PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Co-creation of a digital patient health hub to enhance education and person-centred integrated care post hip fracture: a mixed methods study protocol
AUTHORS	Yadav, Lalit; Gill, Tiffany; Taylor, Anita; Jasper, Unyime; De Young, Jen; Visvanathan, Renuka; Chehade, Mellick

VERSION 1 – REVIEW

REVIEWER	Sandra van Dulmen Radboudumc and Nivel (Netherlands institute for health services research), the Netherlands
REVIEW RETURNED	06-Aug-2019

| GENERAL COMMENTS | Improving information provision and understanding in patients, especially in those who are older or have restricted health literacy skills, is of utmost important to increase patients' self-management and slow deterioration of their health status. The steady increase in the number of people with hip fractures justifies a study into possible solutions to bridge the current information gap. The authors do, however, not convince the readers enough of the need to develop a digital education platform for this purpose. There is apparently no room to decide against developing such a platform, which - as previous studies show - often remain underused by many patients at this moment. The proposed protocol may need an extra step - after assessing needs and examining the health information requirements - to find out if the digital solution is the way to go. Overall, I found the paper not easy to read, due to several loose ends and non-specified choices in the methodology.

Abstract
The abstracts starts by mentioning the importance of adequate health literacy skills but that is not the focus of the intended study. Health literacy is only one aspect to consider in improving the information provision throughout the patient journey. Besides, being well-informed is one thing, understanding what information means for your particular situation and taking required action if needed, is another. The aims of the study are not clear, is it the engagement of patients, carers and healthcare providers (page 2), getting a unique perspective on our understanding of the entire hip fracture (page 3), to develop a 'model of care' (page 6), or something else?
Study limitations you raise are the limited sample size and the participation of only two hospital settings. Then why don't you involve more? And what does this mean for the outcomes of this study if you do not? The fact that the inclusion of 'only' hip fracture patients means that this may not be a representation of (e)health literacy among older people is not a problem as this is not an aim |
|---|---|

of your study so this does not need to be mentioned as a limitation either.

Introduction
Overall, the rationale of tis study is clearly described in the introduction. There is, however, a huge gap between the difficulty with understanding complex instructions and having to use a digital education platform. How are you going to make sure this is solved?
You aim to include high quality and patient-centred information in the platform but how is this guaranteed? Maybe by following recent clinical guidelines or developing a computer-tailored platform?

Methods
The authors propose a mixed-methods approach but that entails more than doing a qualitative and a quantitative part. How these are interrelated and for what purpose the interviews and the focus groups are being executed, respectively, remains unclear.
I do not think the authors make really use of co-creation. They do include patients in the project group but eliciting their input in a structured and iterative way, is something completely different (see e.g. De Beurs et al (Front. Psychiatry 2017)).
How are the different theoretical models interrelated? They partly use the same concepts in a different way so what concpets are used in what way?
Who is to decide the included patients are able to 'carry out the activities of daily living independently'? How long will the recruitment period last? Will you only recruit people with restricted (e)health literacy skills? Why do you not use existing validated health literacy questionnaires? Why do you ask patients about the likelihood of using future technological solutions? To tailor the platform for instance? The analysis of the data will be done simultaneously with progressing data collection. Why? Is this done to determine data saturation or to do theoretical sampling?
The paragraphs on confidentiality and patient and public involvement are nicely written, but still do not convince me that you apply real co-creation methodology. Maybe you better remove the word co-creation from the title and main text?

Discussion
The discussion is primarily a repetition of the rationale for the intended study, not a critical reflection on the methodology and expected outcome. Besides, what the digital education platform will include remains unclear.

