

Integrated Home-Based Primary Care through eVisits

The Toronto Central LHIN

Background/Issue:

Frail, homebound older adults with complex co-morbidities and social care issues are among the most vulnerable and marginalized patient populations in the Toronto Central Local Health Integration Network (LHIN). More often than not, older homebound adults find it challenging to access medical care. They do not see a primary care provider or specialists on a regular basis as they find them difficult to access and reach. This results in increased emergency room visits.

Objective:

Increase collaboration between care teams to keep geriatric patients in their homes and reduce Emergency Department (ED) visits, hospitalizations, readmissions, and long-term care placements in alignment with the Excellent Care for All Act.

Solution:

A telemedicine program was established under the Ministry of Health and Long-Term Care (MOHLTC) and University of Toronto BRIDGES research program in 2012.

The Integrated Home-Based Primary Care (IHBP) program, led by Mount Sinai Hospital's Geriatric program, brings specialists together with primary and community care providers and their patients through an eVisits (real-time video visit using videoconferencing technology). Patients are visited in their home by a Telemedicine Nurse, who connects them to a specialist and their primary care provider through videoconference.

Benefits:

Healthcare providers and patients involved in the program identify the following benefits to this virtual approach:

- saves time and travel for patients and providers
- increases a patient's access to specialized care
- care team can visit with the patient in their home environment and gain a better understanding of their socio-economic situation which may impact care
- interdisciplinary approach addresses multiple health issues, eliminating a siloed approach
- primary care physician and patient have access to experts across disciplines in one place, at one time

Key Elements of a Telemedicine Program:

Telemedicine Nurse:

The Government's "Open Ontario Plan" to provide more access to healthcare services while improving quality and accountability for patients, resulted in the recruitment of 191 full-time nursing positions focused on delivering clinical telemedicine at member sites across Ontario.

Telemedicine Site:

Telemedicine sites are equipped with OTN's videoconferencing technology and a Telemedicine Nurse and/or a Telemedicine Scheduler who manages the scheduling and coordination of an appointment.

Telemedicine Solution: eVisits

OTN's videoconferencing solution for eVisit is just one of the many virtual tools available to members of the OTNhub. eVisits can be conducted over a computer, mobile device or room-based videoconferencing system.

OTN Representative:

OTN has a field team available across the LHINs who specialize in change management and can provide support as organizations identify virtual solutions right for them, secure support from decision makers, and integrate telemedicine into their practice.

Partnerships:

OTN is one of the largest telemedicine networks in the world. This network has grown through evolving partnerships which unite and empower Ontario's healthcare community. Developing strong working relationships with those in your patients' circle of care is integral to the success of any telemedicine program. Providers using OTN's products and services can connect and collaborate on OTNhub.ca – a private and secure online community for practicing telemedicine.

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Patient Population

Patients within this program are frail, homebound older adults (age 65 of older) with complex co-morbidities and are living in the Toronto Central LHIN. They often meet the characteristics of the top 1 per cent of system users. Patients cannot live in a nursing or retirement home at the time of enrolment.

Patient Journey:

Without Telemedicine

1. Older adults who have complex co-morbidities are referred to a specialist by their family physician
2. Patient does not visit specialists due mobility restrictions
3. Patient may end up in Emergency Room or hospital due to lack of care

With Telemedicine

1. Frail, homebound older adults who often have complex co-morbidities are referred to a specialist by their family physician
2. Patients referred to an IHBPC program are first assessed for eligibility in the telemedicine program by a Telemedicine Nurse.
3. Once approved, the Telemedicine Nurse visits the patient in their home prior to eVisit to ensure the patient is set up with videoconferencing capabilities.
4. Nurse returns to patient in the home for eVisit
5. The Telemedicine Nurse conducts a full complete geriatric/physical assessment and provides a detailed report to both the specialist as well as PCP

Participating Sites:

Mount Sinai Hospital leads this program and there are six participating Family Health Teams (FHTs): South East Toronto, Taddle Creek, Mt. Sinai, Sunnybrook, Toronto Western, and St. Michael's.

How it Works:

1. Patient Referral:

The IHBPC program encompasses two primary care team models - the SPRINT House Calls Program (a not-for-profit program providing frail and homebound seniors with physician-led, interdisciplinary care at home) and the Family Health Team (FHT) home-based primary care program. Patients referred to the IHBPC program are first assessed for eligibility in the telemedicine program.

