

## 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

<b>TITLE (PROVISIONAL)</b>	Evaluating a novel Integrated Community of Care (ICoC) for patients from an urbanized low-income community in Singapore using the Participatory Action Research (PAR) methodology: A Study Protocol
<b>AUTHORS</b>	Low, Lian Leng; Maulod, Adlina; Lee, Kheng Hock

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Tess Bright London School of Hygiene and Tropical Medicine, UK
<b>REVIEW RETURNED</b>	29-May-2017

<b>GENERAL COMMENTS</b>	<p>Overall this is an interesting study, however there are several points that need to be addressed before the protocol can be accepted for publication. In general, some details about the methodology are missing, and the flow can be improved to ensure clarity.</p> <p>Specific comments</p> <p>Abstract Page 2, line 5: “Objectives” should be changed to “Introduction”</p> <p>Background Page 2, line 53: “Background” should be renamed “Introduction” Page 2, line 55: Reference 1 does not seem to relate to the statement Page 3, line 8: suggest remove “for poor outcome” from sentence “These factors for poor outcome....” Page 3, line 10: would be useful to have a definition of rental flat Page 3, lines 18-21: where was this study conducted? Page 3, line 41: suggest remove “of integrated care” from sentence “The integrated community of care (ICoC) is a novel model of integrated care..” Page 3, line 44: unclear what the “full cycle of care” is</p> <p>Methods Page 4, line 40: Sandberg et al – add fullstop after “al” and the year in brackets Page 4, line 53: Is there a reference that can be added for the PAR approach? Page 5, Figure 1: Involvement and intervention “sharing key analysis with providers, clients, decision makers” should be “share key analysis with providers..”. Correct remaining bullet points to present tense. Page 5, line 45: Hart and Bond, 1995 – change of reference style. Ensure consistency throughout.</p>
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Page 5, lines 42-53: Repetitious from conceptual framework section.

Page 6, line 9: index discharge introduced as a term here, but it is not defined until later in the manuscript

Page 6, line 15-20: Repetitious from section immediately above on outcome measures

Page 6, line 38-41: Repeat from research design section

Page 6, line 51: Do the rental housing blocks need to be specified to this level of detail? This could mean that the participant's identity may not be confidential.

Page 6, line 58: index admission defined here, could be defined earlier to ensure clarity when reading the study aims and hypotheses.

Page 7, line 3: acronym SGH needs to be defined

Page 7, lines 3-8: start dates of the study could be added to this paragraph

Page 7, figure 2: acroymns C2H and VW should be defined

Page 7, line 4: has the feasibility study been published elsewhere? If so, add a reference

Page 7, line 46: change in reference style here

Page 7, ICoC intervention program: suggest move this to the background, or beginning of methods so the reader is clear from the beginning what the intervention in question is

Page 7, Figure 2: does not quite match the text which states that all three components of the programme will be provided to enrolled patients. The diagram seems to suggest that enrolled participants can be enrolled in C2H alone, and be included in the intervention group.

Page 8, Figure 3: the figure has 4 components, and only three components are explained in the texts as part of the intervention

Page 9, line 13: change in reference style (22)

Page 9, line 13-27: unclear how quality of life will be measured in the controls if they are going to be selected retrospectively at the end of the study period from the database

Page 9, Table 1: the Abbreviated Mental Test, Modified Barthel Index, and Instrumental activities of daily living are introduced for the first time in this table. The purpose of using these tools should be explained in the text. Health related quality of life is mentioned twice in the table.

Page 9, line 57: suggest sample size calculation comes before inclusion/exclusion criteria as there are several mentions of the sample size before the authors mention the calculation.

Page 10, line 3-5: No need to repeat the study aim here.

Page 10, line 7-18: the authors mention  $n_1$ ,  $p_1$ ,  $p_2$  without defining what these are. If they refer to a calculation formula, then this should be provided.