REVIEWER	Charlotte Myhre Jensen Odense University Hospital and University of Southern Denmark, Denmark
REVIEW RETURNED	14-Aug-2019

GENERAL COMMENTS	Overall, this is a very interesting study oriented towards the organization of future health care services. Thus, it will definitely be interesting for readers of BMJ Open. I have a few comments towards elaborating on the contents of the study. As " Involvement of patients is a key feature in the design of this study" the theoretical framework concerning involvement is not clearly described. Likewise, the discussion section could benefit from having included other studies on involvement and also on tele-health support of hip fracture patients. Similarly, I would have

expected they included more studies investigating patient perspectives.

Examples of this are:

Sims-Gould, J., et al., Patient Perspectives on Engagement in Recovery after Hip Fracture: A Qualitative Study. J Aging Res, 2017. 2017: https://doi.org/10.1155/2017/2171865

Jensen CM, Smith AC, Overgaard S, Wiil UK, Clemensen J. "If only had I known": a qualitative study investigating a treatment of patients with a hip fracture with short time stay in hospital. International Journal of Qualitative Studies on Health and Well-being. 2017

Jensen CM, Smith AC, Overgaard S, Wiil UK, Clemensen J. Bridging the gap: A user-driven study on new ways to support self-care and empowerment for patients with hip fracture. SAGE Open Medicine. 2018

Jensen CM, Overgaard, S, Wiil UK, Clemensen J. Can tele-health support self-care and empowerment? A qualitative study on hip fracture patients experiences with testing an app. SAGE Open Nursing. 2018

These last three abovementioned studies have been published and discussed in the thesis:

Tele-health for patients with hip fracture - a participatory design study exploring how to support self-care and empowerment. Jensen CM. 2108

This PhD-study have used participatory design as the overall research methodology. The overall conclusion of this study was that an app can be a way to support individuals in their recovery from a hip fracture and provide a means of paying attention to secondary prevention. Nevertheless, this is not a stand-alone solution. Healthcare professionals need to support and focus on individuals and acknowledge their shock-like state of mind and its consequences for individuals. If a new and technological solution promoting healthcare knowledge is to be successfully implemented by healthcare staff during their everyday work, easy usability and management support are essential.

In my point of view, this protocol would benefit from a broader literature search and from taking these studies and their findings into consideration.

In p. 11 l. 26-36 inclusion criteria are described as "patients who could carry out the activities of daily living independently prior to hospital admission". In p. 12, l.42 it is stated that: "the participants will be classified into two groups, non-frail and frail." Firstly, it is not evident how frailty will be measured (i.e. what score or scale) and secondly, "a person who is able to carry out independent living " would normally not be categorised as frail.

P. 13, l. 43: I am not sure I understand this reference – and if it is an appropriate reference for a qualitative research study.

The study would also benefit from a PRISMA checklist.

VERSION 1 – AUTHOR RESPONSE

Response to Reviewer 1 Comments:

Comment 1:

Improving information provision and understanding in patients, especially in those who are older or have restricted health literacy skills, is of utmost important to increase patients' self-management and slow deterioration of their health status. The steady increase in the number of people with hip fractures justifies a study into possible solutions to bridge the current information gap. The authors do, however, not convince the readers enough of the need to develop a digital education platform for this purpose. There is apparently no room to decide against developing such a platform, which - as previous studies show - often remain underused by many patients at this moment. The proposed protocol may need an extra step - after assessing needs and examining the health information requirements - to find out if the digital solution is the way to go. Overall, I found the paper not easy to read, due to several loose ends and non-specified choices in the methodology.

Response 1:
Thank you for your constructive feedback, we really appreciate for your time and effort in reviewing our manuscript. We acknowledge the point raised is an important concern that we and future studies must consider while looking into the development of potential digital health solution/s.
We consider patients, their carers including family members and healthcare providers as part of an ecosystem. On one hand, those patients who lack adequate e/health literacy levels may be motivated to access potential digital health solutions through these members of the ecosystem who act as facilitators at different points in time throughout their care pathway. On the other hand, if such a potential solution could be adopted and integrated within existing health care system at a local level may increase the usability of the digital health platform. Thus, on page 6 and 7, we have attempted to justify the need to develop a digital health platform for our readers.

Further, we agree this proposed study as the first stage of needs assessment and examining the health information requirements. However, the next stages would be development and testing of a prototype to find out if the digital solution is feasible. A conceptual framework is attached [Fig 1] and text modified within the manuscript for better clarity on page 6 as;

"The research will be conducted in different phases incorporating a co-creation approach involving patients and their carers, primary/aged care clinicians, physiotherapists, dieticians, and hospital-based clinicians through iterative and process learning. This first phase of the study would inform the development of a prototype, a digital health platform (Phase 2). This will be further pilot tested for usability in the next stage (Phase 3). Thus, this study protocol paper exclusively deals with the detailed methods for the first phase [Fig 1]".

Comment 2: (Abstract)
The abstract starts by mentioning the importance of adequate health literacy skills but that is not the focus of the intended study. Health literacy is only one aspect to consider in improving the information provision throughout the patient journey. Besides, being well-informed is one thing, understanding what information means for your particular situation and taking required action if needed, is another. The aims of the study are not clear, is it the engagement of patients, carers and healthcare providers (page 2), getting a unique perspective on our understanding of the entire hip fracture (page 3), to develop a 'model of care' (page 6), or something else?

Response 2:
Thank you for this point and seeking further clarification. We acknowledge that the health literacy and information provision are different concepts and may not be entirely dependent upon each other and there could be many factors that need to be considered like personal circumstances of each patient before optimally utilising any such potential platforms. We have deleted the first sentence of the introductory paragraph within the abstract for better clarity.

The broader aim (long term) of our proposed research is to develop a 'model of care' using digital health solutions. However, the specific objectives of the first phase of formative research are described at the end of the introduction section (page 6 & 7).

The following changes have been made within the abstract section to provide clarity and reflect uniformity;

1) Introduction- "This protocol details proposed research which aims to develop a 'model of care' by using digital health solution that will allow delivery of high quality and patient-centred information, integrated into the existing process delivered within the community setting" (page 2).

2) Methods and analysis- "This phase of the study uses a pragmatic mixed methods design and a participatory approach through engagement of patients, their carers and healthcare providers from multiple disciplines to inform the development of a digital health platform" (page 2).

3) Strengths and limitations- "The proposed study will use a mixed methods approach which could provide a unique perspective around patient educational and information needs during the hip fracture care pathway, through a combination of the distinct strengths of each methodology" (page 3)

Comment 3: (Abstract)
Study limitations you raise are the limited sample size and the participation of only two hospital settings. Then why don't you involve more? And what does this mean for the outcomes of this study if you do not? The fact that the inclusion of 'only' hip fracture patients means that this may not be a representation of (e)health literacy among older people is not a problem as this is not an aim of your study so this does not need to be mentioned as a limitation either.

Response 3:
We will be approaching consecutive patients, who fulfil the inclusion criteria and are admitted to the two hospital settings for the period of six months. We acknowledge due to resource constraints; this could be a limitation of our study in terms of generalisability of study findings in a wider Australian context or internationally.

This point has been modified as "A quantitative survey considering only two hospital settings could be a limitation of the study as the study findings may not be generalisable to the wider Australian context or internationally" (page 3).

Further, we agree inclusion of 'only' hip fracture patients, may not be a relevant limitation. Therefore, this corresponding point has now been deleted. Thank you.

Comment 4: (Introduction)
Overall, the rationale of this study is clearly described in the introduction. There is, however, a huge gap between the difficulty with understanding complex instructions and having to use a digital education platform. How are you going to make sure this is solved?
You aim to include high quality and patient-centred information in the platform but how is this guaranteed? Maybe by following recent clinical guidelines or developing a computer-tailored platform?

Response 4:
The development of the digital health educational platform will take place in different stages through an iterative process. In each phase of our research process; patients, their carers including their family members and relevant healthcare providers will be engaged through a co-creation process.

