Reviewer's report

Title: Understanding key factors affecting electronic medical record implementation: a socio-technical approach

Version: 2 Date: 30 January 2015

Reviewer: Dave Ludwick

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Please number your comments and divide them into

Major Compulsory Revisions

None

Minor Essential Revisions

1. On line 154, the authors use the word “bind” in a somewhat unexpected way. I wonder if the authors could consider using a different word or rephrasing the sentence to be more explicit with their meaning.

2. On line 172, is it possible for the authors to define what they mean by “expert system”: in this context

3. Online 200, the authors use the word “enfold”, but I wonder if another word “unfold” might be a better fit

4. On line 234, doe the authors mean “Two of the areas of the hospital selected were included…”? Just not sure what is meant by “areas”.

5. For the section on interviews (starting on line 220), the authors describe the process of selecting candidates for interviews, but do not describe the nature of the interviews (that is, was a rigorous interview guide followed, or was it more semi-structured interviews)? If a guide was developed, how was it developed and was it pre-tested by for use in the interview process? Who did the interviews? Were the interviewers trained? What was done to control the way in which questions were asked or to minimize any influence the interviewers may have purposefully or accidentally imparted on the interview process?

6. For the section on observation (starting on line 245), the authors refer to Latour’s guidelines, but it would be helpful if the authors provided more detail about what behaviours and actions the observers were looking for and took note of. Also, were the observers trained to observe specific behaviours and actions? Was there an observation checklist or other systematic tool used to somewhat formalize the observation. Was the observation performed by multiple observers and if so, what steps were taking to remove any observer bias that may have materialized.
7. In line 260, there seems to be several uses of the word “network”. There is a research network, which seems to be different from the reference of the word network in the context of ANT. Is the super actor the research network or is it the EMR as a component of the Actor Network. Could the authors possibly consider rewriting these sentences to minimize any potential over use of the word? If no rewrite is possible, then disregard. In line 263, not sure which network is “this network”

8. On line 312, the authors say that “one option was a new provider”. The word “provider” could be used to describe a healthcare provider (doctor, nurse, pharmacist, etc), but I believe in this case the authors maybe speaking about a new software vendor. Can the authors clarify this sentence?

9. On line 339, I wonder if the sentence should read “The manner of how enrolment and mobilisation progressed…”

10. In the section on “the health care delivery process”, the authors assert that one of the most highly acknowledged benefits was time saving. Other assertions are made later on about what various key informants said. However, it is not clear in the methodology section how the authors crystallized results. Is it possible to have a table in the health care delivery process section that shows the results of the crystallization process so that the reader can see what the other themes were from the interviews?

11. On line 444, the authors assert that relationships between stakeholders had changed significantly, but in the next sentences, the topic seems to switch to changes to other seemingly unrelated topics. I’m not sure what the authors intend here. Also, on line 446, the authors say that “this may be strongly influenced by the new situation in Scotland”. I am not sure what is meant by “this” or what the new situation the authors are referring to.

- Discretionary Revisions

12. On line 529, the following sentence might need modification “This included actor participant in the adoption, implementation and evaluation process, inviting actors to…”. Should the word “participant” be the word “participation”?

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

Quality of written English: Needs some language corrections before being published

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