CONNECTING SOUTH WEST ONTARIO

# Analysis and Research: Enabling admission avoidance and reduced length of stay for geriatric patients

Evaluating benefits is an important component of the connecting South West Ontario (cSWO) Program that helps to support and demonstrate the realization of health system benefits through the adoption of electronic health records (EHRs). By pursuing the measurement of organizational value (improvements in the efficiency of care delivery such as time-savings and redirected resources) and clinical value (patients undergo fewer unnecessary tests, patients have improved access to care), patients ultimately benefit from higher quality, better informed clinical decision-making.

The cSWO Analysis and Research program uses a research-based approach to identify areas of clinical best practice that are affected by the use of EHRs, and works collaboratively with clinicians to understand the value of EHRs. This formative evaluation process informs change management and adoption, and enables clinicians to use EHRs more effectively. This research does not include the use of any personal health information.

This document is one in a series of case studies which describe the clinical value of EHRs in different clinical settings and contexts, particularly with respect to clinical best practices. The work of the cSWO Analysis and Research program is ongoing; depending on the circumstance, these cases occasionally raise questions for further investigation, and clinicians are invited to participate in analysis and research to continue to develop these answers.

## Value statement

Using the cSWO Regional Clinical Viewer, ClinicalConnect™, has provided clinicians specializing in geriatric care at Juravinski Hospital and Cancer Centre (JHCC) with access to comprehensive patient records including their current Home and Community Care Services. Having this information supports them in arranging for additional services in order to avoid hospital admission or reduce patient length of stay in hospital.

## Minimizing hospital stay for geriatric patients

Older adults represent the fastest growing sector of society and account for the largest increase in hospital admissions.[1] Seniors have a higher proportion of urgent visits, their hospital length of stay is longer, they require more staff time and resources, and are more likely to experience adverse health outcomes after a hospital visit compared with the rest of the population.[2] The busy environment of an acute care setting is unsuitable for older patients, especially those with delirium or dementia, as they have a higher risk of functional decline and developing medical complications subsequent to a hospital visit.[3]

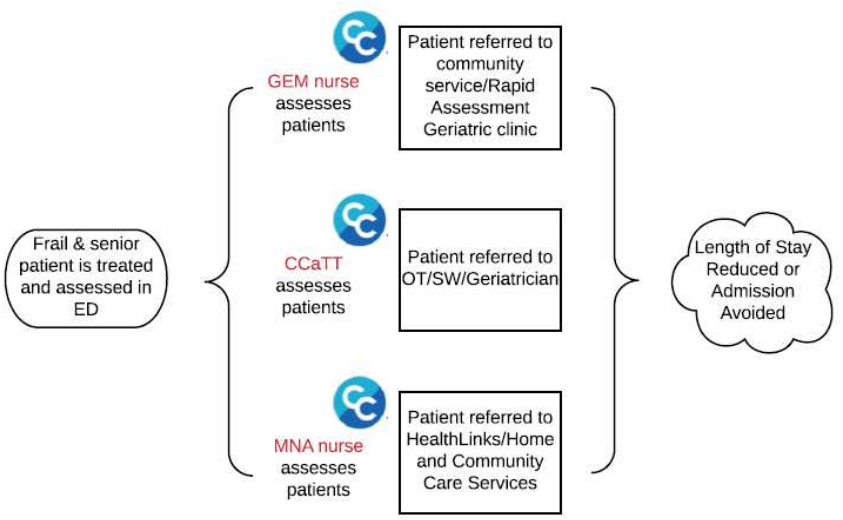
There are several services available to assist older adults in the Hamilton Niagara Haldimand Brant Local Health Integration Network (HNHB LHIN), including LHIN Home and Community Care Services (formerly CCAC), Catholic Family Services of Hamilton, and others. These services focus on extending the provision of health care into the community to enhance individuals' quality of life, helping seniors to stay healthy, safe, and independent for as long as possible.

## ClinicalConnect enables improved care coordination

At JHCC, several clinicians have a common goal of helping geriatric patients avoid admission following an Emergency Department (ED) visit, reduce prolonged hospital stays by providing early intervention and planning, and reduce functional and cognitive decline associated with hospital admissions by facilitating alternate services. These clinicians include a Geriatric Emergency Management (GEM) Nurse, the Centralized Care and Transition Team (CCaTT), and a Medical Nurse Associate (MNA) who review the list of admitted and pre-admitted frail and senior patients daily and subsequently follow their assigned patients' plan of care. These clinicians, in their roles as care providers, all leverage ClinicalConnect to help inform their decisions when providing/arranging care, as seen in Figure 1.

As part of her role, the GEM nurse refers eligible patients to the Rapid Assessment Geriatric Clinic if a previous assessment has not been done by a geriatrician - information that can easily be found in ClinicalConnect. She also coordinates community services for pre-admitted patients to avoid admissions.

CCaTT is a multidisciplinary team comprised of a Clinical Nurse Specialist (CNS), two Social Workers (SW), one pharmacist, one physiotherapist, two occupational therapists (OT) and one LHIN Care Coordinator, who work together to initiate a comprehensive assessment of pre-admitted patients, and support admitted patients by developing the best possible discharge plan. The *LHIN Results 2016-2017 Study* indicated that hospitals saw that up to 75 per cent of individuals who received CCaTT support were able to avoid a hospital admission as a result of this team's support, depending on the hospital.[4]




The MNA nurse coordinates resources for patients in an effort to reduce their length of stay, avoid readmissions, and prevent delirium. Nancy, the MNA at JHCC, tracked her ClinicalConnect usage on a day where she experienced an average patient case load; Figure 2 describes some of the outcomes as a result of being able to access ClinicalConnect. She noted that ClinicalConnect facilitated better care coordination, improved discharge planning, reduced patient length of stay, enabled patient referral to Community Health Links, increased patient safety, and streamlined her workflow. Access to the Home and Community Care Services module in ClinicalConnect, amongst others, has been essential in providing comprehensive patient stories, identifying gaps in patients' care, and coordinating discharge planning for those patients she is assessing.

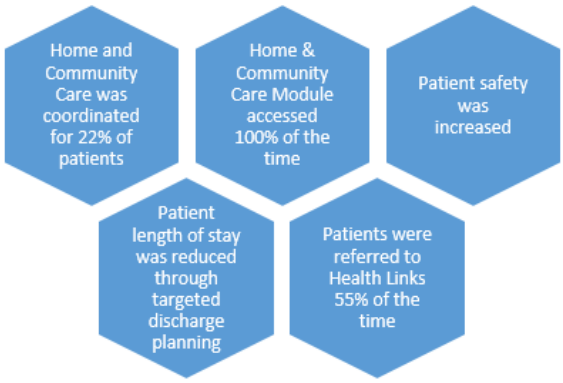



**Figure 2.** Results of ClinicalConnect usage tracked by the MNA at Juravinski Hospital on a typical day

## Testimonial

"ClinicalConnect is a resource tool that enables me to access critical information linking a patient's past history to the present. As a result, health care professionals are better able to understand the complexities surrounding each patient. This facilitates better care coordination across the healthcare continuum. ClinicalConnect allows hospitals to link with existing community resources including Health Links, and the Local Health Integration Network (LIHN). Reducing patient length of stay and ensuring safer discharges contributes to overall patient safety and satisfaction."

Nancy Tukonic, Medical Nurse Associate, Juravinski Hospital and Cancer Centre

## Questions

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## Sources

[1]Aminzadeh, F., Dalziel, W. (2002). Older adults in the emergency department: A systematic review of patterns of use, adverse outcomes, and effectiveness of interventions. *Annals of Emergency Medicine.* 39(3): 238-247.
[2]Ellis, G., Whitehead, M., Robinson, D., O'Neill, D., Langorne, P. (2011). Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomized controlled trials. *BMJ.* 343: d6553.
[3]McCabe, J., Kennely, S. (2015). Acute care of older patients in the emergency department: strategies to improve patient outcomes. 7: 45-54. doi:102147/OAEMS69974
[4]Hamilton Health Sciences. (2017). CCaTT update JH bed management. [Powerpoint Presentation].

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Published: February, 2017
Revised: August, 2018

Funded by eHealth Ontario