Reviewer's report

Title: Low patient activation levels in frail older adults: a cross-sectional study

Version: 0 Date: 07 May 2017

Reviewer: Suman Kundu

Reviewer's report:

The authors investigated an important study investigating patient activation among older adults in the Netherlands. I have the following few queries concerning the methods which might be worth considering:

1. If the main objective of the study is to investigate patient activation, the authors need to consider a reference group to compare the level of activation of the adults in this study.

2. Page 5 line 118: Please provide rational of selecting ≥75y and mentally competent adults? Regarding the age they seem very old and thus likely not capable of physically and mentally active. Not sure whether other similar studies also consider similar age range. Why do they need to be mentally competent to include in the study?

3. Page 6 line 133: Please explain how the 13 questions each with four answer options can make the PAM-13 ranges from 0 to 100?

4. Page 6 line 138-143: It is not clear how the authors came up with thresholds to define 4 levels of PAM score? Otherwise the choice seems arbitrary and considering the PAM score in the continuous scale should be appropriate.

5. Page 7 line 147-152: how did the authors come up with the potential factors that may associate with the patient activation? Any prior literature or expert opinion?

6. Page 7 line 163: "..multimorbidity.." please explain a bit what you mean.

7. Please provide the metric to assess model fit, what is the R-square value? Showing the residual plot might be helpful.

8. Page 8 line 179: rational of categorizing the PSQ? Why it is not considered as a continuous variable unless the thresholds have a clinical meaning?
9. Page 8 line 185-186: please report the cross table of PAM levels and type of residency to justify this claim.

10. Page 9 line 190 and 195: please provide the explanation of positive effect of education and multimorbidity on the PAM score since the data are counter-intuitive. Perhaps they can elaborate that in the discussion.

11. Please avoid repeating the data in the discussion. Summarized the results and present the key findings of the study in texts.

12. Page 10 line 231-233: I miss the data supporting this conclusion.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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