Reviewer’s report

**Title:** Lessons Learned from Implementation of Computerized Provider Order Entry in 5 Community Hospitals: A Mixed-Methods Study

**Version:** 1  **Date:** 28 February 2013

**Reviewer:** Marie-Pierre Gagnon

**Reviewer’s report:**

This manuscript reports a case study of Computerized Provider Order Entry (CPOE) implementation in five community hospitals in Massachusetts. The results presented are essentially qualitative, so it is questionable to use the term “mixed-methods approach”, which implies the use of qualitative and quantitative research methods.

In general, the paper is clear and well-structured. I particularly appreciated the way that the authors describe how they used the Immersion and Crystallization analytical approach. It could be interesting to discuss the potential influence that the investigators’ background has had on the analytical process (reflexivity).

The results are in line with those reported in recent studies and systematic reviews of IT implementation and this could be more highlighted in the manuscript. One novel element that emerges from this case study is the unintended consequences of the new system on staff leaving the hospital practice or retiring. Perhaps this could be identified as an avenue for future research.

**Major revisions:**

In the Background section, the authors should refer to the current literature on IT implementation models. For instance, the authors could consult this review by Logan that synthesizes the literature on IT implementation models:


They should also refer to recent reviews of barriers and facilitators to IT implementation in general, e.g.:


and CPOE in particular, e.g.


These references are only some suggestions, but the authors could refer to other relevant publications. In general, there is strong support related to the factors identified in this study for successful implementation, as well as the potential pitfalls. Comparing the results with this abundant literature could strengthen the Discussion.

Minor essential revisions
More references about the impacts of CPOE could be provided after the first sentence and another sentence could cite studies that did not report benefits related to CPOE.

At the bottom of page 6, please explain what “house staff” means the for non-USA readers.

On p. 7, under Site Visits, it is mentioned that you developed a “standardized instrument”. What does “standardized” mean in this context?

For the in-depth interview guide, please indicate if any theoretical framework was used to guide the questions? Terms such as Attitudes, Barriers, and Facilitators are very similar to the dimensions found in Ajzen’s Theory of Planned Behavior.

In the Limitations section, please discuss the elements that could affect the rigor of the qualitative analysis by referring to known criteria, e.g. the COREQ statement:

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