Reviewer’s report

Title: Effect of a one-person CRM team leader training on team performance and leadership behavior in simulated cardiac arrest scenarios: A prospective, randomized, controlled study

Version: 2
Date: 3 February 2015

Reviewer: Susan Nancarrow

Reviewer’s report:

This is an interesting article, and clearly a great deal of work and consideration has gone into the delivery of the program. The use of a randomised controlled trial methodology for an educational intervention for the workforce is also relatively novel, and also presents some challenges. I believe that the article makes a potentially useful contribution, however have some methodological concerns. I also feel that the main point of the article (ie single leader vs whole team training) gets lost in the other details and complexity of the article. I think that trying to keep this emphasis will simplify the paper and increase its value and readability.

One of the challenges of performing an RCT is that the method is now so mechanised, that it is easy to spot any deviations from the correct method. It is helpful that the authors have included the CONSORT guidelines. The key finding, that training only the leader can have a large impact on team outcomes, is important.

Minor essential revisions:
1. The aim of the study needs to be included in the abstract
2. The use of the word training is singular (the word trainings is used throughout the text and should be corrected)
3. There are numerous acronyms in the document which become a bit overwhelming - it would be good if these could be reduced, and a glossary introduced for the acronyms that are retained
4. Do not use an acronym in the title (ie CRM). In fact, the title could be simplified to more clearly represent the comparison between the two groups.
5. It would be valuable to mention the resource implications of the key findings (ie training only the leader is cheaper)

Major compulsory revision

6. There is no sample size calculation within the text. This does need to be calculated so the reader can determine whether or not the lack of statistical significance is actually a sample size problem (Type II error). This should also be mentioned in the limitations.
7. The randomisation process needs to be explained in more detail - alphabetical
order is not randomisation... how did they randomise participants based on alphabetical order?

8. The outcomes should be described in terms of primary and secondary outcomes (and these included in the description of the hypotheses.

9. The results are contextualised largely within the CRM literature. To do the findings justice, it would be valuable to incorporate wider literature on leadership training and performance, and try to draw conclusions or at least meaning for and from that body of work.

**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