Reviewer's report

Title: Mobile-phone-based Home Exercise Training Program Decreases Systemic Inflammation in COPD

Version: 1 Date: 7 April 2014

Reviewer: Donna Goodridge

Reviewer's report:

Major Compulsory Revisions

1. The focus of the background is on COPD, inflammatory markers and exercise training. A review of the state of the art with respect to the use of mobile technology to enhance exercise training is needed here.

2. The intervention group received two interventions: the music program on the mobile device and telephone follow-up whenever patients missed one day of training. Would an intervention involving regular telephone follow-up without the mobile device have resulted in similar improvements? It seems that the contact from the program may have been critical in motivating participants to continue walking.

3. The statistics section requires additional explanation. The analysis undertaken is not clear. "For data with even or uneven or variation, a M-W U test or Wilcoxon signed rank test was used". It seems to me that these categories would encompass all of the data. Repeated measures analyses would seem appropriate for the data collected. Why did you decide not to use this type of analysis?

4. Adherence in both groups would have been interesting to evaluate. Were the participants asked at any time the reasons underlying their decisions to adhere or not adhere to the walking program?

5. It was not initially clear how adherence was reported back to the central server. It is unclear how the reliability of using the duration of listening music correlated to actual walking time. How did you account for people who may have listened to music but not walked the entire duration? Is it possible that patients turned off the music for other reasons? These issues need to be discussed within the paper.

Level of interest: An article whose findings are important to those with closely related research interests

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.