Reviewer's report

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

Version: 3 Date: 11 May 2007

Reviewer: Enrico Coiera

Reviewer's report:

General

The authors have addressed many of my concerns with the paper. In particular, the presentation of confidence intervals for the precision results is important, as is the inclusion of a statement recognising that the current results do not demonstrate a statistical difference between the search options. Given the small sample size for this study, it is likely that if there is a difference, it may not have been detected, and we do need a larger study to settle this, which I understand is the plan.

I am now only concerned with how the authors describe the meaning of this small study. The abstract states that PICO templates 'had higher precision scores' and 'retrieved a larger number of relevant articles'. While true, you do not state that these higher rates were not statistically significant, and you should do so. Equally you do not yet have evidence to support your conclusion that PICO 'can improve' or 'can affect' the precision of search results. Currently the statistics say the opposite.

The way out of this dilemma is to say that in this pilot study, with small numbers, we could not demonstrate a statistically significant result, but that there was a trend that may, in a larger study, translate into evidence that PICO helps.

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

Please amend the abstract and the discussion to reflect that we currently only have weak evidence that PICO helps.

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

-- Discretionary Revisions (which the author can choose to ignore) --

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

Competing interests were declared in the first review of this paper, and remain unchanged.