Reviewer's report

Title: Using diffusion of innovation theory to understand the factors impacting patients’ acceptance and usage of consumer e-health innovations: a longitudinal case study in a primary care clinic

Version: 5 Date: 28 October 2014

Reviewer: Josianne Marsan

Reviewer's report:

Thank you for your answers to my comments in the previous round. The paper has improved a lot by including previous literature.

MINOR ESSENTIAL REVISIONS

1. I think your paper would be more conceptually rigorous if you clearly distinguish between adoption and usage. In fact, adoption and usage do not represent the same behavior according to Information Systems researchers (Karahanna et al. 1999). IT adoption is considered a prerequisite for IT usage; IT adoption is defined as the initial usage (new behavior) of an IT innovation at the individual level, and IT usage is defined as the subsequent continued usage of an IT innovation at the individual level (Karahanna et al. 1999).


2. In the section entitled “Perceived advantages of the e-appointment service”, you mention the ability to print out the appointment results, but you still don’t provide a sub-section presenting evidence of this advantage.

3. Your paper still says nothing about the procedure for log data analysis. You explain how interviews were analyzed, but you don’t explain how log data was analyzed (see your Data analysis section).

4. You cite Esther et al. (2011) [44], but it does not appear in your list of references.

DISCRETIONARY REVISIONS

5. You say: “This study was built based on the previous qualitative interview findings [22]. To increase the scientific value and generalizability of the study, Rogers’ innovation diffusion theory was used as a theoretical lens to analyze the impact of these factors to the patients’ attitudes toward the acceptance or reject of this service.” (Lines 136-140) I think you should add: “Furthermore, a new data set extracted from computer log adds a longitudinal view to this study.”

6. I suggest that you split your section “The e-appointment scheduling service
and diffusion of innovation theory” into two different sections: “The e-appointment scheduling service as an IT innovation” and “Theoretical basis”.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests