Reviewer's report

Title: How residents and interns utilise and perceive the personal digital assistant versus UpToDate

Version: 1 Date: 15 November 2007

Reviewer: Scott Strayer

Reviewer's report:

Overall this paper attempts to address a very important issue----which medical information resources (PDAs vs. UpToDate) are perceived as most useful by resident physicians. It also investigates the features of these two resources reported to be most useful and barriers to PDA use among other variables (PDA ownership, medical software used by PDA owners, time spent on UpToDate and PDAs). It uses a survey developed for another study by the same authors and samples resident physicians in one tertiary care hospital in 2004.

Major Compulsory Revisions

1. It is not appropriate to directly compare all users to determine relative usefulness of UpToDate and PDAs as there is varying levels of use of the two resources and installed programs on the PDAs. In the first place, the PDA is a hardware tool and UpToDate is a software program, so that comparison alone is simply not relevant. I think that the information could be better presented reporting use patterns among these two resources. If a comparison is to be made at all, it should probably be between PDA users who have reference software installed (e.g. at least one reference program) who also used UpToDate.

2. Another problem with this direct comparison as currently reported is that median use of the PDA is 0 hours. Therefore, it’s not surprising at all that respondents found UpToDate more useful as median use for that resource was 0.5 hours. Once again, reporting on the frequencies of use would be more helpful and perhaps isolating any direct comparisons between users who had actually used both resources.

3. Another major concern is the date of this survey. Many innovations in both PDAs and UpToDate have occurred over the past 3 years, so that the information simply may not be relevant at this point. If this survey could be updated it would certainly be more applicable to the current technologies that are available. That being said, if not, at least informing the readers of changes since 2004 would be important information.

4. Finally, although the survey response rate is high, comparing respondents to non-respondents would help to determine if a response bias was present. Additionally, more information on the available resources at this hospital is necessary (e.g. were PDAs purchased for all/some residents, what other online resources were used in this hospital setting, what is the computer literacy of
respondents?).

Minor Essential Revisions

1. I would recommend not using the word “junior” doctors throughout the manuscript. Perhaps just stating that these are “resident” physicians or “physicians in training” or some other more widely acceptable term.

2. Please update the references referred to in the second sentence of the “Background” section. You list only 3 references supporting the use of electronic resources to retrieve evidence and I’m certain there are more that can be provided.

3. In the background section, you state that UpToDate is not portable, however there are versions for Pocket PC and Palm, and it can conceivably be viewed on a portable device with a browser. I agree that it is not usually used in this manner, but clarifying this would be helpful.

Discretionary revisions

1. The following sentence: “The questionnaire captured information on who owned a PDA, the time spent using a PDA, how useful the doctors deemed the PDA was for acquiring medical knowledge, the medical software used by PDA owners, and doctors’ perceptions of the various functions and potential disadvantages of the PDA.” should be changed to: “The questionnaire captured information on PDA ownership, time spent using a PDA, usefulness of PDA for acquiring medical knowledge….”

2. Since this is an online publication, there is the possibility of including your questionnaire as a link or appendix. I would recommend doing this and modifying the following language: “The questionnaire is available from us upon request. (Other sections in the questionnaire evaluated the use of other information resources, the results of which have previously been reported, and will not be discussed here.)” to this: “Other sections in the questionnaire (see Appendix or link) evaluated the use of other information resources which have been previously reported (citation to previous reports).”

3. Please describe development of the survey. How were questions generated? Was it adapted from a previous survey somewhere? How was it validated?

4. Consider modifying this sentence: “The bulk of the doctors were not enrolled in any specialty training programs, as many of them had only recently graduated from medical school, since specialty training only begins in residency and not internship in Singapore.” to this: “…..as many of them had only recently graduated from medical school. In Singapore, specialty training begins in residency (not internship).”

5. Change this sentence: “One reason for the relatively small amount of time
spent using the PDA was that not all but 54 doctors (40.3%) owned a PDA (43 residents and 11 interns)” to this: “One reason for the relatively small amount of time spent using the PDA was that only 54 doctors….”

6. Please add references referred to in this sentence: “Most previous studies have found a greater usage of PDAs and UpToDate among doctors.”

7. Change this sentence: “This is despite most owners of PDAS using them….” to: “This is despite most owners of PDAs reporting use…”

8. In addition to providing subscriptions to PDA programmes as suggested in your discussion, it might also be helpful to provide technical support and installation of programmes.

9. The following statement: “As this suggests a lack of confidence or ability to integrate new…” should read: “This may reflect a lack of confidence or ability to integrate new…”

10. I would include the point that this is conducted in a tertiary care hospital as a limitation. For example, this may not be generalizable to community-based hospitals and residency training programmes.

**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 importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I have been a health advisory board member for the Palm corporation. I have also received speaking fees from UpToDate.