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Thus, all possible attempts will be made to identify and address the challenges around truly optimising use of such a digital health educational platform.

Our study design is based on utilising sound theoretical frameworks including clinical guidelines, such as the NICE guideline on hip fracture management and WHO-ICOPE for community interventions to manage declining intrinsic capacities among older people (page 8 & 9 within the methods section/theoretical framework). Simultaneously, the study intends to utilise existing knowledge around best practices from local practitioners' perspective within the health system of South Australian State (page 12 within the methods section/qualitative methods). Thus, the proposed digital health educational platform can guarantee a high quality and patient-centred provision of information.

Comment 5: (Methods)
The authors propose a mixed-methods approach but that entails more than doing a qualitative and a quantitative part. How these are interrelated and for what purpose the interviews and the focus groups are being executed, respectively, remains unclear.

Response 5:
Thank you for this helpful comment. Use of different methods of research corresponds to objectives described on page 6 and 7, at the end of introduction section within the manuscript;
i) The quantitative method will help us understand health and ehealth literacy levels of patients, their current and potential use of digital health, their health status and factors influencing their recovery. Whereas, qualitative method on the other hand will help us understand the remaining two objectives of the first phase of the study- around information content and system requirements.
ii) With respect to individual interviews and focus group discussions, we intend to gather perspectives from individuals under different response contexts. For example;
Some participants may prefer one-to-one interviewing while for others it could be a group environment acting as better prompt to elicit appropriate responses. We intentionally wish to keep this process flexible and pragmatic to accommodate individual choice and circumstances.
Following changes were made within the manuscript for better clarity are as follows;
"The quantitative data will be analysed to address the first objective of the study related to general health literacy and ehealth literacy among older people with hip fracture" (page 11 under the heading- Statistical analysis plan).
"This component will help determine important factors that need to be considered at the time of designing an ehealth educational platform including potential barriers and facilitators around future use of such technologies. Thus, addressing the second and third objectives of this phase of study" (page 12 under the Qualitative methods heading).

Comment 6: (Methods)
I do not think the authors make really use of co-creation. They do include patients in the project group but eliciting their input in a structured and iterative way, is something completely different (see e.g. De Beurs et al (Front. Psychiatry 2017)).

Response 6:
Thank you for your comment and need for further clarification on this aspect.
In conjunction with your comment 1, we have modified the text and included our conceptual framework for the proposed research on page 6. The last paragraph of the introduction section indicates that the proposed research will be conducted in three phases; patients, their carers and healthcare providers will be engaged as part of the iterative process from informing the development of a digital health platform to testing its usability in the subsequent phases. The change in the text as follows;

"The research will be conducted in different phases incorporating a co-creation approach involving patients and their carers, primary/aged care clinicians, physiotherapists, dieticians, and hospital-

based clinicians through iterative and process learning. This first phase of the study would inform the development of a prototype, a digital health platform (Phase 2). This will be further pilot tested for usability in the next stage (Phase 3). Thus, this study protocol paper exclusively deals with the detailed methods for the first phase [Fig 1]" (page 6).

Further, our study steering group will also include representation from patients and consumer group to guide the conduct of study at each phase and ensure effective engagement of patients and relevant stakeholders. We have mentioned this under the heading 'Patient and Public involvement' heading (on page 14) of the original manuscript.

Comment 7: (Methods)
How are the different theoretical models interrelated? They partly use the same concepts in a different way so what concepts are used in what way?

Response 7:
Thank you for this comment and seeking clarification.
As a background to the proposed research, a preliminary review of literature was conducted around different theoretical frameworks to inform the direction of our research from design to implementation. In the process, we realised the need to include more than one framework, mainly due to two reasons;
1) Each framework is distinct- example NICE and WHO-ICOPE guidelines will help us follow the best practice around development of information content for the potential digital health solution. On the other hand, HBCSS will be able to guide the development of digital health system. Whereas, constructs of i-PARIHS would help us around the process of implementation from a health system perspective.
2) "While there are some overlapping constructs or concepts in each of these frameworks in addition to some limitations with each, using multiple frameworks to guide different stages of the research process and explore applicable constructs/concepts from different perspectives will provide a clearer outcome of the study results" (added on page 10).

