

CONFERENCE ABSTRACT

Using Information Communication Technology in Models of Integrated Community-Based Primary Health Care: Exploring ICT in the iCOACH Study

17th International Conference on Integrated Care, Dublin, 08-10 May 2017

Carolyn Steele Gray¹, Jan Barnsley², Dominique Gagnon³, Louise Belzile⁴, Tim
Kenealy⁵, James Shaw⁶, Nicolette Sheridan⁵, Walter P. Wodchis²

1: Lunenfeld-Tanenbaum Research Institute, Sinai Health System, Canada;

2: Institute of Health Policy, Management & Evaluation, University of Toronto, Canada;

3: Unité d'enseignement et de recherche en sciences du développement humain et social, Université du Québec en
Abitibi-Témiscamingue, Canada;

4: Gerontology, Université de Sherbrooke, Canada;

5: Faculty of Medical and Health Services, University of Auckland, New Zealand;

6: Institute for Health System Solutions and Virtual Care, Women's College Research Institute, Women's College
Hospital, Canada

Introduction: Information and communication technology (ICT) is a promising enabler to support delivery of integrated care by inter-disciplinary teams by supporting information sharing across professional and organizational boundaries; arguably a crucial aspect of successful models of integrated care. The literature suggests that there are core components of ICT functionality such as interoperability between systems, supported chronic disease management functions and patient and caregiver access to ICT, are required to support the delivery of integrated models of care. While suggestions on what ICT for integrated care should look like abound in the literature, few studies have explored how ICT is used in practice in the implementation of integrated community-based primary health care.

Theory and Methods: We draw on data from interviews with front-line staff and management collected from 2 cases in Canada (one in Ontario and one in Quebec) and 3 case studies in New Zealand collected as part of the iCOACH project. Interview data was thematically coded around three core themes: 1) types of ICT systems adopted; 2) the role ICT plays in the model of care with regard to central activities of integrated care, and 3) perceived value of systems from the perspective of health care providers and organizational managers and leaders.

Results: All case sites had some form of ICT system in place (most often electronic medical records), however variation occurs within and across jurisdictions in terms of which integrated care activities were supported by ICT, the level of adoption, and the sophistication of systems. Most models faced significant challenges with regard to between-system interoperability to allow for effective information sharing. There was additional diversity in terms of healthcare provider use and acceptance of available technology. Where systems were lacking, sites would use workarounds, for example co-locating providers who could access multiple systems at a single site.

Discussion: Preliminary analyses of case study data suggest that ICT was used to support a range of integrated care activities. Interoperability remains an important, and often elusive, requirement. Front-line providers and organizations showed the ability to creatively work around limitations of ICT, but did not see these as sustainable solutions.

Conclusion: ICT systems across the cases varied in terms of maturity and functionality. There was a consensus across sites regarding the importance of ICT to support integrated care, however many cases did without robust systems. Providers and leaders identified the need to adopt ICT systems that supported information sharing across teams to sustain and grow programs.

Lessons Learned: Adoption of ICT systems into models of integrated care can occur at different stages of implementation, with many models reaching a point at which integrated ICT systems are required to support effective sustainable growth.

Limitations: Case study findings offer unique and in-depth perspective on the adoption of ICT in 9 different models of integrated care. Findings may not be generalizable to all of models of integrated care.

Suggestions for future research: Further exploration is required to determine at exactly which point in the implementation process (early vs. sustained adoption) ICT is required.

Keywords: information communication technology (ict); ehealth; integrated care; information sharing
