Reviewer's report

**Title:** An Ontology-based Nurse Call Management System (oNCS) with Probabilistic Priority Assessment

**Version:** 7Date: 16 September 2010

**Reviewer:** Joanne C Turnbull

**Reviewer's report:**

**SUMMARY:** Overall, I think this is a well written and clear paper. I would question how interested a more general HSR audience would be in the very lengthy and technical details contained within this paper. I would like to see a more HSR focus. However, the suitability of the paper for BMC HSR is clearly an editorial decision.

1. Is the question posed by the authors well defined?
   Yes, the research question/aim of the research is clear.

2. Are the methods appropriate and well described?
   As a non-IT person, it is hard for me to judge the technical details. I would question how much an HSR researcher would be interested all the detail presented on pages 8-11. For a paper in this sort of journal, I would say that there is almost too much information. The methods contain a huge amount information - some of which seems slightly repetitive and/or superfluous for a HSR audience (I'm sure an IT audience would view this differently). Having said this, the paper is clearly written and accessible for those not from an IT background. I think the algorithm section needs simplifying for a non-technical, 'lay audience' p12-13.

3. Are the data sound?
   Yes, the data seem to be. Although as I non-IT reviewer I find it difficult to assess this.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   My main concern with this paper is that it is very IT focused rather than HSR focussed - but that is an issue for the editors to address. It is also exceptionally long. You would have to be very interested in this subject to want to read all this in detail.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
   Yes, but the conclusion is brief. Clearly the authors are passionate about this technology and the benefits it could provide. This does make it very one sided. There are numerous examples technological failures in health care - much of this
is about how to successfully embed new technologies into practice. Since this is a
HSR journal, I would like to see some discussion about the implications of the
technology in a real life environment - rather than a simple acceptance that this
is/could be a great technological system.

6. Are limitations of the work clearly stated?
No - there is no discussion about what the limitations of the study might be. The
authors do however acknowledge there is further work to be undertaken. (Major
compulsory revision)

7. Do the authors clearly acknowledge any work upon which they are building,
both published and unpublished?
Yes

8. Do the title and abstract accurately convey what has been found?
They accurately convey what the study is about. Less attention is given to the
results. The paper focuses on the technical detail of the system.

9. Is the writing acceptable?
Yes, the ideas are presented clearly and logically

**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