Author’s response to reviews

Title: Quality of Care for People with Multimorbidity - A Case Series

Authors:

Michaela Schiøtz (michaela.louise.schioetz@regionh.dk)
Dorte Høst (dorte.hoest@regionh.dk)
Mikkel Christensen (mikkel.bring.christensen@regionh.dk)
Helena Domínguez (maria.helena.domínguez.vall-lamora.02@regionh.dk)
Merete Almind (merete.almind@regionh.dk)
Kim Sørensen (l.lybeck@dadol.net.dk)
Thomas Saxild (saxild@mac.com)
Rikke Holm (KT91@suf.kk.dk)
Anne Frølich (anne.froelich@regionh.dk)

Version: 1 Date: 06 Oct 2017

Author’s response to reviews:

To the BMC Health Services Research Editors,

We have now revised the manuscript based on the comments from the reviewers. Below are our responses to the comments from the reviewers.

We hope that you find the manuscript interesting and suitable for publishing in BMC Health Services Research and look forward to hearing from you.

Yours Sincerely,

Michaela Schiøtz, on behalf of the author group

Our responses to the reviewer reports:

Comments from reviewer 1:

1. I found the Abstract to be somewhat confusing. I did not understand how the authors came to their results and conclusions based on what was described in the methods
section. I think that once the authors add detail to other parts of the manuscript, they should revisit their Abstract to be sure that it better reflects what they had done.

Our response: We agree with the reviewer that the abstract should be revised. Consequently, we have revised the abstract so it now better reflect the rest of the manuscript.

2. This is relatively minor, but I think that there is too much information on the Danish Healthcare System. I think that readers really just need a good sense of understanding who is covered by the public system, what it covers, and what this means in terms of data completeness for a study such as this one.

Our response: We agree with the reviewer that less information can be provided about the Danish Healthcare System. We have therefore reduced the information provided about the Danish Healthcare System and have included a short section about who is covered and have included a passage discussing what it means in terms of data completeness for the study in the discussion section.

3. Under Design, the authors state that selected patients were required to have 2 or more of a set of the most prevalent chronic conditions among adults in the Danish Capital Region. What is this estimate based on? Is there a report or some other research that can be cited? Similarly, under the Population section, the authors state that they selected 133 people with the same age and gender distribution as the population but do not explain where this comes from.

Our response: Thank you for noticing this. Information about the most prevalent chronic conditions and the age and gender distribution in the population in the Danish Capital Region is based on a report from the Danish Capital Region and results from our own research group. We have added citations (the report and the relevant paper from our research group) in the manuscript.

4. From 133 selected individuals, only 23 (plus 1 used for pilot testing) were included in the final sample. Was this low participation expected? If not, can the authors comment on any concerns about bias?

Our response: As described in the methods section the process recruiting patients and obtaining patient records included several steps (signed consent forms from the patients, sorting out patients without the relevant chronic conditions (due to incongruence in the different registration systems) and manually obtaining patient records from general practice). Each step meant that the number of patients that we could include was reduced. The number of included patients was a little lower than what we had hoped for. We have now described the process of including patients in more details and have included a section describing concerns about bias in the discussion section.

5. I was unclear on exactly who participated in the focus groups. Did specialists only comment on patients with conditions under their specialty? What about the GPS and nurses? I could not tell how many focus groups were held, how many attended each
group, or how many patient records were reviewed per group. More detail on this aspect of the study would be appreciated.

Our response: We agree with the reviewer that this should be explained further. Thus, we have added a section with more details on how the focus groups were organized.

6. Related to the above, there is not enough detail on the process used to obtain the medication reviews. For example, did both clinical pharmacologists review all patient records? If so, how were disagreements handled?

Our response: We have now described the process further including how information about prescribed medication was obtained and how the two clinical pharmacologists conducted the medication reviews.

7. Further to both above points, I think that the authors need to provide much more information on how "quality" of care was evaluated by the clinical participants. Were these based on guidelines, other standards, etc? Were clinical participants provided the questionnaire shown in Table 2? If so, do the authors have their responses and could this be included in the results somehow? As of right now, there really is not information to gage exactly how the authors collected their data, or even what kind of data they were collecting.

Our response: We agree with the reviewer that more information is needed on this topic. The responses from the clinicians were discussed at the focus group meetings and the answers were recorded and summarized by the authors. The responses from the clinicians were based on clinical guidelines, disease management programs and clinical standards for the relevant chronic conditions. After the focus group meetings the clinicians were presented for the results in order to make sure, that they agreed on the conclusions. We have provided more information about this process in the manuscript and have extended table 2, so it now includes the questions from the questionnaire.

8. What is an "episode of care" in this study? Each physician visit? Hospital stay? More definition is required.

Our response: We agree that an elaboration is required. Thus, the sentence now state: “an episode of care such as a hospitalization, a visit to an outpatient clinic or the general practitioner”.

9. The findings from the focus groups seem interesting but I think that the authors could delve into these issues - and the participants' perceptions - a little more. I wonder if it would also be possible to link some of the clinical participants' comments regarding barriers to care to the patient issues under discussion (while being mindful of patient privacy). I think that it would be of interest to readers to see some examples of how single chronic conditions among patients with multimorbidity.
Our response: We agree with the reviewer that this could be interesting. We have now linked some of the clinical participants’ comments to barriers of care to the patient issues under discussion.

Comments from reviewer 2:

This is an interesting study combining elements of case series, chart review and qualitative focus group discussions to identify quality of care deficits for patients with multimorbidity in the Danish health care system. However, there are some issue that need to be addressed.

My biggest concern is the small sample size of only 23 patients. This even gets more relevant, because only eight chronic conditions are used for patient selection. Multimorbidity is a very complex condition with a very large number of possible disease combinations and interactions between diseases, treatment regimes and medications. I therefore recommend a more careful declaration of study limitations. I strongly advise the authors to delete the sentence "The findings from the sample can thus be generalized to the population of people with multimorbidity." (pg. 13, ln. 11-14). This is contradicted by the small sample size and the small number of selected diseases - and it is not needed as the identified quality of care issues are relevant even if there are patient groups not covered from the study. Additionally I strongly advise to delete the sentence "because clinician review revealed recurring patterns, it is unlikely that including more patients would have altered the findings." This statement is not conclusive, because recruiting a broader range of patients (regarding the disease spectrum) might also have resulted in more differentiating categories in the focus groups. In this regard it is also needed to mention the small disease spectrum as a study limitation.

Our response: We agree with the reviewer that the relatively small number of cases should be listed as part of the study limitations. Further, we have deleted the sentences "The findings from the sample can thus be generalized to the population of people with multimorbidity." and "because clinician review revealed recurring patterns, it is unlikely that including more patients would have altered the findings." Instead we have included a passage about how only patients with at least two out of six chronic conditions were selected as a study limitation and have included the reviewer’s comments saying that including patients with other chronic conditions than the selected could have resulted in more differentiating categories in the focus groups.

If I understood the authors right, they conducted three focus groups, but each with the same personnel. If this is true, they also need to introduce this as another study limitation as usually additional focus groups also include additional people.

Our response: It is correct that three focus groups were conducted. However, most of the participants differed during the different meetings. Thus, three different general practitioners participated, two different home nurses participated, and three different specialists participated. Only the nurse from the municipality center participated in all three focus group interviews. We now have stated that clearer in the methods section and have also included a section about this under study limitations.
Besides these revisions I also recommend to start the methods section under the heading design with an initial statement that summarizes the complete design (case series vs. chart review vs. focus group discussions vs. evaluation of medication regarding start/stopp and other criteria etc.). The authors are also advised to sort the results section a little more with regard to the methods used. The way it is written now, it is difficult to understand and really needs some improvements in readability.

Our response: We thank the reviewer for this comment. We have now included an initial statement under the methods section that summarizes the complete design. Further, we have revised the results section in order to improve the readability.