Reviewer’s report

Title: Osteoporotic fractures and obesity affect frailty progression: A longitudinal analysis of the Canadian Multicentre Osteoporosis Study

Version: 0 Date: 14 Oct 2017

Reviewer: David Hewson

Reviewer’s report:

General comments:

This article is an extremely well written paper that provides important results with respect to potential risk factors for changes in frailty status over time. However, the article would benefit from changing the way in which the magnitude of the significant effects reported are interpreted. In the methods section, a mean rate of deficit accumulation per year of 0.04 reported in Kennedy et al. (2014) was cited as being a clinically important difference. Yet in the present paper, although greater physical activity significantly decreased frailty over time, the reported change was only -0.00 (95%CI -0.00—0.00) in Table 3/Figure 3. It would be worthwhile discussing these findings considering a minimal clinically important difference for the CFI. Indeed, out of the 12 significant effects reported for women, only four reached an effect of 0.04, with only 6/14 significant effects for men reaching 0.04.

Specific comments:

Page 5, line 18. The plural of the noun analysis should be analyses (analyze is the verb).

Page 6, line 12. Change "accumulated not saturated" to "accumulated but did not saturate"

A pertinent point is made on page 11, lines 6-11. "Future studies should examine if culturally tailored psychosocial interventions improve older adults' well-being and their compliance to interventions aimed to decelerate physical frailty." Although this comment is likely to be true, it is unrelated to the rest of the article in which issues of compliance and culture are not mentioned.

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:

Acceptable

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