



“What we’ve realized is that we need to have good tools to communicate in order to prevent unnecessary admissions and give patients the right care, in the right place, at the right time,”

Dr. Samir Sinha
Director of Geriatrics
Mount Sinai Hospital

Improving Health Care for Elders at Mount Sinai Hospital

ACE'ing Elder Care with Innovative IT Tools

Overview

With older adults accounting for 42 percent of the Ontario's acute care hospitalizations and 59 percent of its hospital days (Canadian Institute for Health Information [CIHI], 2013), Mount Sinai Hospital in Toronto increasingly recognizes that the current hospital system was designed with the needs of a younger population in mind.

Little attention is paid to the unique needs of frail older adults within acute care settings who often present with a number of inter-related chronic and acute health and social care issues.

As a result, it has long been recognized that the way in which acute care services are currently organized and delivered often disadvantage older adults with chronic diseases (Thorne, 1993). Mount Sinai decided to lead Canada's acute care hospitals in this area in 2010 when it became the first to make Geriatrics a core strategic priority.

Aging patients achieve better health care outcomes when their care is coordinated, comprehensive and timely.

Therefore, in recognizing these needs, Mount Sinai sought to develop programs and enabling tools through its innovative

Acute Care for Elders (ACE) Strategy that could allow them to deliver the right care, in the right place at the right time.

Challenges before Cerner

- Lack of order set priority upon admission that specifically addresses the unique needs of older adults.
- Inability for systems to identify high-risk older patients between different points across the care continuum.
- Siloed information between the primary and community care providers involved with the high-risk older home care program and the Home-Base Primary Care House Calls Program and Emergency Department (ED) or hospital staff.

Cerner partners with Mount Sinai to enable its Acute Care for Elders (ACE) Strategy

With *Cerner Millennium®* already established as the hospital's Electronic Health Record (EHR) platform, implementing and enhancing its ACE Strategy with Mount Sinai's frontline clinicians and Informatics Department was seamless. The Informatics Department engaged heavily with its front line providers to understand their necessary needs to deliver the care they aimed to provide.



At a Glance

Name: Mount Sinai Hospital
Location: Toronto, Canada
Beds: 472
Admissions: 25,875
Outpatient visits: 674,000
ED visits: 46,856

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This resulted in the implementation of the most practical and user-friendly Cerner enabled solutions. New processes and tools were tested in advance and then launched with an accompanying awareness campaign. All of these easy to use and understand IT solutions have now become well engrained in the culture of this academic health sciences centre and its community partners.

The ACE Strategy's inpatient care models are enabled by the creation and use of six evidence-informed admission order sets: a general ACE Unit Order Set, and those for older patients with COPD, CHF, Cellulitis, Pneumonia and Hip Fractures.

The ACE Superset contains several admission order sets and ensures ACE-specific protocols are used in the care of every older patient. The order sets have ensured that patients are given exposure to more optimal medications and care protocols, and also allows consultations with key specialists and allied health providers to start much earlier.

Furthermore, the documentation of key Geriatric clinical process and outcomes indicators have been integrated into existing Clinical Documentation tools. These tools populate the vitals sections, as well in the chart, to better support the care of these patients, and in monitoring the overall quality of care being delivered.

A more seamless integrated service delivery model has been enabled at several points in the hospitalization process and within several teams. This promotes care to start within the ED and for care coordination around these patients to begin in real time.

The development of a real-time report providing the location of ACE-designated patients across the hospital also aides the identification and prioritization of certain patients for transfer to the hospitals ACE Unit, and the initiation of best-practice care protocols wherever they may be.

Point-of-care interventions have been greatly enabled and facilitated across its continuum of care with the creation of an email-notification system for community-dwelling Mount Sinai/Community Care Access Centre (CCAC) Integrated Client Care Program (ICCP) and House Calls Program patients, whose health needs may have required an unscheduled trip to the ED at Mount Sinai Hospital.

For these patients, notifications are triggered when the person arrives at the ED, prompting conversations around care, sometimes before the ED Physician has even seen the patient.

The goal of this automated communication process is to facilitate vital information exchanges amongst the clinical team members that know the patient across the continuum of care.

This process is solution-focused, with a goal of avoiding hospitalizations whenever possible and facilitating a patient's return to the community as soon as possible. The program also ensures that the right information supports a patient's necessary care in the ED or the hospital.

Cerner Project Overview

Cerner is a key partner of Mount Sinai, by working together to make elder care a priority within the hospital and community. By pairing the existing EHR with Cerner's ACE Strategy solutions, Mount Sinai is already seeing impactful change in the way care is delivered and has enabled it to become widely-recognized as Canada's leading acute care hospital when it comes to the care of older patients.

Accomplishments

- Client, caregiver and provider goals are being met, as is evidenced by improved overall patient and provider satisfaction rates.
- Hospital lengths of stay, ALOS/ELOS ratios, readmission rates, ALC days and the percentage of older patients returning directly home have all significantly improved
- The management of pain, nausea, incontinence and constipation (amongst other issues) has been greatly augmented overall, while the incident of pressure ulcers, falls, functional declines and delirium has declined
- Clinical providers across sectors (inpatient, community and primary care) are working in a more integrated fashion.
- Estimated net savings achieved as a result of the implementation of the ACE Strategy for Mount Sinai Hospital in 2012/13 was \$6.26 Million.

Industry Recognition

First place winner of 2013 Cerner Advancing Clinical Excellence Award for Improvement for Nursing Workflow.

For more information, please visit www.mountsinai.on.ca and www.cerner.ca