Reviewer’s report

Title: IN-HOME PHYSICAL FRAILTY MONITORING: RELEVANCE WITH RESPECT TO CLINICAL TESTS

Version: 0 Date: 15 May 2018

Reviewer: Qian Li Xue

Reviewer's report:

General comments:

The study aims to evaluate the ARPEGE Pack for in-home monitoring of frailty status in older adults. This is a timely topic and has great potential to facilitate frailty assessment, which is often perceived as resource demanding in a clinical setting, therefore limiting its use in practice. The close correlation between ARPEGE-based and conventional measurements of grip strength and gait speed is impressive. The comparisons for the exhaustion and physical activity components are less useful for good reasons as pointed out by the authors. Although it is important to analyze the correlations on a continuous scale, it would be interesting to see the correspondence between discrete frailty states from using the two approaches. The authors are encouraged to add this additional information into the manuscript by calculating, for example, Cohen's kappa. In addition, this manuscript would benefit from including a table that summarizes the baseline characteristics of the study sample; otherwise, the list of variables in the Methods on page 6 would be irrelevant. It would also be interesting to compare the correlations between the healthy subjects and the patient sample in the study.

Specific comments:

Page 7, line 164: what is PA? Should it be PT instead?

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.

Yes

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

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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