Reviewer’s report

Title: Factors related to health-related quality of life in older people with multimorbidity and high health care consumption over a two-year period

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Reviewer: Raphael Wittenberg

Reviewer's report:

This paper presents the findings of a longitudinal study assessing the HrQoL, symptom burden, activities of daily living, physical activity and depression over a two year period among a sample of older people with multi-morbidity and high health care consumption. The topic is important in view of the rising numbers of people with multi-morbidity.

The abstract while helpful needs some amendment: The final sentence of the background contains repetition of 'factors that are related to HrQoL'. The results part should presumably refer to 'higher limitations in activities in daily living' (rather than higher ability). Also in the results part there is a redundant word 'variability' at the end of the penultimate sentence, and the words 'over a two year period' appear twice in the last sentence. The country/area and year of the study are not stated.

Background: The final sentence would be clearer if it referred to 'limitations in activities of daily activity' and 'limitations in physical activity', such that all the 'conditions' are expressed as limitations.

Method: The first paragraph should provide more information about the Age-FIT study, covering country/area and date and how the sample were identified/selected. The second paragraph should make clear whether the older people included in this study comprise members of the Age-FIT control group, treatment group or both. Since the NHP which is the dependent variable contains a physical activity dimension and physical activity assessed by the s-IPAQ is an independent variable, the risk of circularity/endogeneity should be mentioned.

Results: It is not clear why a mixture of means and medians are set out in the second paragraph: consistency would be better unless reasons are stated for showing means for some variables and medians for others. The paragraphs on HrQoL could be clearer about which findings relate to measurement at baseline, which to measurement at follow-up and which to change between baseline and follow-up. The paragraphs on changes over a two year period could usefully remind readers that the sample constitute a select group in that people who were no longer alive and living at home were excluded. It could also usefully mention whether there is any risk of regression to the mean affecting the findings, if for example baseline interviews were conducted at a time of high resource use due to an acute episode.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

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