Comment 8: (Methods)
Who is to decide the included patients are able to 'carry out the activities of daily living independently'? How long will the recruitment period last? Will you only recruit people with restricted (e)health literacy skills? Why do you not use existing validated health literacy questionnaires? Why do you ask patients about the likelihood of using future technological solutions? To tailor the platform for instance? The analysis of the data will be done simultaneously with progressing data collection. Why? Is this done to determine data saturation or to do theoretical sampling?

Response 8:
We really appreciate for your constructive comments and seeking further clarity.
The following sentence has now been added for clarity on page 10 (Inclusion and exclusion criteria heading) "Activities of daily living will be extracted from the case records as this are examined by an orthogeriatric nurse as part of existing practice".
Patient recruitment will last for around 6 months. This has been corrected now in the sentence as; "Approximately, 100 participants will be recruited from the two hospital sites over a period of six months" (page 10 Sample size and questionnaire heading).
All consecutive patients fulfilling the inclusion and exclusion criteria will be invited to participate in the study, irrespective to their levels of e(health) literacy skills. The following sentence has been added for clarity. "Those patients giving written informed consent will be recruited in the study irrespective to their levels of e(health) literacy skills" (page 10 Inclusion and exclusion criteria heading)
The study will be using existing health literacy and ehealth literacy scale used previously in other studies [References 28 & 29 respectively, page 11].

Patients will be asked about the likelihood of using future technological solutions to determine the likely scenario of usability of potential digital health educational platform. A sentence has been added on page 11-12 (under the heading 'Statistical analysis plan') as "This will help determine the likely scenario of usability of potential digital health educational platform".

Whereas on the other hand, qualitative methods will be able to explore potential barriers and facilitators around future use of such technologies. Similarly, a sentence has been modified on page 12 (under the heading 'Qualitative method') as "This component will help determine important factors that need to be considered at the time of designing an ehealth educational platform including potential barriers and facilitators around future use of such technologies"

The sentence on page 13 (under the heading 'Qualitative method') has been modified as; "The researcher will start analysing the data simultaneously with data collection till the data saturation is reached".

Comment 9: (Methods)
The paragraphs on confidentiality and patient and public involvement are nicely written, but still do not convince me that you apply real co-creation methodology. Maybe you better remove the word co-creation from the title and main text?

Response 9:
We used the term "co-creation" as an attempt to engage all the stakeholders relevant to the hip fracture care pathway including patients and their carers. These stakeholders will be involved in each stage of the process, from informing the development of a digital health platform to its testing and iteration guided by the feedback of the consumers.

Further, we have tried to simplify and address this specific comment through our responses above and appropriate revisions within the manuscript.

Comment 10: (Discussion)
The discussion is primarily a repetition of the rationale for the intended study, not a critical reflection on the methodology and expected outcome. Besides, what the digital education platform will include remains unclear.

Response 10:
Thank you for this comment. We have attempted to address this in the revised discussion section of the manuscript. These following changes can be seen within the discussion section;

Paragraph 2 (page 15)- "The aim of our proposed research is to develop a 'model of care' by using digital health patient education platform. The development of the digital health educational platform will involve an iterative process, across three phases. In each phase, patients, their carers including their family members and relevant healthcare providers will be engaged through a co-creation process".

