Reviewer's report

Title: An educational game to improve Internal Medicine residents' knowledge and adherence to clinical practice guidelines

Version: 1 Date: 21 July 2008

Reviewer: Jyothis George

Reviewer's report:

The authors do need to be congratulated for this succinct description of development of a multimedia game prototype and feasibility. With interests in medical education as well as medical informatics, I should admit I found it an enjoyable read. However, there are a few areas where improvements can be made.

All Minor Essential/Discretionary Revisions

1) It is not clear from the introduction or methods as to why a decision was made to develop a team based game rather than a 'single user' game. 'Team based' games are better than the single user in some respects and it is perhaps worth mentioning this in the early part of the manuscript. As you have alluded in the manuscript, having too many players in the team can dilute educational value.

2) Coming from a UK background, I find the figure quoted for the use of educational games (78%) high. Was this study done by the authors? - If so, it would be useful to include the relevant question used in the study. 'Educational games' is not a clearly defined term and hence different directors may have included activities like quiz sessions.

3) By using a quiz type approach to teaching guidelines, this system assumes a certain familiarity with the guidelines. As suggested by one of your respondents from the pilot study, distribution of full guidelines before and/or after the game should be part of the procedure. Not doing so might increase a piece meal uptake of the guideline without a holistic insight into it.

4) There are a number of acronyms which are perhaps familiar to an US audience, but international readers of BMC Medical Education may struggle with all the organisations mentioned in 'Additional File 1).

5) It is not clear from the description if the moderator inputs answers for the teams or if the teams do it themselves. Although seemingly trivial, this information is important for anyone trying to develop similar systems.

6) Pilot Study: How was feedback obtained (Structured vs freetext or combination). How did you measure acceptability (eg: 5 point scale) and other factors. Please consider including the questionnaire.

7) Jeopardy Style: Many of your readers may have played Jeopardy either!
8) You also mention web-based games as your next stage. Presumably, the teams will be able to play 'asynchronously'.

9) In terms of wider applicability and generalisability, please elaborate on how your solution is better than other relatively easier approaches (like developing a powerpoint slideset with hyperlinks from questions to correct/incorrect answer slides).

10) "Integrating the game in the curriculum is both feasible and acceptable by residents" (First para of discussion). In UK English, we would say 'acceptable to' or 'considered acceptable by'.

Overall, well-written manuscript which will be of interest to readers of BMC Medical Education. I would recommend for publication once above factors are revised.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.