Page 10, line 12-18: the feasibility study has not been explained and authors should consider adding a section on this

Qualitative data collection design and strategies

- Will the authors be developing topic guides for this research? If so they could be included as an appendix

Page 11, line 13: IRB – define acronym

Page 11, line 24: “following nurses around and being a familiar face” – this statement is unclear and authors should rephrase

Page 11, line 25: “refer to interview guide” – where is the interview guide?

Page 11, line 25: “Sessions will be about max. 30 mins” should be edited to “Sessions will last approximately 30 minutes....”

Page 11, line 36: beneficial or detrimental?

	<p>Page 11, lines 45-50: analysis of the secondary aims addressed, but the authors should also address how the primary aim will be analysed.</p> <p>Page 12, lines 2-4: authors should address what type of analysis they intend to carry out for the qualitative interviews (i.e. thematic, content, framework?)</p> <p>Discussion</p> <p>Page 12, line 33-37: suggest moving to the introduction</p> <p>Page 12, line 38: intervention should be interventions</p> <p>Page 13, line 15-21: sugg</p>
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<b>REVIEWER</b>	Tan Boon Yeow St Luke's Hospital, Singapore
<b>REVIEW RETURNED</b>	19-Jun-2017

<b>GENERAL COMMENTS</b>	I commend the authors for coming up with a novel idea in attempting to measure both the health and social outcomes of a challenging group of patients that will have implications on both policy as well as system design to bring about better care of patients in Singapore.
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## VERSION 1 – AUTHOR RESPONSE

### Response to Reviewer #1

#### General Comments:

Overall this is an interesting study, however there are several points that need to be addressed before the protocol can be accepted for publication. In general, some details about the methodology are missing, and the flow can be improved to ensure clarity.

Author Reply: Thank you for your kind words and positive feedback on our work. We have addressed your comments below and hope they are acceptable.

#### Specific Comments:

##### Abstract

Page 2, line 5: "Objectives" should be changed to "Introduction"

Author Reply: We agree and have revised accordingly.

##### Background

Page 2, line 53: "Background" should be renamed "Introduction"

Author Reply: We agree and have revised accordingly.

Comment: Page 2, line 55: Reference 1 does not seem to relate to the statement

Author Reply: We agree and have removed this reference.

Comment: Page 3, line 8: suggest remove “for poor outcome” from sentence “These factors for poor outcome...”

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 10: would be useful to have a definition of rental flat

Author Reply: We agree and have included a definition of rental flat and the eligibility criteria in Singapore.

Comment: Page 3, lines 18-21: where was this study conducted?

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 41: suggest remove “of integrated care” from sentence “The integrated community of care (ICoC) is a novel model of integrated care..”

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 44: unclear what the “full cycle of care” is

Author Reply: We agree with your comment and have removed the “full cycle of care” which can be confusing.

## Methods

Page 4, line 40: Sandberg et al – add fullstop after “al” and the year in brackets

Author Reply: We agree and have revised accordingly.

Comment: Page 4, line 53: Is there a reference that can be added for the PAR approach?

Author Reply: Yes, we have added the reference that inspired our conceptualization of the PAR approach into the 3Is. (Reference no. 28 and 29)

Comment: Page 5, Figure 1: Involvement and intervention “sharing key analysis with providers, clients, decision makers” should be “share key analysis with providers..”. Correct remaining bullet points to present tense.

Author Reply: We agree and have revised the figure accordingly.

Page 5, line 45: Hart and Bond, 1995 – change of reference style. Ensure consistency throughout.

Author Reply: We agree and have revised the reference style to be consistent.

Comment: Page 5, lines 42-53: Repetitious from conceptual framework section.

Author Reply: We agree. Have omitted repetitions and integrated them accordingly.

Comment: Page 6, line 9: index discharge introduced as a term here, but it is not defined until later in the manuscript

Author Reply: We agree and have defined index admission and index discharge accordingly.

Comment: Page 6, line 15-20: Repetitious from section immediately above on outcome measures

Author Reply: Thank you for the comment. We have removed this repetitive part.

Comment: Page 6, line 38-41: Repeat from research design section

Author Reply: Thank you for the comment. We have removed this repetitive part.

