Reviewer's report

Title: Long-term health-related and economic consequences of short-term outcomes in evaluation of perinatal interventions

Version: 4 Date: 6 April 2010

Reviewer: Elina Hemminki

Reviewer's report:

This is the 2nd version of the paper. The authors had not indicated where the changes (said to have been) made are, which caused some difficulty. I do not have the old version at hand.

Below are mine old comments (abbreviated) as well as a comment whether it seems to have been taken into account. The main deficiency still is that the purpose of this paper is not given.

1. The reason to publish this protocol is not clear. A reason I can think of could be to get suggestions from the readers of original studies for the fist part... An explanation is now given in the response letter, and briefly at the end of “validation” para and of Discussion. These are unlikely places for the readers to find the motivation. It would be much clearer already in the introduction, modified to indicate this to be the reason to write this paper.

2. The background includes previous literature only on the 1st part. No previous literature on modeling and its possible benefits and difficulties ... is given. Only one reference is now added. The rest of the references deal with statistical aspects (which may not be of so much interest). I would recommend having more literature on the benefits and drawbacks of modeling (in comparison to actual data).

3. The purpose of this paper is not given: to present a study plan addressing these and these issues. At the end of background “objectives of the study”, which are different from the objectives of the paper, are given.

4. Abstract is not very informative...The abstract is now changed. It contains more relevant data. Two problems: 1) it does not indicate the nature of the paper (see also comments 1 and 3), 2) Methods and Discussion are partly repetitive.

5. The types of studies reviewed is not clearly stated...Corrected.

6. The examples before the “objectives of the study” are interesting. But they would be even more so, if the authors explained whether the original conclusions...Corrected.

7. The authors do not explain why they start to look for studies on long term effects from the trials (on short term effects) from Cochrane library... This is now clearly explained in the response letter, but not as clearly in the paper itself.

8. The short term outcomes (the predictive value of which for long-term outcomes
will be modeled?) include very different types of phenomenon. The rationale of selecting the short-term outcomes is not given. This is now better formulated in the current text. In the response letter they say that the outcomes were selected “as the most often reported as outcomes in obstetric trials”. I am not a clinician, but some of the variables seem very rare (or the terms used are not customary). Could the reason be that these are the variables they have in their example case for modeling? Furthermore, the text on the page 6 on variables used in the prediction is contradictory. In the 2nd para the outcomes are listed, and in the “statistical analysis” “will be based on clinical expertise and plausibility”.

9. “Systematic review” in Methods: only trials “aimed to improve neonatal outcome” are included. Why this restriction? A perinatal intervention may have been evaluated e.g. by labor progress, and only later its long term infant effects are studied. The response letter explains that also interventions such as labor progress will be included. However, the text uses the formulation “interventions that aim to improve neonatal outcome”. There is a contradiction: will also interventions primarily looking other aspects than neonatal outcome be included?

10. “Systematic review” in Methods: to what does “these selected articles” refer to? I did not find that place any more, apparently corrected.

11. The time tense in Methods section varies. Corrected.

12. Description of the part 2 (modeling) is difficult to comment. Corrected (see however comment 2)

13. POPS included only very pre-term infants. Can results from them be extrapolated? This should be commented. Done briefly.

14. I did not understand how the second result in Discussion is achieved. Corrected.

15. At places, the meaning of the sentences is difficult to understand. Corrected

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'