs as well as feed into policy decisions. They also go to communities for information and are used at RCCbc partnership tables to provide evidence for priority setting. A separate article is being considered by BMJO at present on the process of the partnership engagement. Future publications will look at policy and service outcomes in our complex and changing environment.

5) The paper offers an important insight into an under-described and much needed approach to build sustainable, fit for purpose, rural health services. For me, the strength of this paper is the potential for reporting detail about the process and approaches undertaken to carry out the work, that others can learn from or adopt. For example, providing more detailed examples of establishing connections/engagement/ or describing what aspects of data collection and recruitment worked well / didn't work; how feedback was shared to the community/to policy makers/ and what the barriers and enablers to meaningful sharing were, etc. Including the qualitative data distracts from this focus as those data talk about what was said in the interviews and focus groups- rather than being about the process. I would recommend that the qualitative data are reported separately where they can be afforded greater discussion because the are, in and of themselves, insightful. It would be good to have greater opportunity to learn more about the data within and across participant response groups. Was everything equally important to everyone? What were differences between key stakeholders and why? Whose "voices" were most dominant in the data?

Thank you for this comment, you have identified what for us was a major dilemma and cause for debate prior to submission of the article. While we felt the process was important, we decided that as we had designed it using research methodology to enhance the rigour of the data gathering and analysis that separating the two elements would detract from a more holistic picture of the process. We also found that the ethics approval process really helped ensure consent was clearly obtained, informed and documented. We were a little surprised at how much the ethics approval process during the visit and the explanations of confidentiality of data handling and anonymity of results seemed to give participants more trust in the process and allowed them to feel they could speak freely. We included this feedback in the results section.
We have therefore added headings to separate the process and the research data analysis in the article and provided a supplementary file which is the RCCbc handbook developed for visit organisers which is a detailed step by step description of how to set up and conduct a visit.
In terms of the data the process for meeting groups on their own and together has allowed all perspectives to be heard and we do not feel any particular voices are dominant in the data. The key to this was the training of visitors and their mentoring during their first visit to ensure consistency of how interviews were conducted and data gathered.

6) There is reference to this process having early policy impact but there is little evidence to support this, other than the emergency transport initiative. Was this as a result of the project or COVID, or perhaps both? But again, I think these exemplars of impact need dedicated manuscripts to be able to provide enough detail of "cause and effect".
This is an important paper and if the focus could be revised to provide a more detailed commentary on the process and approaches, it could be an influential publication for many of us looking to carry out meaningful rural community participation and engagement. Thank you.

We have added links to reports generated by the project, some of which are specialised reports commissioned to help provide rural context for specific issues. We have also added some narrative in this area and will be publishing on these topics in the future.

Reviewer: 2
Dr. Roger Strasser, University of Waikato
Comments to the Author:
The authors are to be congratulated on planning, implementing and now reporting this research which is groundbreaking and of great importance to people living in remote and rural communities. In my view, this paper merits publication in BMJ open and could be accompanied by an Editorial or Commentary to emphasise its importance.

The manuscript is written clearly with each section providing sufficient information for the reader to understand and interpret each element beginning with the Introduction, Study Design and Methods, Results, Discussion, Limitations and Conclusion. In addition, the authors provide substantial supporting information about the design and implementation of the project, and links to publicly accessible information about outputs and outcomes.
I have two substantive suggestions for improvement. The article title is too long and could finish with the "?" leaving out the second sentence in the title. Also, the word "affect" could be changed to "achieve" to clarify the intent of the question. My second suggestion is to remove Table 2 from the text and include it as an appendix. In its current place, it distracts the reader from the flow of the narrative. As stated, this article merits publication.

Thank you for these comments. Both of these suggestions have been implemented.

Reviewer: 1
Competing interests of Reviewer: None

Reviewer: 2
Competing interests of Reviewer: I have known Stuart Johnston and David Snadden as colleagues for many years. Recently, I assisted the RCC group with drafting a manuscript about the use of the Partnership Pentagram Plus model, in this article referred to as Boelen's Health Partnership model, in health system change. I had no involvement in the Rural Site Visit project and learned about it by reading the current article.