Reviewer's report

Title: On the Usage of Health Records for the Design of Virtual Patients: a Systematic Review

Version: 1 Date: 30 April 2013

Reviewer: William T Gunning

Reviewer's report:

1 Major essential revisions: None
2 Minor essential revisions: None
3 Discretionary revisions:

It is refreshing to review a manuscript that is so well written and I commend the authors! The purpose of the manuscript is well defined and the methodology explicitly described. It is essentially a review article regarding use of electronic medical records to determine whether others have established a means to use electronic medical records (EMR) for creating virtual patients (VPs) that the authors suggest is currently being developed and previously described. I find this too much of a tease and I personally detest having to look up references, thus I suggest the paper would benefit from having an illustration or screen shot to emphasize their discussion of using unformatted data. This is not clear to me how such information would be beneficial and in what context. Who is the intended learner for an unformatted electronic data dump? It seems to me that this could be problematic for a learner that would not experience the EMR if the platform was different than that being used in their hospital system. I believe that this should be addressed in the manuscript although it is not the intent of the authors, they did provide a tease in the conclusions when mentioning their “Casebook”. This reviewer is not keen to need to read another publication to understand what they have published in ref #4!

In the same context, I do not like the format used in the results section whereas I need to go to the references cited to find out who is cited or which platform was used. The circle or those working in the field and the number of systems employed is not that great to omit more specific citations in the text (I.E., Terry Poulton et. Al. described such and such in Medical teacher in 2009 (#23)! It is my personal opinion that the manuscript would be much better served to re-write the results section to replace (I.E., “In [23], the authors discuss…..) the style of writing that forces the reader to refer to citations while reading the paper!

As stated above, the manuscript is very well-written and meet all of the criteria that is requested of reviewer’s to determine suitability for publication. As I have also stated bluntly, I believe the paper would be improved if the results section and any statement requiring the reader to actively refer to the manuscript bibliography is revised as suggested. This would require minor revision.

I find the manuscript suitable for publication and implore the editor to require my
suggestions (including an illustration of Casebook and addressing concerns of different EMR systems format styling) be incorporated to improve an excellent manuscript.

**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:**

This reviewer has no competing financial conflicts of interest.

This reviewer has published regarding creation of virtual patients from medical records and is cited in the manuscript.

'I declare that I have no competing interests'