Reviewer’s report

Title: Identifying nurse staffing research in PubMed: development and testing of empirically derived search strategies.

Version: 2 Date: 29 June 2010

Reviewer: Ruth Sladek

Reviewer’s report:

The authors have made a range of significant changes that have improved the manuscript substantially. However, there are outstanding issues. If the authors do not redress Issue 3 (raised in my earlier review), I will recommend the paper be rejected outright.

Issue 1:
Aspects of the method are still not articulated. For example, see the paragraph commencing with “The precision set...”: what is the random sample based on, ie percentage (according to the data you provide I calculate it at 6.15%)? How was it done? Did you review the precision set of 2195 for relevance? Why did you expect the relevant papers of the precision set to overlap (because it reads as though the original sample was only a percentage of the combined ‘OR’ search, so logically, should be smaller)? In the Results section, not all aims are provided – where are aim 4’s results? I can only see it first mentioned in the discussion as prevalence rate – where is the description of how this was calculated?

Issue 2:
It still needs thoughtful copy and content editing. There were still various errors.

Issue 3:
Notwithstanding the above, the major and unanswered sticking point relates to my recommended compulsory revisions, which the authors have not fully addressed. Namely, they continue to maintain that this is a PubMed filter in the title, abstract and the text. It is NOT, and this is misleading. The search filter (ie the objectively derived component of their paper) excludes PubMed (non Medline) and limits results to PubMed (MEDLINE). Logically, it is a Medline (PubMed) filter, or a Medline filter using the PubMed interface. Therefore, their methodology is such that they cannot claim it to be a PubMed filter. This is misleading. This journal is about research methodology, making it even more imperative that the authors are accurate in this matter.

If I, assuming the paper is published, found this article, there is only a ‘buried’ indication in the paper to direct me to using the modified strategy. If I use the sensitive strategy, I almost certainly would be assuming it searches all of the PubMed interface (Medline AND PubMed) but the reality is that it only searches PubMed (Medline) records. While not intentional, it is misleading. A clear
statement, in an appropriate place, needs to be provided for the reader so they know when to use what, and why, ie to cover PubMed system fully, to use both the sensitive search OR the untested translated one.

I acknowledge that the authors have added a statement about this in Discussion/para 4 although suggest the clause "ignores a small percentage of non-Medline references in Medline" is inappropriately downplaying the significance of this. If I was doing a review even several missed articles could be a sorry loss (and a sensitive filter for this purpose is one of the reasons the authors justify for this work) – regardless, the number missed varies depending on the day and topic.

**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.