Reviewer’s report

Title: The Impact of Waist Circumference on Function and Physical Activity in Older Adults: Longitudinal Observational Data from the Osteoarthritis Initiative

Version: 1 Date: 29 March 2014

Reviewer: Heather Vincent

Reviewer’s report:

Minor essential revisions

Introduction:
1. Paragraph 3: The introduction could be strengthened with the addition of a previous review that addressed which measure of adiposity could best predict lower levels of mobility (Vincent, Vincent and Lamb. Obesity and mobility disability in the older adult. Obes Rev. 2010 Aug;11(8):568-79. Waist and BMI could predict lower mobility levels and that longitudinal data are needed to show the relationship between waist/ BMI and disability.


Methods:

This was very well written. There are only minor comments:
3. Under Study Measures: “Questionnaires ascertained…” Questionnaires collected data on….”

4. Statistical analyses; “All data is..” should be “All data are…”

Do you have a rationale for choosing the quartiles for the waist circumference values? If so, please cite.

Results:

5. “Minimal clinical differences were….“ Do you have a citation to reference here about what is considered he MCD?

Second paragraph: “The unadjusted functional outcome data is..” should be “…data are..”.

6. Paragraph 3, line 2: SF-12 decline appear..” should be “.appears.”

Discussion:

7. This section was straightforward, and agrees with the published literature in the area. The main conclusion may be modified, however, to include a statement
that strengthening exercise and increased physical activity levels – even if weight change is not dramatic – can significantly improve joint pain and may help improve walking performance.

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests