Reviewer's report

Title: Early telemedicine training and counselling after hospitalization in patients with severe chronic obstructive pulmonary disease: A feasibility study.

Version: 3 Date: 22 June 2014

Reviewer: Anne Holland

Reviewer's report:

This manuscript details the use of telerehabilitation and counselling immediately after an admission for an acute exacerbation of COPD.

The use of telerehabilitation at this time point is novel and arguably represents the time where it is most likely to have an important impact, given the impact of traditional rehabilitation on hospitalisation and survival when delivered after an exacerbation.

The study recruited individuals with severe COPD who declined traditional rehabilitation, which is also a novel approach. The study includes relatively large numbers of subjects (n=37 completed) compared to other pilot studies in this area.

However, the application of telerehabilitation at this time point also presents some significant challenges for interpretation of results. All patients would still be undergoing natural recovery following the exacerbation, and thus in an uncontrolled trial it is impossible to tell whether the changes in clinical outcomes have anything to do with the intervention. The economic argument is difficult to support, given that we cannot exclude the possibility that the patients may have improved similarly without any intervention. This problem is exacerbated by the application of nurse-led counselling via teleconferencing, which was clearly an existing intervention in this setting.

Major compulsory revisions

1. Given the uncontrolled nature of this trial, and the likelihood that spontaneous recovery contributed substantially to the observed improvements, the authors should consider being much more conservative in their interpretation of clinical and economic outcomes. The manuscript would be stronger if it were to focus first and most strongly on the feasibility and acceptability of the intervention. There should be a much lesser focus on the clinical and economic outcomes, both in the results and the discussion, in keeping with the difficulty in interpreting these data.

2. The abstract contains no data and thus does not reflect the content of the manuscript. The authors could consider revising this, taking into consideration the uncontrolled nature of the trial.
3. The lack of an intention to treat analysis is a weakness, given that 25% of participants dropped out and we do not know anything about their outcomes. This should be acknowledged.

4. It appears that the trial was registered retrospectively, after data collection was complete. Please clarify.

Minor Essential Revisions

5. Introduction - there are now a number of other pilot studies of telerehabilitation for COPD. This should be reflected in the literature review.

6. Reference 11 is an editorial. The authors should reference the original research by Stickland et al, to which this editorial refers.

7. Methods - please clarify whether the usual pulmonary rehabilitation program is offered in an inpatient or outpatient setting.

8. Please clarify why an intervention period of 3 weeks was chosen when current pulmonary rehabilitation standards recommend a duration of 8 weeks (Spruit et al 2013) and your usual program is also of this length?

9. Were the functional tests carried out at home or in the hospital?

10. Discussion - Reference 27 refers to a very different study where exercise intensity was controlled using external cues. In this study the authors do not provide any evidence that the desired exercise intensity was achieved. Consider revising this section to be consistent with the data available.

11. Abbreviations - please define RM in English

12. Table 2 - the number of subjects in this table is not consistent with the text. Here we have subject numbers ranging 40 - 46, where the text indicates this table refers to subjects who completed (n=37).

Discretionary revisions:

13. Were the characteristics of non-completers different to completers?

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

Quality of written English: Needs some language corrections before being published

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.