Notice of the Final Oral Examination for the Degree of Master of Science of

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“User Perspectives of Electronic Referral to Inform Pan-Canadian Implementation”

School of Health Information Science

Tuesday, September 11, 2018
10:00 A.M.
Clearihue Building
Room B019

Supervisory Committee:
Dr. Abdul Roudsari, School of Health Information Science, University of Victoria (Supervisor)
Dr. Andrew Costa, School of Health Information Science, UVic (Member)

External Examiner:
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Dr. Anastasia Mallidou, School of Nursing, UVic

Dr. David Capson, Dean, Faculty of Graduate Studies
Abstract

Long wait times for elective services are seen as one of the major challenges for Canadian healthcare. Canadians report that they wait longer for specialists than citizens in other countries. An average of 25% of patients are waiting longer than evidence-based benchmarks in priority areas. One reason for this is that the referral process is poorly coordinated and leads to delays in care. Electronic referral is seen as a potential means of improving the referral process and enabling faster access to care. There is a major national initiative and multiple provincial initiatives that are looking to implement or expand electronic referral. However, existing projects have encountered challenges with user adoption. Therefore, it is critical that information about user perspectives on electronic referral inform future implementation. Before examination of the literature, frameworks for the evaluation of health information systems that could be relevant to electronic referral were examined. Then a literature review was conducted and aligned to the most suitable evaluation framework. This literature review found that the evidence from the Canadian perspective on electronic referral is sparse and that further study is needed. In addition, validated instruments have not been used to determine user perspectives and a formal qualitative methodology was only used in one study. Therefore, a mixed methods approach was undertaken to address these deficiencies. The System and Use Survey developed by Canada Health Infoway is a validated tool that was used to survey both users of faxed based referral as well as users of electronic referral. These two groups of users were then compared. As well, thematic analysis was used for the qualitative study to analyze interviews of users of electronic referral. This approach yielded a rich source of information that added significantly to the findings in the literature and addressed most components of the evaluation framework. The quantitative findings showed that most family physicians using fax were satisfied overall with the process. This highlighted how challenging any changes to this process would be to implement. Correspondingly, the overall user satisfaction was not significantly different between family physicians using fax and those using eReferral. There were, however, some significant results between family physicians using fax and those using eReferral, which were response time, the overall quality of referral information, completeness of the information, the timeliness of the information, and the format and layout of the referral information. It seemed that family physicians using eReferral were more satisfied by performance in these domains than family physicians using fax, although further research needs to be completed to verify this. The qualitative analysis highlighted user perspectives on the impact of electronic referral on the referral process, the usability of electronic referral, the experience with deployment, the effect on process outcomes, the improvement of patient outcomes as well as patient experience, the interaction with information technology, the importance of the content of the system, and the impact on society. The contribution from this mixed methods study to the currently available evidence can help to inform future deployment of electronic referral.