Reviewer's report

Title: Paediatric Palliative Care improves patient outcomes and reduces healthcare costs: Evaluation of a home-based program

Version: 1 Date: 05 Nov 2017

Reviewer: David N. Korones

Reviewer's report:

The authors have responded thoroughly and carefully to all the reviewers’ criticisms. I still think the difference between the control and PPC groups is a major issue and needs to be emphasized even more in the discussion. I also still think the prospective part of the study should be published separately and not as a part of this report, as it is a different study.

ABSTRACT

1. I don't understand what a mixed closed cohort design is. Is that standard terminology? If so, it is fine to leave that.

2. There are still no P values or CI's in the abstract - not essential but it would help.

METHODS

3. Page 6, lines 13-14. It sounds like the 2 retrospective cohorts are (1) those enrolled in StarPALS and (2) those not enrolled AND who died in the hospital. These seem like very different groups. Is it required that the kids in the control group must have died in the hospital? (It appears so) If so, they may be a sicker group, need more in-hospital services vs the children who were in the StarPALS program who were able to get home (and perhaps were less sick and less complicated since they did get home). That really needs to be elaborated upon in the discussion.

4. Page 7, lines 12-17. The authors are to be commended for including the criteria for eligibility. While not essential, it would help the reader to have an example listed within
each category as it is sort of vague. E.g., for Category 1, one could add at the end (e.g., cancer)

RESULTS

5. Page 13, lines 7-21. The authors might want to consider listing how many children were in each of the 4 categories in the control and PPC groups, rather than just divide it into cancer and non-cancer.

6. Pages 16-18. I know the authors want to keep this prospective aspect of the study in this report. But I still have problems with including it. It is a different cohort of children, the data are presented in a different way (e.g., by disease not by category), and it is not clear on Table 7 whether the 3, 6, 12 month scores are 3, 6 12 months from program entry or 3, 6, or 12 months prior to death. This is really a different study and would be much better if it was presented as a separate report.

DISCUSSION

7. The authors do acknowledge that the inherent differences between the PPC and control groups in this study is a limitation to interpreting results. However, they should elaborate on the fact that the control group included only hospital deaths as that is perhaps the most significant difference. That should come first, then the mention of differences in baseline characteristics, and last, the 8 excluded patients.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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