Reviewer’s report

Title: Technical development of PubMed Interact: an improved interface for MEDLINE/PubMed searches

Version: 1 Date: 14 August 2006

Reviewer: Peter Wyer

Reviewer’s report:

General
This manuscript describes an innovative technology for searching the MEDLINE database which both incorporates features of previous developments within the same project and goes well beyond them. Integrating search term entry, date, age and methodology limits into a single screen provides the user with fingertip control over all of the crucial elements pertaining to expedited searches of a sort that clinicians and others seeking efficient access to relevant information characteristically perform.

My review of the earlier version of the manuscript had to do with the difference between a “package insert” or “users’ guide” description of a product, or a project report such as one might submit to a potential sponsor, and a research report. The importance of this challenge is ultimately up to the editors of BMC to adjudicate.

I am personally excited by the product and appreciate the saliency of the authors’ objectives and approach to the objective of making MEDLINE an efficient, accurate and friendly tool for busy clinicians in the course of their daily activities and responsibilities. My perspective is that of a medical practitioner looking for validated aides to problem solving, and not that of an informatics connoisseur looking for cutting edge use of ultra-sophisticated technologies.

This said, I have to point out that the authors’ revised manuscript still falls short of acknowledging the difference between a product description and what we would otherwise call “research”. They have missed the point of one of my previous comments pertaining to empirical validation of effectiveness and I have addressed this below.

Notwithstanding the above limitations, the manuscript is very well written and serves well as a descriptive article on the latest fruits of the NLM efforts in this area. To the extent that the journal is oriented to “innovations” reports and willing to defer empirically validated evidence of superiority, an acknowledgement on the part of the authors of the distinction being made here should render the piece publishable.

Specific Comments- Limited to issues not addressed in the revision.

7. Does the manuscript clearly describe how the software performs and its advantages/limitations over existing applications?

The authors’ response to this issue misses the point. It is not a question of what features of PubMed Clinical Queries have demonstrably been carried forward into PubMed Interact. Rather it is a question of whether the new product actually increases the speed and accuracy of searches performed by target users, e.g. medical practitioners. This would require the equivalent of a controlled study involving such practitioners and comparing objective measures of performance using Interact versus Slim or Clinical Queries. Although such a comparison is clearly beyond the scope of the report at hand, the authors still need to acknowledge the need for such empirical validation and that its absence is a structural limitation of their report.

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

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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)