Reviewer's report

Title: Utilization of the PICO framework to improve searching PubMed for clinical questions

Version: 1 Date: 14 March 2007

Reviewer: Ann Mckibbon

Reviewer's report:

General
This is an important paper and deserves publication. I feel that it can be made stronger. My suggestions start with general comments and then move to the specific.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

First and foremost, I urge you to seek statistical help to show that your statements are correct. I want to see p-values and confidence intervals before I will believe that this article shows “higher precision” or “larger number of relevant articles”. You will likely need a statistician as you have 3 groups and each participant is doing 3 searches so some of your issues are a bit more complex statistically. I know that this consultation will block quick publication but it will make your article stronger.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

I feel that the article is well written and needs few changes. Please be consistent with abbreviating EBM. Sometimes it is abbreviated and sometimes not.

Abstract. Please add that the academic medical center was in the US. This is valuable information for readers. Also I do not think you need “prospective” in front of randomized controlled trial (also in method section). This is just my bias but it is redundant.

Discussion. Second paragraph is really results. Could you please move this around. It would also be interesting to put these data in a table to see if any of the formats for MEDLINE differed for the proportion of studies that got no relevant citations. I also think the paragraph on errors belongs in the results section.

Conclusion. You cannot say that things “improve the quality” until you provide statistical inference data.

References. The numbering is off. Also some inconsistencies on page numbers: ref 3 and 4: 270-274 and 489-95. Reference 5 needs to be closed up and numbering adjusted.

Discretionary Revisions (which the author can choose to ignore)

Look at your inactive sentences…”there is”… “there are”. Some of these sentences would be stronger if they were turned into active sentences.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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:
I have received salary support more than 5 years ago to help develop the PubMed Clinical Queries. I do not stand to gain financially or in any other manner with respect to this publication.