

Empowering Consumer Preventative Health Using TELUS Personal Health Records Sands, Todd*, Savi-Cannon, Jackie and Sharp, Debra

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Although much research has involved clinical provider-patient EHR adoption and utilization, the key barriers identified by Tang et al., (2006) for widespread implementation and sustainability of large consumer based solutions such as TELUS PHR, remain evident. These barriers have been described as evidenced by Tang et al., to exist in three main categories; technical, environmental, and/or individual based, and each impacts the adoption, use and sustainability of PHR and EHR systems. Recent work by Lisckai et al., (2013) and more recently by Minard et al., (2014) co-authored by one of the researchers in this study, have investigated the successful adoption and use of EHRs in chronic asthma disease management. Although the barriers were evident also in these studies, their positive outcomes and evidence-based conclusions were consistent with earlier recommendations by Tang et al., that education and research focus were essential to overcoming any barriers that exist, whether they be technical, environmental or individual in nature.

The focus of the current study design is different than a traditional research design; major environmental and individual barriers of earlier studies included interventions regarding client privacy and security, portability and availability of systems, and compliance with evolving standards (Tang et al., 2006). In this study, the TELUS PHR inherently overcomes selected key barriers, in its' strive in systems design and provisioning as a nationally recognized system compliant with Canada Health InfoWay privacy and security standards. This design will overcome some of the main environmental concerns associated with the individual use of e-records. Further, by coupling the TELUS PHR to a preventative health model, it is proposed that the knowledge and learning necessary for adoption of a PHR as identified by earlier research (Tang et al., 2006, Lisckai et al., 2014, Menard et al., 2014) will evolve a more health conscious and electronically savvy consumer. As a result and over time, selected consumers will be more acceptable to the use and sustainability requirements of a PHR, which ultimately will assist in their integration and use of provider-patient EHRs, if and when they require provider-patient EHR for treatment. The benefits of early adoption using a preventative health approach will enable those consumers with a focus on their health before a disease state exists, providing the necessary education not only of the PHR and its use, but also its value in early detection and management of health. This enablement will aid in empowering consumers, rather than engagement as a result of a pre-existing condition. The use of the TELUS PHR will be complemented with a health passport focused on evidence-based health that can be implemented by consumers through education, and not necessarily requiring the input of primary health care providers. One added advantage the TELUS PHR provides is its integration with TELUS Health Space and the potential for consumers to integrate into a provider-patient relationship in future e-record use.

Results of the approach used, uptake and key barriers overcome will be reported upon by the researchers in this study using primarily administrative data, and not the clinical or health related aspects of the users of TELUS PHR as subjects in a clinical research study. This community-based participatory research model will assist in differentiating the role that preventative health can play, using activity-based learning to overcome selected barriers, in comparison to reported studies indicating that clinical disease are required (Tang et al., 2006). A phased approach using various cohorts of individuals based on initial uptake in affiliation with a community health passport by selected consumers over a fixed time period will be used to provide administrative data. Since this will not be a traditional research study design, the consumers, TELUS and others will benefit from the flexible innovation of the

use of the TELUS PHR in the model. The objective also contributes to the value of preventative health research and preventative health as a pillar in smart community development. The involvement of organizational health and safety, well-being and human resource department efforts of private and public sector companies to sustain use of the TELUS PHR in preventative care corporate approaches for employees and their families will also be examined.

Windsor and Essex County, through its *Connecting Windsor-Essex™* activities was recognized as a Top7 Intelligent Community in the world in 2011 by the Intelligent Community Forum (ICF), an academic think-tank in the United States, but with global recognition. *Connecting Windsor-Essex™* is also affiliated with iCANADA, an organization of communities focused on the principles of intelligent community development in Canada, with a vision to create 50 ICF recognized intelligent communities in Canada, making it the first intelligent nation in the world.

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