2. Coordination:

A Telemedicine Nurse spends at least 70 per cent of their time coordinating and scheduling eVisit appointments with geriatric patients referred to the telemedicine program. Before scheduling a home visit, the nurse reviews the referral, identifies a specialists from a local hospital (i.e. Mount Sinai Hospital and University Health Network), and schedules the appointment. They also work with the care team and family members to acquire the appropriate patient information needed for the appointment.

3. eVisit:

A Telemedicine Nurse - equipped with eVisit technology (laptop computer with videoconferencing peripherals) - visits the patient's home for the appointment. The first eVisit is led by the physician but includes the specialists and caregivers associated with the patient's care. The physician conducts a thorough assessment and develops a shared-care plan. The physician manages the plan with the specialist after the initial eVisit. The team is then updated every six months to assist in care planning.

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Resources:

Technology:

The Family Health Teams and participating hospitals have videoconferencing systems or software. These are known as the primary telemedicine sites. All participating physicians and specialists involved in the program are equipped with personal computer videoconferencing technology to participate in the eVisit from their office or home location.

Funding:

The program is primarily funded by the Toronto Central LHIN. The LHIN funds the Telemedicine Nurse and guides the program's targets and growth prospects. A Program Manager, who was hired by the Geriatric Program at Mount Sinai Hospital, oversees the day-to-day operations and efficiencies of the program. Participating providers can bill OHIP for face-to-face consultations and indirect consultations through rounds.

Human Resources:

A Telemedicine Nurse is an integral member of the IHBPC team. The nurse consults with the Family Health Team and the House Calls program when a specialist consultation is required. One day per week is dedicated to each Family Health Team to facilitate scheduling and planning of their telemedicine events.

Training/Change Management:

Before telemedicine's integration, each Family Health Team had specialists attending weekly and bi-weekly rounds via OTN's videoconferencing solution. As a result, these specialists were familiar with the technology, and only needed training to become familiar with providing bedside consultations through an eVisit.

Implementation

1. Identify a Need

While many Family Health Teams and the House Calls Program had a consultant internist and/or psychiatrist attending team rounds to discuss complex patients, the specialists could not provide direct home visits to homebound patients under the old care model due to time limitations. Telemedicine technology was identified as a solution to this problem.

2. Create a strategy:

In this case, the initial strategy was to create a "pool of specialists" providers could refer to for homebound patients over 65 years of age. However, as the program unfolded, it focused on a "continuum of care" and connecting medical and socially-complex homebound patients to specialists they already have a relationship with.

3. Partner with existing programs:

The LHIN works with the regional Family Health Teams and the House Calls Program to achieve their goals. CCAC Care Coordinators are now active partners in the weekly IHBPC team rounds at each IHBPC site, and help coordinate and plan care across primary and community care. They are often the primary liaison between patient and care providers after an acute care admission.

Overcoming Barriers:

Lab Tests

Often, patients referred to this program require lab testing before the eVisit can be scheduled. To avoid patient travel, the Telemedicine Nurse brings with her, into the home, a mobile unit to conduct blood work.

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Staffing Resources

The LHIN-funded nurses available to the IHBPC program have many responsibilities and can visit up to three patients a day. As the program grows, more resources are needed. If funding is unavailable to hire new staff, an existing staff member can take on the role of coordinating telemedicine appointments as they would in-person visits.

Wait Times

Specialists have busy schedules, so it's often difficult to book their time. While it is arguably easier and faster to see a patient over videoconference than it is in person, telemedicine isn't top-of-mind for many specialists. Participants are therefore subjected to a specialist's regular waiting lists. To overcome this mindset, OTN can help an organization gain physician buy-in and identify the transformative impacts telemedicine can have on the clinical program's overarching goals to more seamlessly integrate it into a practice.

Additional Information:

- [Toronto Central CCAC and Primary Care - Completing the Circle of Care Through Integration.pdf](#)
- [Home-Based Primary Care for Frail Older Homebound Adults - An Innovative Solution for a 21st Century Challenge.pdf](#)
- [List of Program Coordinators.pdf](#)
- [Project Summary - IHBPC - LHIN Evaluation.pdf](#)