

You Want Me to Use This EMR?

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Abstract. Globally, implementation of electronic medical records (EMRs) has accelerated. Australia is starting on this necessary but arduous path. Anecdotes suggest many nurses enquire “You Want Me to Use This EMR? Opinions on the use and usefulness of EMRs are not positive. This research proffers the use of a rich theoretical lens, taken from the information system’s domain, to understand the root concerns and create solutions; providing insight into nursing acceptance and adoption of the EMR.

Keywords. Electronic medical records, nursing, relationship equity theory, user adoption and acceptance

1. Introduction

In the last 10 years, the digital transformation of healthcare delivery has been characterised by the implementation of electronic medical records (EMR) [1]. However, research to date, suggests that while investment in EMRs is significant, the return, patient satisfaction and clinician satisfaction is rated poor at best [2]. Anecdotally, it is noted that nurses often enquire “You want me to use this EMR?”

Digital transformation in healthcare delivery is here to stay. Nevertheless, this transformation can only be successfully achieved if all users adopt and accept digital health solutions. In Australia, we are witnessing a rapid increase in the implementation of EMRs in both in-patient and out-patient care. Such solutions are having a significant impact on tasks, workflow and comfort levels of healthcare professionals and patients.

This research focusses on nurses, the largest healthcare workforce, with regard to the impact of an EMR on their healthcare delivery. Specifically, the benefits and challenges of the adoption and acceptance of EMRs for nurses are evaluated to proactively develop responses when the profession questions the benefit of an EMR.

To evaluate nurses’ adoption and acceptance of EMRs and fully engage them in the decision-making, development, implementation and evaluation of the EMR, three important domains require better understanding: **1.** issues at the system level (system usability; interoperability and integration; standards; limited functionality/missing components) **2.** user–task issues (do systems meet nursing needs?) and **3.** environment issues (user training, the attention of educators, managers, policy makers) [3].

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The research question to be answered, “how can we encourage nurses to adopt and accept EMRs and develop foundational skills required of a Nurse Informatician?”, is in itself complex and thus we proffer the application of Relationship Equity Theory (RET), a theory frequently used in information systems research, to provide a deep theoretical lens for analysis [4][5].

2. Method

We proffer Relationship Equity Theory (RET) [4][5] to help us understand critical issues impacting nurse’s adoption and acceptance of EMRs. RET is a recognised theory in the information systems research field but has yet to be applied in nursing. We adopt a qualitative approach, which has four key phases focusing on multiple case studies in Victoria. Informed by an initial literature review in Phase 1, Phase Two will develop a matrix of analysis to guide our line of inquiry. The inputs will be derived from previous studies conducted on critical issues around the adoption and acceptance of EMRs. During Phase Three, focus group and semi-structured interviews, to understand nurses’ concerns, key barriers and facilitators with using an EMR, will be conducted. Finally, in Phase Four, thematic analysis will develop themes from RET and apply them to the data.

3. Results

This research is in its infancy. However, the findings to date from the initial literature review demonstrate that the use of RET in evaluating nursing adoption and acceptance of an EMR is novel. The extracted themes from the literature will inform and guide the next phase of the research. In addition, we have identified three well established Victorian healthcare sites for participant recruit.

4. Conclusion

This research in progress suggests that RET can provide a better understanding of both the adoption and acceptance of EMRs by nurses and the potential effect of EMRs on nurses. RET is relevant to any social setting and can be applied when there is any sort of exchange taking place [5] yet to date it has not been used for this domain. Adoption of EMRs should be considered as a complex change process where the introduction into the hospital environment does have an effect on the dynamics of existing relationships.

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