Comment: Page 6, line 51: Do the rental housing blocks need to be specified to this level of detail? This could mean that the participant's identity may not be confidential.

Author Reply: Thank you for the comment. We note your concerns and have revised accordingly.

Comment: Page 6, line 58: index admission defined here, could be defined earlier to ensure clarity when reading the study aims and hypotheses.

Author Reply: Thank you for the comment. We have defined index admission and index discharge earlier in the manuscript as recommended.

Comment: Page 7, line 3: acronym SGH needs to be defined

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 7, lines 3-8: start dates of the study could be added to this paragraph

Author Reply: Thank you for the comment. We have added the start date and estimated end date.

Comment: Page 7, figure 2: acroymns C2H and VW should be defined

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 7, line 4: has the feasibility study been published elsewhere? If so, add a reference

Author Reply: Thank you for the comment. We have not published this and it was a feasibility pilot before the start of our study.

Comment: Page 7, line 46: change in reference style here

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 7, ICoC intervention program: suggest move this to the background, or beginning of methods so the reader is clear from the beginning what the intervention in question is

Author Reply: We agree and have moved this to the start of the methods section.

Comment: Page 7, Figure 2: does not quite match the text which states that all three components of the programme will be provided to enrolled patients. The diagram seems to suggest that enrolled participants can be enrolled in C2H alone, and be included in the intervention group.

Author Reply: We have revised the figure to match the text

Comment: Page 8, Figure 3: the figure has 4 components, and only three components are explained in the texts as part of the intervention

Author Reply: We have revised the figure to match the text.

Comment: Page 9, line 13: change in reference style (22)

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 9, line 13-27: unclear how quality of life will be measured in the controls if they are going to be selected retrospectively at the end of the study period from the database

Author Reply: Thank you for the comment. The quality of life, abbreviated mental test, modified barthel index etc will not be available from the controls. Therefore, we are not using these indicators as our outcome measures. However, possible confounders (for propensity score matching) and healthcare utilization data can be retrieved from our health system's electronic health records and merged with the Ministry of Health's data resource to overcome issues of cross utilization, should patients utilize healthcare from other health systems in Singapore. We have also highlighted this in the revised manuscript.

Comment: Page 9, Table 1: the Abbreviated Mental Test, Modified Barthel Index, and Instrumental activities of daily living are introduced for the first time in this table. The purpose of using these tools should be explained in the text. Health related quality of life is mentioned twice in the table.

Author Reply: Thank you for the comment. We have revised accordingly.

Page 9, line 57: suggest sample size calculation comes before inclusion/exclusion criteria as there are several mentions of the sample size before the authors mention the calculation.

Author Reply: Thank you for the suggestion. We have revised accordingly.

Comment: Page 10, line 3-5: No need to repeat the study aim here.

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 10, line 7-18: the authors mention  $n_1$ ,  $p_1$ ,  $p_2$  without defining what these are. If they refer to a calculation formula, then this should be provided.

Author Reply: Thank you for the comment. We have removed them and just referred to as intervention and control groups.

Comment: Page 10, line 12-18: the feasibility study has not been explained and authors should consider adding a section on this

Author Reply: Thank you for the comment. The study on page 10, line 12-18 was our previous study that we have published. We used this study to reference our potential effectiveness for the current intervention. I have referenced this study accordingly in the revised manuscript.

Qualitative data collection design and strategies

Comment: Will the authors be developing topic guides for this research? If so they could be included as an appendix

Author Reply: Thank you for the suggestion, we have included the topic guide in Appendix A.

Comment: Page 11, line 13: IRB – define acronym

Author Reply: Acronym has been defined. (Institutional Review Board)

Comment: Page 11, line 24: “following nurses around and being a familiar face” – this statement is unclear and authors should rephrase

Author Reply: Thank you, the sentence has been rephrased and edited in the section to the following: “After obtaining consent, the qualitative research team will build rapport of elderly participants further through regular interactions facilitated by frequent house visits with community nurses and health partners. When comfort and trust has been established between the research team and participants, investigators will conduct interviews following a life history format. We will ask about their personal histories to gain a deeper and better understanding of their current circumstances and health behaviors. We will also seek their feedback as recipients of the care intervention. Interviews will be carried out over multiple sessions and visits, instead of a block session, so as to not tax elderly participants. Each session would last about approximately 30 minutes and will continue until all questions in the guide (refer to Appendix A) have been satisfactorily completed.”

Comment: Page 11, line 25: “refer to interview guide” – where is the interview guide?

Author Reply: Added “refer to Appendix A” where Interview Guide has been appended.

Comment: Page 11, line 25: “Sessions will be about max. 30 mins” should be edited to “Sessions will last approximately 30 minutes....”

Author Reply: Thank you for the suggestion. We have revised accordingly.

Comment: Page 11, line 36: beneficial or detrimental?

Author Reply: Thank you for pointing out the confusion. We have changed this to “significant” to account for possible implications beyond either beneficial or detrimental.

Comment: Page 11, lines 45-50: analysis of the secondary aims addressed, but the authors should also address how the primary aim will be analysed.

Author Reply: Thank you for pointing what we have missed out. The discussion on analysis of primary aim was originally found in the sampling section. We have moved it to the front of the quantitative analysis.

Comment: Page 12, lines 2-4: authors should address what type of analysis they intend to carry out for the qualitative interviews (i.e. thematic, content, framework?)

Author Reply: Thank you for the comment. We have added the following and hope the elaboration suffices: “The research team will use NVivo to code responses for theoretical and emergent themes. The team will analyze data, by coding for broad themes that correspond to influences at the individual, interpersonal, organizational, community and policy level according to the social ecological framework of health behavior, while simultaneously code for emergent themes. The combination of both deductive and inductive analytical approaches will provide further granularity for the evaluation of the ICoC intervention programme. Data will be independently coded by two qualitative analysts and codings will be compared for agreement through NVivo, to achieve inter-rater reliability.”

Discussion

Page 12, line 33-37: suggest moving to the introduction

Author Reply: Thank you for the suggestion. We have moved this to the introduction as suggested.

Comment: Page 12, line 38: intervention should be interventions

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 13, line 15-21: suggest remove as this was already mentioned in the discussion

Author Reply: Thank you for the comment. We have revised accordingly.

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Tess Bright London School of Hygiene & Tropical Medicine
<b>REVIEW RETURNED</b>	21-Jul-2017

<b>GENERAL COMMENTS</b>	<p>General comments This version of the manuscript is much improved. The authors have made an effort to address all previous comments. However, there are still some minor points to address before it can be accepted.</p> <p>Specific comments Check spelling requirements through the journal: British vs American English.</p> <p>Abstract Line 11: change “improving” to reducing</p> <p>Introduction Page 2, line 57: public rental housing is mentioned here in the first sentence but is not defined until later, and it is not clear that this is referring to the Singapore context until sentence three. This could be clarified.</p> <p>Page 3, lines 4-5: change “readmission risk and being a frequent hospital admitter and emergency department (ED) user” to “readmission risk, frequent hospital admission and emergency department (ED) utilisation”</p> <p>Page 3, line 9-10: remove “very low at” and add “1500 Singapore Dollars or lower”.</p> <p>Page 3, lines 8-12: Dollars should have capital D</p> <p>Page 3, line 12-14: Sentence does not flow from previous one. Please revise</p> <p>Page 3, line 18-37: Make it clearer that this intervention is a multi-component one so that you can justify testing it in light of previous findings showing limited impact. Authors need to justify how this intervention improves on previous attempts.</p> <p>Page 3, line 33: “going beyond a single component”</p> <p>Page 3, line 55: change 2 to two</p>
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Page 3, lines 39-52: Make clear who provides the intervention at this stage

#### Methods

In general authors could make this section a little more concise. Although it is important to define the intervention components early, authors can consider rearranging the methods so that participant recruitment comes before intervention and control.

Page 4, line 31: define acronym SGH here

Page 5, lines 2-10: authors should define here that this programme has been implemented in 3 rental housing flats, as this is mentioned later in the manuscript

Page 5, line 3: define Agency for Integrated Care as AIC. Rephrase sentence: "Since October 2014, the Agency for Integrated Care (AIC) has run the C2H programme comprising a case manager..."

Page 5, line 17: SGH THC should be SGH TC

Page 5, line 46: Participatory action research change "PAR"

Page 5, line 51: Unclear what the similarities in nursing processes are. Please clarify.

Page 6, line 12: Regional Health System can be abbreviated to RHS

Page 6, line 12: What is the PAR praxis?

Page 6, line 42: authors here mention unscheduled hospital readmissions, but previously mentioned acute admissions. Authors should be consistent with terminology throughout the document.

Page 7, line 18: Authors mention here that the intervention will be improved on the go, but it is not clear until later in the document that the intervention will not be revised until after outcomes have been measured analysed.

Page 7, line 22: Authors mention a previous study. Make explicit that this was a pilot/feasibility study conducted by the authors in 2014 in Singapore.

Page 7, line 40: how was Chinatown selected?

Page 7, line 48: Singapore General Hospital can be SGH

Page 7, line 42-53: Make explicit the type of sampling that will be used.

Page 8 line 12: change "extract" to "select"

Page 8, line 12-19: on page 9, mention that they will be referred based on complexity of care, but this is not mentioned here

Page 8, line 31: Define what eHintS system is

Page 8, line 40: change to fullstop

Page 8, line 56: define fidelity for readers who may not understand this terminology

Page 9, line 34-36: go along uses double vs single quotations

Page 9, line 36: how was this sample chosen?

Page 9, line 44-46: how will this be analysed?

Page 9, line 51-57: make consistent with page 8

Page 10, line 5-7: sentence does not make sense

Page 10, line 24-47: this part can be covered in ethics

Page 10, line 39-46: make clear earlier that the intervention will not change until after primary outcomes analysed/collected

#### Analysis

Page 10, line 52: control and intervention do not need capital letters

Page 10, line 55: a table might be useful here, perhaps combining with table 1 that shows the primary and secondary aims as an easy reference point for readers.

Page 10, line 42: delete "ones"

Page 11, line 13: "once fieldwork for the day is over" can be change to "at the end of each day"

	<p>Ethics and Dissemination  Page 11, line 30: change to “Additional informed consent...” and remove “another time”  Page 11, line 31: change “also” to “for”</p> <p>Discussion  Page 11, line 54: delete “participatory action research” as you have already defined PAR earlier  Page 11, line 52: change to “healthcare services may in turn”  Page 12, line 7: define empanelment  Page 12, line 15: remove “however”  Page 12, line 16: an RCT would be most appropriate for evaluating the effectiveness, but it is not always the best design for process indicators  Page 12, line 18-19: make this clear earlier in the document</p>
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## VERSION 2 – AUTHOR RESPONSE

### Response to Reviewer #1

#### General Comments:

This version of the manuscript is much improved. The authors have made an effort to address all previous comments. However, there are still some minor points to address before it can be accepted.

Author Reply: Thank you for your kind words and positive feedback on our work. We have addressed your comments below and hope they are acceptable.

#### Specific Comments:

Check spelling requirements through the journal: British vs American English.

Author Reply: We agree and have revised to British English for the manuscript.

#### Abstract

Line 11: change “improving” to reducing

Author Reply: We agree and have revised accordingly.

#### Introduction

Page 2, line 57: public rental housing is mentioned here in the first sentence but is not defined until later, and it is not clear that this is referring to the Singapore context until sentence three. This could be clarified.

Author Reply: We agree and have removed public rental housing from line 57.

Page 3, lines 4-5: change “readmission risk and being a frequent hospital admitter and emergency department (ED) user” to “readmission risk, frequent hospital admission and emergency department (ED) utilisation”

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 9-10: remove “very low at” and add “1500 Singapore Dollars or lower”.  
Page 3, lines 8-12: Dollars should have capital D

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 12-14: Sentence does not flow from previous one. Please revise

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 18-37: Make it clearer that this intervention is a multi-component one so that you can justify testing it in light of previous findings showing limited impact. Authors need to justify how this intervention improves on previous attempts.

Author Reply: We agree and have revised accordingly.

Comment: Page 3, line 33: “going beyond a single component”  
Page 3, line 55: change 2 to two

Author Reply: We agree with your comment and have removed the “full cycle of care” which can be confusing.

Comment: Page 3, lines 39-52: Make clear who provides the intervention at this stage

Author Reply: We agree with your comment and have revised accordingly.

## Methods

In general authors could make this section a little more concise. Although it is important to define the intervention components early, authors can consider rearranging the methods so that participant recruitment comes before intervention and control.

Author Reply: We agree and have revised accordingly.

Comment: Page 4, line 31: define acronym SGH here

Author Reply: We have revised accordingly.

Comment: Page 5, lines 2-10: authors should define here that this programme has been implemented in 3 rental housing flats, as this is mentioned later in the manuscript

Author Reply: We agree and have revised accordingly.

Comment: Page 5, line 3: define Agency for Integrated Care as AIC. Rephrase sentence: “Since October 2014, the Agency for Integrated Care (AIC) has run the C2H programme comprising a case manager;

Author Reply: We agree and have revised accordingly.

Comment: Page 5, line 17: SGH THC should be SGH TC  
Page 5, line 46: Participatory action research change “PAR”  
Page 6, line 12: Regional Health System can be abbreviated to RHS

Author Reply: We agree and have revised accordingly.

Page 5, line 51: Unclear what the similarities in nursing processes are. Please clarify.

Author Reply: We have paraphrased and added an example for clarity

Comment: Page 6, line 12: What is the PAR praxis?

Author Reply: We have elaborated on PAR praxis and made the sentence clearer

Comment: Page 6, line 42: authors here mention unscheduled hospital readmissions, but previously mentioned acute admissions. Authors should be consistent with terminology throughout the document.

Author Reply: We have revised accordingly.

Comment: Page 7, line 18: Authors mention here that the intervention will be improved on the go, but it is not clear until later in the document that the intervention will not be revised until after outcomes have been measured analysed.

Author Reply: Thank you for pointing this out. We have revised it accordingly to state that revisions will be made when outcomes have been measured and reported.

Comment: Page 7, line 22: Authors mention a previous study. Make explicit that this was a pilot/feasibility study conducted by the authors in 2014 in Singapore.

Author Reply: We have revised as recommended.

Comment: Page 7, line 40: how was Chinatown selected?

Author Reply: Thank you for the comment. We have revised and explained why Chinatown was chosen.

Comment: Page 7, line 48: Singapore General Hospital can be SGH

Page 7, line 42-53: Make explicit the type of sampling that will be used.

Author Reply: Thank you for the comment. We have revised accordingly.

Comment: Page 8 line 12: change "extract" to "select"

Page 8, line 40: change to fullstop

Author Reply: We have revised accordingly.

Comment: Page 8, line 12-19: on page 9, mention that they will be referred based on complexity of care, but this is not mentioned here

Author Reply: Thank you for pointing this out. We have included this on page 8.

Comment: Page 8, line 31: Define what eHintS system is

Author Reply: Thank you for the comment. We have done so in the revision.

Comment: Page 8, line 56: define fidelity for readers who may not understand this terminology

Author Reply: We have done so in the revision.

Comment: Page 9, line 34-36: go along uses double vs single quotations.

Author Reply: We have revised accordingly.

Comment: Page 9, line 36: how was this sample chosen?

Page 9, line 44-46: how will this be analysed?

Author Reply: We have revised and elaborated that the sample of n=10 includes all of the VW nurses and the C2H team, which actually amounts to 10 people.

Comment: Page 9, line 51-57: make consistent with page 8

Author Reply: We have revised accordingly

Comment: Page 10, line 5-7: sentence does not make sense

Page 10, line 24-47: this part can be covered in ethics

Page 10, line 39-46: make clear earlier that the intervention will not change until after primary outcomes analysed/collected

Author Reply: We have revised all of the above accordingly.

Comment: Analysis

Page 10, line 52: control and intervention do not need capital letters

Page 10, line 55: a table might be useful here, perhaps combining with table 1 that shows the primary and secondary aims as an easy reference point for readers.

Page 10, line 42: delete "ones"

Page 11, line 13: "once fieldwork for the day is over" can be change to "at the end of each day"

Author Reply: Thank you for the suggestion, we have revised accordingly. As for the table suggested, we feel that Table 1 is sufficient and Page 10 quantitative analysis serves to detail the statistical analysis of the primary and secondary aims. We hope this will be satisfactory to the reviewer.

Comment: Ethics and Dissemination

Page 11, line 30: change to "Additional informed consent;" and remove "another time"

Page 11, line 31: change "also" to "for"

Author Reply: We have revised accordingly.

Comment: Discussion

Page 11, line 54: delete "participatory action research" as you have already defined PAR earlier

Page 11, line 52: change to "healthcare services may in turn"

Page 12, line 7: define empanelment

Page 12, line 15: remove "however"

Page 12, line 16: an RCT would be most appropriate for evaluating the effectiveness, but it is not always the best design for process indicators

Page 12, line 18-19: make this clear earlier in the document

Author Reply: We agree and have revised accordingly.

### VERSION 3 – REVIEW

<b>REVIEWER</b>	Tess Bright London School of Hygiene and Tropical Medicine
<b>REVIEW RETURNED</b>	08-Aug-2017

<b>GENERAL COMMENTS</b>	<p>General comments</p> <ul style="list-style-type: none"> <li>• Thank you for the revised manuscript. I did not receive a document detailing responses to my previous comments.</li> <li>• Please check acronyms throughout - e.g. sometimes you use ICOC, and sometimes ICoC. Similar with C-Train vs C-Train. Please be consistent.</li> <li>• Is there any training for those provided for those implementing the intervention? If so, details should be provided.</li> <li>• The second research question that you mention introduction asks about effect on clinical outcomes, but this is not mentioned as an outcome in the text. Make sure that your research questions match the methods.</li> <li>•</li> </ul> <p>Specific comments</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• First line needs a reference</li> <li>• Methods</li> <li>• Intervention and control</li> <li>• Final line in control group participants should be “the community VW and C2H teams will not be available for control group participants”</li> <li>• Research design</li> <li>• Final line should be “Additionally, while evaluation studies utilize quantitative data to measure intervention outcomes, a qualitative approach may address the limitations of using a single metric....”</li> <li>• Study aims and hypotheses</li> <li>• Point c. change to “elderly and caregiver’s access experiences with service use and health care delivery”</li> <li>• Sample size calculation</li> <li>• What does HDB block stand for?</li> <li>• First line of second paragraph “select a sample of 40” rather than “select a sample size of 40”</li> <li>• How did you decide on the sample size of 40?</li> <li>• Data collection strategies to measure outcomes</li> <li>• Basic characteristics</li> <li>• Intervention group</li> <li>• First sentence: “the research team will take...” change to “the research team will obtain...”</li> <li>• Last sentence: change to “ this information... “</li> <li>• Outcome measures at 30 days and 1 year</li> <li>• Third sentence “unscheduled readmission at 30 days....” is unclear</li> <li>• Also need to explain Omnibus as you have eHints.</li> <li>• Qualitative data collection design and strategies</li> <li>• 1b. Second sentence should commence “the medical team...”</li> <li>•</li> <li>• Last sentence: 1st strata - are there any more strata?</li> <li>• Phase 3</li> </ul>
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	<ul style="list-style-type: none"> <li>• This phase may also highlight negative consequences, not just benefits and this should be addressed</li> <li>• Analysis</li> <li>• The outcome measures should be linked to table 1, as they are numbered in the text in this paragraph (e.g. primary aim 1, secondary aim 2, 3 etc). This will make it easier for the reader to understand what you are referring to.</li> <li>• Ethics</li> <li>• Will you also obtain informed consent for focus group discussions that you mention? And the stakeholder interviews?</li> </ul>
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### **VERSION 3 – AUTHOR RESPONSE**

#### **Response to Reviewer #1**

##### General Comments:

Thank you for the revised manuscript. I did not receive a document detailing responses to my previous comments.

Author Reply: We had uploaded it on the system and apologize if it was missed out in the system.

Comment: Please check acronyms throughout - e.g. sometimes you use ICOC, and sometimes ICoC. Similar with C-Train vs C-Train. Please be consistent. Is there any training for those provided for those implementing the intervention? If so, details should be provided.

Author Reply: We agree and have revised accordingly.

Comment: Is there any training for those provided for those implementing the intervention? If so, details should be provided.

Author Reply: No additional training is provided for those implementing the intervention as they are already experienced staff in transitional and community care.

Comment: The second research question that you mention introduction asks about effect on clinical outcomes, but this is not mentioned as an outcome in the text. Make sure that your research questions match the methods.

Author Reply: Thank you for the comment, we have included it in the main text to reinforce this point. It was elaborated in "Phase 3. Inquiry and Intervention" on page 10 that the findings of the qualitative component will be analysed together with the post-30 days and post 1 year quantitative outcome measures to identify which mechanisms of the intervention have been successful and which require improvements.

## Specific Comments:

### Introduction

Comment: First line needs a reference

Author Reply: We agree and have done so.

### Methods

#### Intervention and control

- Final line in control group participants should be “the community VW and C2H teams will not be available for control group participants”

Author Reply: We agree and have revised accordingly.

#### Research design

- Final line should be “Additionally, while evaluation studies utilize quantitative data to measure intervention outcomes, a qualitative approach may address the limitations of using a single metric4.”

Author Reply: We agree and have revised accordingly.

#### Study aims and hypotheses

- Point c. change to “elderly and caregiver’s access experiences with service use and health care delivery”

Author Reply: We agree and have revised accordingly.

#### Sample size calculation

- What does HDB block stand for?
- First line of second paragraph “select a sample of 40” rather than “select a sample size of 40”
- How did you decide on the sample size of 40?

Author Reply: We agree and have revised accordingly.

#### Data collection strategies to measure outcomes

- Basic characteristics
- Intervention group
- First sentence: “the research team will take...” change to “the research team will obtain...”
- Last sentence: change to “this information...”

Author Reply: We agree and have revised accordingly.

#### Outcome measures at 30 days and 1 year

- Third sentence “unscheduled readmission at 30 days....” is unclear
- Also need to explain Omnibus as you have eHints.

Author Reply: Thank you for the comment. We have defined “unscheduled readmission” in the earlier sentence and hope this clarifies.

We have defined eHints in the earlier paragraph under control participants, and hope this clarifies. We have also added an explanation of the Omnibus.



## Methods

### Qualitative data collection design and strategies

- 1b. Second sentence should commence “the medical team..”
- Last sentence: 1st strata - are there any more strata?

Author Reply: We have revised accordingly. “whether they show improvements in health behaviour or not” is the second strata and we have indicated accordingly.

### Phase 3

- This phase may also highlight negative consequences, not just benefits and this should be addressed

Author Reply: We have revised accordingly to reflect this.

### Analysis

- The outcome measures should be linked to table 1, as they are numbered in the text in this paragraph (e.g. primary aim 1, secondary aim 2, 3 etc). This will make it easier for the reader to understand what you are referring to.

Author Reply: We have revised accordingly.

### Ethics

- Will you also obtain informed consent for focus group discussions that you mention? And the stakeholder interviews?

Author Reply: Thank you for the comment. Yes we have indicated that additional informed consent will be taken for interviews and focus group discussions, including that with the stakeholders.