Reviewer's report

Title: Measuring the implementation of a group-based Lifestyle-integrated Functional Exercise (Mi-LiFE) intervention delivered in primary care for older adults aged 75 years or older: A pilot feasibility study protocol

Version: 2
Date: 13 February 2015
Reviewer: Kirsty Sprange

Reviewer's report:

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

None

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Table 4 – 'EQ5D' is stated twice at bottom of the table, is this correct?
2. Tables 5-7 – Could include how many participants are represented by the feedback?
3. Possibly use bullet points for the ‘activity status’ list on page 9 to help with readability?

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

4. Introduction
   It may facilitate reading and understanding if much of the discussion section were to be moved to the introduction section and information on Mi-Life section as appropriate. Specifically the evidence cited supporting the use of this type of intervention and why it is being used to explore the study objectives e.g. page 28 meta-analysis evidence.

5. Intervention
   Although there is information provided on the pilot test for the intervention and how the intervention was modified at this point, there doesn't appear to be any information on how the intervention has been adapted for use in a group-based setting. Was the Clemson et al 2012 intervention delivered to individuals only or small groups? How has it been adapted for group dynamics, for example variation between group members' abilities? Also if the delivery of the intervention has been adapted whether this has required any specific training or different approach to delivery by the Physio?

6. Eligibility and consent
On page 10 the study states the researchers won’t be recruiting participants with dementia, but more information on how they will be managing those participants with cognitive impairment who do take part could be beneficial. Particularly, whether they are using a cognitive measure e.g. 6CIT or MMSE, to establish level of cognitive function and how they will manage participants when in the trial. So for example the consent process, the authors indicate that a physician will make the decision on whether someone can take part if they have a carer with them. Will consent be monitored throughout the 6 month intervention in case of a change in cognitive capability? More clarity on this would be useful.

7. Fidelity
It may be helpful to further describe (page 20) how the fidelity/adherence videos of the groups will be reviewed. For example will the independent reviewer/observer be using a checklist, a scale or looking for any specific behaviours/actions? Has this method been tested for consistency etc?

On page 11 under enhancing recruitment, the authors may want to further explain how they will ensure translation is consistent? Assuming translators refers to a family relative or carer? This information would help inform intervention adherence and fidelity.

On page 12, for clarity it may be useful to confirm whether those taking part in the study and those not taking part will be part of mixed groups receiving the intervention. If they are, then possibly stating how this will be managed.

8. Qualitative data
The authors indicate they will be using thematic analysis for the qualitative data, it would be helpful to know whether a pre-set list of topics would be covered during the interviews such as a schedule, and if so what topics would be covered. Will they be using the qualitative work to inform adherence? i.e. why participants didn’t complete the intervention. If they were to include a schedule of topics or themes they wanted to cover during the interviews this would help support how they will explore their objectives.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I declare that I have no competing interests