Reviewer's report

Title: Representation and execution of clinical decision support using workflow engine technology (new title is: Implementation of workflow engine technology to deliver basic clinical decision support functionality)

Version: 2 Date: 31 October 2010

Reviewer: Siaw-Teng Liaw

Reviewer's report:

This title suggests that the R&D work is focused on implementation with the objective being to achieve basic CDSS functionality. This is still not very clear from the text or the abstract.

The background defined some gaps but does not make explicit what gaps this project would address. The objectives for the paper seems incongruent with the title, mainly because the objectives of the project or R&D questions were made explicit. Some relevant questions appeared in the text within the context of the CDS Evaluation Framework. However, this would be better understood if the R&D questions were formulated right at the beginning, perhaps in a separate section titled R&D objectives or questions.

The methods described would follow on from the R&D questions. If the CDS-EF is to be the core basis for the evaluation of this work, then it makes more sense to have it up front when describing the methodology. In fact it may even be introduced in the background as it seems to be the most relevant to this journal (and does not appear to have been published elsewhere by the authors).

This would assist the reader to understand the description of the implementation and relate the dimensions of the implementation to the desired functionality, which also must be described in a measurable way. The way the results should be presented would then flow from this so that the reader would understand whether the implementation processes have addressed the R&D objectives/questions posed.

Perhaps the authors can edit the abstract so that the objectives are clearly expressed, key methods described, key results presented and key conclusions made.

The conclusion in the abstract does sense because of the typo. However, reading in between the lines, it seems to me that this is the objective of this paper: to describe the research/evaluation methodology guiding the implementation of the application. So the proposed methods and what actually happened needs to be described and discussed so that the project can be replicated in other settings, etc. An approach to take may be to write the paper so that another group, using the same methodology and software, can replicate the implementation and examine if the results are different and why. I would suggest
that what has been published be incorporated and described in the background/methods with appropriate referencing.

**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