Conference Abstract

Improving patient care and safety in the community through technology

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Abstract

Introduction: The Central Community Care Access Centre (CCAC) in Ontario, Canada is leveraging technology to improve patient care and safety in the community by:

• Implementing leading practices in e-health and health assessment technology to drive outcome-based care.

• Enabling evidence-based decision-making through databases and software that systematically measure patient health status and outcomes.

• Ensuring consistent, accurate patient information is available across the continuum of care with multiple health partners.

These innovations reinforce system sustainability through efficiencies and value for dollar services.

Aims and objectives

Key examples:

• Chaired provincial committee to implement the Client Health Related Information System (CHRIS) standardized database across Ontario’s CCACs, supported by mobile technology that enables care coordinators to work in patient’s home rather than CCAC office.

• Implemented Resource Matching & e-Referral (RM&R) electronic health system with Central region hospitals, including first in Canada to automate referrals from emergency departments (ED) to community care.

• Studied use of Resident Assessment Instrument for Home Care (RAI-HC) data to inform quality improvement through evidence-based care coordination. Used RAI-HC data to validate outcomes in leading practice initiatives and population health models.

• Developed standardized in-home Medication Management Support Services (MMSS), backed by mobile technology and web-based software.

• Partnered with Sunnybrook Health Sciences to pilot MyChartTM – a web-based personal health record that allows patients to access and manage selected health information from their CHRIS record.

Results:

• CHRIS captures comprehensive data in one patient record, simplifying provider interactions and enhancing timely access to service.

• RM&R enables streamlined, reliable referrals, seamless transitions and better system flow. It provides single source of region-wide referral information, and has helped hospitals and CCAC to meet target rates for referral completion and acceptance.

• RAI-HC informs quality care planning and evaluation through objective patient-centred assessments and solution-focused data interpretation, and targets service provision to those with highest needs. RAI-HC data informed Central CCAC’s Short Stay specialized population model, now adopted provincially.

• In 2011-2012, MMSS patients reported fewer ED visits (81%), fewer falls (73%) and less pain (43%). MMSS saves Ontario’s Drug Benefit program about $100 annually, per patient.

• MyChartTM is an integrated self-management tool, accessible to all Central CCAC patients and members of their circle of care.

Conclusions: Central CCAC’s e-health innovations enable evidence-based decisions focused on quality patient outcomes and value to the system. They also provide a technological foundation for further system improvements:

• CHRIS integrates with other e-health initiatives and enables system efficiencies e.g. Central CCAC’s Hospital Transfer Team, which organizes post-hospital care for over 10,000 patients a year.

• Central CCAC led a cross-jurisdiction expansion of RM&R for rehab referrals in 2012 and will implement RM&R with two Family Health Teams in 2013.

• Using RAI-HC data in conjunction with service utilization, population growth, and community resources data facilitates streamlined caseload distribution and better resource management.

• Central CCAC’s efforts to expand MMSS technology resulted in a $20,000 award from Canada Health Infoway’s ImagineNation Outcomes Challenge, which will be reinvested in technology.

• Emerging Health Links Networks in Ontario are reviewing MyChartTM’s potential as a viable option to empower patients through self-management tools.

Keywords:

technology, e-health, sustainability, efficiency, safety