Reviewer’s report

Title: A development study and randomised feasibility trial of a tailored intervention to improve activity and reduce falls in older adults with mild cognitive impairment and mild dementia.

Version: 0 Date: 02 Jan 2018

Reviewer: J Close

Reviewer’s report:

This is an extremely well written paper and a pleasure to read.

It provides a comprehensive account of what is essentially a feasibility study.

The rationale is well made, the design is pragmatic and demonstrates a clear understanding of the challenges in working with this population.

There are multiple outcomes which are appropriate and have the potential to influence the design of a larger RCT.

Undertaking this work in such a comprehensive manner should provide meaningful data to support further applications for trials in this area for these authors and others interested in this field of research.

Couple of minor points

1) Why stop intervention in people who are declining cognitively - it is the nature of the target population. Perhaps it is just the wording that needs to reflect that is isn't simply a decline in cognitive status but a change that influences the ability to safely engage in the proposed intervention.

2) Pedometers will provide limited information. There are better activity monitors available which will provide more information on gait speed, gait quality, time on feet, differentiate between recumbent / semirecumbent position etc.

Level of interest
Please indicate how interesting you found the manuscript:

An exceptional article

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

Acceptable
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests'

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal