Reviewer's report

Title: Evaluating processes of care and outcomes of children in Hospital (EPOCH): Protocol of a multi-center cluster randomized trial

Version: 2 Date: 14 March 2015

Reviewer: Patrick Brady

Reviewer's report:

The author team did an excellent job with their response.

Major compulsory comments:

none

Minor revisions:

1. considering this journal is for a broad audience of trialists, please consider better defining ‘no-event’ on page 8 first full paragraph. Presumably this was the MERIT composite outcome referenced above but this won’t be clear to many readers.

2. page 9, mechanisms to identify children at risk: (disclosure that probably is not needed: I’m from Cincinnati). Two modest issues that are worth addressing. Not all of the criteria in paper by Brilli et al are subjective (e.g., HR>180 is objective). Secondly, these criteria are still in use and supplemented by the PEWS work by Tucker et al.

3. page 13, top of page: there are two instances of new unpublished data in this methods section that are not necessary in framing methods and are not presented in sufficient detail for readers to gauge their validity. I would suggest removing.

4. The author group notes linear regression for severity of illness scores including PIM2 and PELOD. I am not an expert in these scores but I worry they would not meet assumptions of normality. Consider addressing the need for log transformation or alternative regression methods as appropriate.

Minor revisions not for publication:

1. the font used for section headers in abstract and paper and in bibliography has odd spacing that is difficult to read. Please review.

2. On top of page 19, SCDE begins a sentence. Most style manuals advise against this. Consider writing out.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable
**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

as before re my declaration.