

A Formative and Summative Evaluation of an Electronic Health Record in Community Nursing: Highlights 2011-2012

D.M. Doran, RN, PhD FCAHS¹, C. Reid-Haughian, RN, MHScN, CCHN (C)²,
J. Cafazzo, PhD^{1, 3}, A. Chilcote, MEd, CCC¹, C. Chu, RN, PhD (c)¹

¹University of Toronto, ²ParaMed Home Health Care, ³University Health Network



CONTEXT

In community nursing, there are challenges associated with documentation, workload and working in isolation. Implementation of an electronic health record (EHR) is generally believed to improve the quality of patient care.

This research aims to evaluate the implementation and adaptation to an EHR in a community setting, related to device, context and nurse characteristics.



Application by CellTrak.

SAMPLE & METHODOLOGY

- Community Nurses and Supervisors
- Alberta Context Tool
- Questionnaire for User Interface Satisfaction
- Interviews
- Focus Groups

TIME ONE	TIME TWO
18 Centres	21 Centres
117 Surveys	80 Surveys
9 Interviews	10 Interviews
	5 Focus Groups

OBJECTIVES

1. To determine the usability of EHR during implementation
2. To assess the effect of the EHR on clinical workflow.
3. To assess how organizational context variables (e.g. leadership, culture, information sharing, social interactions, resources and organizational support) correlate with community nurse adoption of electronic documentation, and to determine how these variables change over time.
4. To assess the effect of an EHR system on nurses' evidence-based practice.
5. To assess the effect of EHR use on quality of care indicators
6. To assess end-users' and client satisfaction with EHR.

PRELIMINARY RESULTS

- + Communication improved at Time 2
- + Client outcome improvements improved at Time 2
- + Assessment/discharge completion rates improved at Time 2
- + Device terminology improved at Time 2
- + Access to electronic resources improved at Time 2
- System speed satisfaction reduced in Time 2
- Feedback about clinical performance data reduced in Time 2

“When I first started it I guess I was kind of against it. Then I realized that I might as well change my attitude and just go with the flow. Now I use it all the time.”

“The assessment brings up things I would have not thought about myself. It forces you to look [at] who may be at high risk that you didn't think was at risk.”

BARRIERS AND FACILITATORS TO EHR IMPLEMENTATION

TIME ONE

- Connection to an available network
- Usability of device
- Ability to access client information
- Availability of organizational and peer support

TIME TWO

- Nurse preparedness
- Nurse beliefs- system facilitates client-centred care
- Device speed and enhancements
- Communication and support

NEXT STEPS

Continue analysis
Organizational quality indicators
Client satisfaction interviews
External end user interviews

Analysis & Synthesis
Corporate Response
& Re-education

Evaluations,
Recommendations &
Knowledge Exchange