Reviewer’s report

Title: A review of randomized controlled trials evaluating the effectiveness of handheld computers for data collection.

Version: 1 Date: 19 July 2005

Reviewer: Stephen Lapinsky

Reviewer’s report:

General

This manuscript describes a review of studies comparing handheld computer data entry with conventional paper data entry. As the authors point out, the literature in this regard is scant. This review adds to the knowledge base, particularly as many papers cited appear in subspecialty or relatively obscure journals that may not be read by many physicians.

Specific issues:

1. Introduction paragraph 1: the comparison of publications over time is a little misleading as the MESH term "Computers, handheld" was only introduced in about 2003. Prior to that such publications were classified under a number of headers, not covered by the text words described.

2. This study focuses on a very narrow area, namely studies in which data entry is performed by subjects, rather than by researchers or physicians. The reason for this narrow focus is unclear, particularly as the Introduction refers to a wider range of application of handhelds for research. This being said, I do not believe that the study by Lal et al meets these criteria.

3. Broadening the inclusion criteria would allow a larger number of studies. The evaluation of 1 or 2 studies in certain outcome areas is not very meaningful.

4. The article is very wordy and much of the data is repeated in both the text and the tables. This could be summarized and analyzed, rather than presenting such detail.

5. Figure 1 box content is not legible

6. Table 1 appears to leave out the study by McBride and includes 2 by Tiplady (one of which is not an RCT). Table 2 and 3 could be shorter and Table 4 is fully included in the text.

---------------------------------------------------------------------------------------

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

Point 4 - 6

---------------------------------------------------------------------------------------

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)
Which journal?: Appropriate or potentially appropriate for BMC Medicine: an article of importance in its field

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests