Reviewer’s report

Title: Integrating and extending cohort studies: lessons from the Extending Treatments, Education and Networks in Depression (xTEND) study

Version: 3 Date: 27 April 2013

Reviewer: Jenny Theodora van der Steen

Reviewer’s report:

Major compulsory revisions

This paper discusses the benefits and pitfalls of the combining of two Australian cohort studies.

1. I understand that for this topic, it is difficult to find the best format. However, the discussion is overly long at present, and it is difficult to keep overview of the main issues even for readers who are specifically interested in this topic. The discussion section in fact comprises parts of the background, methods, and results. The studies are being described partly in the background, and partly in the discussion. Please clearly indicate illustration with study material, for example, using Boxes (or as indicated by the Editors). Further, please introduce and explain the structure of the paper, and be more concise for the reader to keep on track.

2. On the other hand, some more background on how the combining was brought about may help understand the examples provided. How did the researchers meet, were they aware of each other’s studies initially? What was driving them to initiate the combining? Did they read any literature on this before starting it, and was that helpful, or should one find out possibilities for their own study because they are very specific, individual, or local? What inspired them to do it the way they did, was it literature, coming to a consensus, common sense?

3. Most important, because the post-hoc combining of datasets also cross-nationally, and its benefits and pitfalls has been described in the literature before for, for example, studies on aging (Höfer et al) and on acute diseases in the nursing home setting (van der Steen et al), a new element is that the cohorts had separate baseline assessments, but were integrated on the way with a combined follow-up assessment. This involves additional benefits (pages 17, 18). I believe the manuscript would benefit from a focus on this element, introducing depth rather than addressing a wide variety of topics superficially. You may refer to the published literature with little or no illustration from the two studies for the elements that have been described in the literature already.

4. In this respect, please explain how the variable time after the baseline assessment (1 to 7 years depending on the baseline assessment in either of two cohorts which hardly overlap, page 13) affects the validity of measuring change over time.

Minor essential revisions
5. I do not understand Table 1: what do the symbols mean (both may indicate “yes” or “applicable”). Further, without knowing the xTEND project in detail and without explanation, the differences with research synthesis are not understandable. Consider dropping it, or limit to the items for an overview of possible reasons for combining.

6. Table 1 and 2: reference to the resources is lacking. Alternatively, if all from the empirical data of the described studies, indicate the methods of how the classifications were brought about.

7. Table 3 provides a nice overview of what the studies are about, and how dissimilar measurements were initially. Please explain how less than ideal can be distinguished from statistical intervention required. Would less than ideal move to the other category if only the data allowed for this, so depends on what happens to be available? So less than ideal indicates shortcomings but no statistical intervention can address it due to lack of data, and statistical intervention required in fact represents shortcomings but statistical intervention is possible because the data happen to be available?

8. Please indicate how the number of publications in Figure 1 relates to the overall increase of publications over 2002-2011

9. Please comment on the very limited amount of overlap between the two studies (Figure 2, inner regional only) and implications for the combined analyses (were there enough cases to compare, and if so, were the inner regional groups of the two studies comparable on key characteristics?)

10. You may wish to explain better for non-Australian people why it is so important to include people from very remote areas if they represent only 0.6% of the NSW population (politically or strategically; in what respect are these people so different?)

11. Please explain why people are being identified who most likely benefit from interventions (page 9) while the studies are observational.

Discretionary revisions

12. You may wish to comment on the combined studies having a lower baseline response rate with a higher risk of bias compared to the HCS cohort alone.

13. Run-on sentences of 5 to 7 lines may be split up.

14. Please limit reference to work outlined elsewhere etc. to your own work and give credits to the authors where not.

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

Quality of written English: Acceptable

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