Reviewer's report

Title: Rationale, design and baseline results of the Treatment Optimisation in Primary care of Heart failure in the Utrecht region (TOPHU) study: a cluster randomised controlled trial

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Reviewer: pupalan iyngkaran

Reviewer's report:

The authors have provided a study of importance to the field. There have been many process of care studies to improve HF. A good example is the OPTIMIZE-HF study. That and most other studies focus on the cardiologist team. Even when care is provided for by the clinical nurse consultants it is within a specialised team. There has also been much interest for close-to-community health care workers to bridge gaps in remote communities or less developed countries. As this article focuses on the general practitioners who has a lot of access to patients it is a feasible alternative for many health systems and thus the results are much anticipated. On these arguments I feel strongly that the concepts raised warrants strong consideration for publication provided the other aspects are similarly of an acceptable standard.

1. Abstract: wording a language could be strengthened. (Minor Essential Revisions)

2. Introduction: (Major Compulsory Revisions)
There seem to be a mismatch between the association for GP diagnosis and subsequent titration of medications. I believe the focus here is on education and optimising treatment in primary care. The issue of diagnosis is completely separate, if not the authors will need to clarify how so? I do note the sentence "uncertainty is an important barrier to treatment" but the context of the paragraph does not fit very well. I am not sure why it is important to mention treatment of HFpEF.

3. Methods: (Major Compulsory Revisions)
The content is generally there, but this section can be improved. It may be reasonable to explore other methods papers from this journal, Trials or American Heart Journal and explore the headings they have used and the order they have used. It is vital for current research standards that enough information is provided in a consistent manner from the the paper for others to similarly repeat the study. I have listed some headings in correct order - Aims and scientific rationale; Projected outcomes; Protocol - enrolment criteria, recruitment of subjects, participant follow-up, data collection and storage, end points; Training and standardisation; Expected sample size; Statistical considerations.

Results: (Discretionary Revisions)
I am not sure that the results are vital for this paper. It may be best to just focus on the methods. This is a complex and important study. As much information about the steering committees throughs and plans should be provided for readers in the methods section.

Discussion: (Major Compulsory Revisions)

The discussion is inadequate. The authors need to provide about a 20-30% of the content of the article discussing the many aspects os the methods. I again point to previous HF trials with published methods. In this case it would be interest for the authors to discuss

- why not choose a nurse led model
- is self care an alternative
- what are the cost ramifications for GP's to focus so much on one disease
- why only one training session
- what about technology assisted tools?

There are many other aspects that warrant discussion

Level of interest: An article of importance in its field

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

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