Reviewer's report

Title: Development and preliminary evaluation of the VPS ReplaySuite: a virtual double-headed microscope for pathology

Version: 1 Date: 25 February 2005

Reviewer: Rebecca S Crowley

Reviewer's report:

General
2376928415662474
Development and preliminary evaluation of the VPS ReplaySuite: a virtual double-headed microscope for pathology

Review of Resubmitted Manuscript

The revised manuscript is much better than the previous submission. The authors adequately address a number of my previous concerns. In particular, they clarify the issue of subject recruitment, entry into the study, and completion. They have also added a very thorough description of the limitations of this study.

The title is better, and the focus on the technology development and preliminary evaluation is improved from the previous manuscript.

Abstract:

Page 2-3 - Results section “It seems very unfair to only report opinions of those 3 participants who replayed more than 10 examinations. Either include the results for the entire set of participants or remove this entirely.

Page 3 - Conclusions section “Change the last sentence. For a study of this kind “the sample set is simply too small to know whether it bodes well or not. Remove this claim. Simply state that the sample set was small and potentially biased. Indicate the need or intention for future work to validate and generalize these findings.

Background:

Page 4 - “Novices often make errors when searching the slide“ Use the following reference which contains the original data:


Methods:

Page 8 - Diagnostic Concordance Graphs. Indicate how these are constructed by the system? You seem to have different categories (B2, B5, etc), which seem to come from The Core Reporting Guidelines. Do they only exist for breast? Is this scalable to other domains by simple changes in your system?

Page 9 – Study architecture. Retitle this Study procedure.

Page 9 - In the last line of the design paragraph - Participants who had previously participated. Do the authors mean that these individuals were not required to re-diagnose the cases, but did have an opportunity to view the examinations of others? If so, please clarify.

Results:

Page 12 – If User 5 was biased and you know this from the start- I would just remove that person from the beginning and say that you had 9 participants, rather than 10.

Discussion:

Page 15 – It seems very questionable to single out the change in diagnoses by individuals, and try to interpret the potential for generalization. I would remove this paragraph entirely, or talk more generally about the kinds of re-assessments that are possible.

Page 16 – The new discussion of limitations is very good.

Page 18 – The paragraph describing the relationship between use of the system and perceived benefit does not contribute much to the paper. I would suggest removing this paragraph as well as Figures 8 and 9.

Figures: Figures, especially screen shots, are of poor quality. It’s almost impossible to see any detail. Capture figures at higher resolution using SnagIt or CaptureEase or similar software, if this hasn’t already been done.

---

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

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)