Paragraph 3 (page 16)- "Our study design is based on utilising sound theoretical frameworks including clinical guidelines. Each framework contributes in a different manner to the process; the NICE and WHO-ICOPE guidelines will help to guide best practice around the development of information 'content' for the potential digital health solution. HBCSS will guide the development of digital health 'system' and i-PARIHS focuses on the 'process of implementation' from a health system perspective. There are some overlapping constructs between these frameworks alongside certain limitations. However, simultaneously, the study will also utilise existing knowledge around best practices from local healthcare providers' perspective in South Australia".

Further, this phase of the study will guide the development of a digital health education platform for the hip fracture patients, as a prototype.

Response to Reviewer 2 Comments:
Comment 1:
Overall, this is a very interesting study oriented towards the organization of future health care services. Thus, it will definitely be interesting for readers of BMJ Open.

Response 1:
Thank you for the comments; we really appreciate your time and effort in reviewing this manuscript
Comment 2:
I have a few comments towards elaborating on the contents of the study. As " Involvement of patients is a key feature in the design of this study" the theoretical framework concerning involvement is not clearly described.

Response 2:
Thank you for this constructive comment.
We agree involvement of patients is a key feature in the design of this study. A conceptual framework is attached [Fig 1] to reflect different stages of the study and text modified within the manuscript for better clarity on page 6 as;
"The research will be conducted in different phases incorporating a co-creation approach involving patients and their carers, primary/aged care clinicians, physiotherapists, dieticians, and hospital-based clinicians through iterative and process learning. This first phase of the study would inform the development of a prototype, a digital health platform (Phase 2). This will be further pilot tested for usability in the next stage (Phase 3). Thus, this study protocol paper exclusively deals with the detailed methods for the first phase [Fig 1]".
Further, our study steering group will also include representation from patients and consumer group to guide the conduct of study at each phase and ensure effective engagement of patients and relevant stakeholders. We have mentioned this under the heading 'Patient and Public involvement' heading on page 14 of the original manuscript.

Comments 3:
Likewise, the discussion section could benefit from having included other studies on involvement and also on tele-health support of hip fracture patients. Similarly, I would have expected they included more studies investigating patient perspectives.
Examples of this are:
Sims-Gould, J., et al., Patient Perspectives on Engagement in Recovery after Hip Fracture: A Qualitative Study. J Aging Res, 2017. 2017: https://doi.org/10.1155/2017/2171865
Jensen CM, Smith AC, Overgaard S, Wiil UK, Clemensen J. "If only had I known": a qualitative study investigating a treatment of patients with a hip fracture with short time stay in hospital. International Journal of Qualitative Studies on Health and Well-being. 2017

Jensen CM, Smith AC, Overgaard S, Wiil UK, Clemensen J. Bridging the gap: A user-driven study on new ways to support self-care and empowerment for patients with hip fracture.
SAGE Open Medicine. 2018

Jensen CM, Overgaard, S, Wiil UK, Clemensen J. Can tele-health support self-care and empowerment? A qualitative study on hip fracture patients experiences with testing an app. SAGE Open Nursing. 2018

These last three abovementioned studies have been published and discussed in the thesis:
Tele-health for patients with hip fracture - a participatory design study exploring how to support self-care and empowerment. Jensen CM. 2108. This PhD-study have used participatory design as the

overall research methodology. The overall conclusion of this study was that an app can be a way to support individuals in their recovery from a hip fracture and provide a means of paying attention to secondary prevention. Nevertheless, this is not a stand-alone solution. Healthcare professionals need to support and focus on individuals and acknowledge their shock-like state of mind and its consequences for individuals. If a new and technological solution promoting healthcare knowledge is to be successfully implemented by healthcare staff during their everyday work, easy usability and management support are essential.

In my point of view, this protocol would benefit from a broader literature search and from taking these studies and their findings into consideration.

Response 3:
Thank you for these useful suggestions and reference to the current literature. We have to utilise these references to help with further clarification. The discussion section of the manuscript has been revised accordingly. The changes can be seen within the discussion section as;
Paragraph 1, reference 34 (page 14-15)- "A study relating to consumers' perspective conducted in Sweden demonstrated that following an event of hip fractures, patients not only have restricted mobility but also lose their confidence and self-efficacy due to the complex recovery process consisting of both physical and psychological strain. The study further concluded that even after four months post-surgery, the previously healthy and independently-living felt hip fractures affected their day-to-day life [32]. Another study revealed that due to exposure to the ward culture at the time of acute hospital admission, the patients become passive and insecure about their future life situation. This suggests patients believe in recovery but lack psychological support to regain pre-fracture status [33] or inadequate empowerment [34]".
.
Paragraph 2, reference 36 (page15)- "Patients and their carers are interested in being involved in the decision-making process about the management of their condition. Increasingly, emphasis has been given to provide solutions which assist patients with more information and enable them to actively participate in their care process, including management of their expectations about the recovery process prior to hospital discharge [35-36]".

Paragraph 4, reference 44 (page 16)- "Similarly, by involving the user in a participatory design ensures consumers' requested functionalities can be incorporated to optimise the usability of the potential solution and simultaneously empower healthcare providers [44]".

Paragraph 4, reference 45 (page 16)- "A recent study demonstrates that older people with hip fractures can respond well to modern technological solutions utilised for health knowledge inspite of their limited use [45]".

Comment 4:
In p. 11 l. 26-36 inclusion criteria are described as "patients who could carry out the activities of daily living independently prior to hospital admission". In p. 12, l.42 it is stated that: "the participants will be classified into two groups, non-frail and frail." Firstly, it is not evident how frailty will be measured (i.e. what score or scale) and secondly, "a person who is able to carry out independent living " would normally not be categorised as frail.

Response 4:
Thank you for your comment and seeking further clarification.
According to the definitions of 'Activities of daily living' and 'Frailty' are two different measures. Therefore, it is difficult to interpret that all the people who carry out activities of daily living independently would normally not be categorised as Frail. However, we agree there can be correlation between these two attributes.

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The following sentences have now been added for clarity;

One page 11 (Sample size and questionnaire heading) "According to this phenotype, frailty is present when three or more of the following criteria are met: unintentional weight loss, weak grip strength, self-reported exhaustion, slowness and low physical activity level. On the other hand, when one or two of these criteria are met, respondents are classified as prefrail. However, for the purpose of this study, we will be using a dichotomous Frailty Phenotype; Non-frail (0–2 deficits, combining non-frail and prefrail categories) and Frail (3+deficits)".
On page 10 (Inclusion and exclusion criteria heading) "Activities of daily living will be extracted from the case records as this are examined by an orthogeriatric nurse as part of existing practice".

Comment 5:
P. 13, l. 43: I am not sure I understand this reference – and if it is an appropriate reference for a qualitative research study.

Response 5:
Thank you for your comment. We have now deleted the sentence for better clarity.

Comment 6:
The study would also benefit from a PRISMA checklist.

Response 6:
Thank you for your comment. A PRISMA-P checklist has been incorporated as Appendix-7.

VERSION 2 – REVIEW

REVIEWER	Charlotte Myhre Jensen Odense University hospital
REVIEW RETURNED	15-Oct-2019

GENERAL COMMENTS	Thank you for the opportunity to re-review this study protocol. It is clear that the authors have revised the manuscript according to previous comments and now it presents more clearly. Trying to develop a 'model of care' by involving the concerned persons is definitely worth while research. I wish you all the best.

VERSION 2 – AUTHOR RESPONSE

Response to Reviewer(s)' Comments (Round 2):

Comment 1:

Thank you for the opportunity to re-review this study protocol. It is clear that the authors have revised the manuscript according to previous comments and now it presents more clearly. Trying to develop a 'model of care' by involving the concerned persons is definitely worth while research. I wish you all the best.

Response to comment 1:

Thank you once again for reviewing our manuscript in the second round, we really appreciate your effort, time and all the constructive suggestions.