Background:

One-third of Ontarians have a chronic health condition complicating factors such as mental health concerns or lack of social supports. Many of these, typically older, patients see multiple specialists with little care coordination in care. Solo family physicians rarely have access to interdisciplinary resources to help them manage these complex patients. They lack the tools needed to easily collaborate with specialists, as a result, silos in patient records and care management are created, resulting in frequent patient emergency room visits and hospital admissions.

Objective:

Increase collaboration between care teams to provide solo family physicians with the support they need to better manage and coordinate care for older patients with complex medical needs.

Solution:

To improve the way it delivers care to its diverse communities, the Toronto Central LHIN adopted the Ontario Telemedicine Network's (OTN) virtual care solutions to create an innovative new model of care called Telemedicine IMPACT Plus (TIP). This model uses telemedicine for case conferences, inviting the patient to meet with a group of interprofessional care providers and his/her solo family physician by eVisit (real-time video visit using videoconferencing technology). The eVisit enables the interprofessional team to develop a coordinated care plan and recommendations for care.

Benefits:

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

- Primary care physician and patient have access to experts across disciplines in "one place at one time"
- Collaborative approach addresses multiple health issues, supports problem solving, eliminates siloes in care, and enhances a physician's confidence.
- 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
- Patient participation ensures plan reflects his/her priorities
- Ability to learn, share and apply best practices health information and knowledge

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 fulltime 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.



Patient Population:

The TIP model targets patients who:

- have a primary care physician
- are aged 65 and older;
- have three or more chronic conditions;
- take at least five medications;
- have a minimum of one activity of daily living (ADL) limitation
- are not homebound or institutionalized

Furthermore, these patients and/or their caregivers must be willing and able to be actively involved in team discussion, and must be motivated to take action to improve the patient's health status. The patient must also be emotionally/cognitively/socially equipped to do so.

Patient Journey:

Without Telemedicine

- 1. Patient sees family physician for multiple chronic conditions
- 2. Patient is referred to specialists
- 3. Specialists recommend different treatment plans, which may or may not complement each other
- 4. Family physician lacks the information needed to stay up-to-date on patient care
- 5. Patient may be asked to attend an in-person case conference with physician and specialists, however patient may or may not show up due to time and travel involved
- 6. Patients go to ER often for care as they are unsure which healthcare provider to see for which condition

With Telemedicine

- 1. Appropriate patients are identified based on program criteria
- 2. TIP nurse is engaged to introduce the patient and their family physician to the TIP program
- 3. Nurse coordinates a case conference and contacts the most appropriate care providers to create the patient's interprofessional care team
- 4. The one-hour case conference via OTN's videoconference service is conducted with the patient in their home
- 5. The nurse engages the patient in the conversation, while each healthcare provider takes turns asking questions and consulting one another
- 6. Recommendations are made by the care team to the family physician as well as options and approaches venues not yet investigated for the patient.

How it works:

- 1. The facilitator for the Telemedicine IMPACT PLUS model (TIP), a Registered Nurse, uses in-depth knowledge, education skills, research and clinical expertise to identify patients with complex co-morbid conditions as part of Ontario's Health Links initiative.
- 2. Once a patient is identified and accepted into the program, patients receive a home visit from a TIP Telemedicine Nurse who schedules a case conference via eVisit.
- 3. The case conference takes place from the family physician's office or patient's home where the Telemedicine Nurse, patient and family physician are linked to the interdisciplinary team (often gathered in a hospital telemedicine suite) using a laptop and OTN's personal computer videoconferencing technology.



Resources:

Human Resources

The Toronto Central LHIN makes use of LHIN-funded Telemedicine Nurses in its region to schedule and coordinate telemedicine events. There is also a Project Manager assigned to champion the program among physician.

Technology

TIP leverages OTN's videoconferencing solution for eVisits. Nurses visiting the patients in the home are equipped with a laptop and videoconferencing peripherals (i.e. camera, microphone).

Funding

This is a LHIN-funded program. The Toronto Central LHIN leverages existing resources, including LHIN-funded Telemedicine Nurses, to execute this program. Physicians can also bill OHIP for telemedicine services.

Change Management/Training

In this instance, OTN worked with the Toronto Central LHIN to identify the opportunity for virtual care, obtain buy-in from physicians and allied health professionals, and implement virtual process seamlessly and securely.

Implementation

This new model of care is made possible with OTN's videoconferencing service for case conferences. OTN offers a variety of training and learning services to help care providers seamlessly integrate telemedicine tools into their day-to-day practice.

Dr. Pauline Pariser, a family physician and Project Lead for TIP, provides the following advice for organizations considering a virtual care solution:

• Start small.

Identify your early adopters and have them trial it. Ensure you have the necessary financial and infrastructure support. "You can't go it alone," says Dr. Pariser. "You need institutional backing."

• Identify a strong leader.

"You need a lead who will stay with it. Someone from the primary sector who sees the 'value add' and is willing to pilot it."

- Put in place strong project management This will help troubleshoot issues and keep up the momentum. OTN recommends appointed a business lead to a telemedicine program.
- Identify key staff roles.

TIP's Telemedicine Nurse provides the critical link between the patient, family physician and interprofessional team, coordinating the case conference and follow-up.

• Leverage OTN's expertise.

TIP worked with OTN to troubleshoot a variety of issues, from billing to technology "It's iterative," says Dr. Pariser. "You need an organization willing to work with you."

• Be willing to think outside the box.

"You have to have a vision if you have complex patients," says Dr. Pariser. "Solutions have to be multifaceted and you have to be willing to step out of standard care models."



Overcoming Barriers:

Physician Support

It is difficult to obtain widespread support from family physicians across the LHIN whose time is limited to adopt new tools. It is, therefore, important to identify an internal champion, project manager or business lead. The Toronto Central LHIN has internal champions who help others think beyond traditional care delivery and realize the benefits of virtual care. They have also delegated someone to manage TIP and encourage widespread participation.

Staffing Resources

While there are LHIN-funded nurses available, they are often overwhelmed with many responsibilities. As the program grows, more resources are needed. Programs are encouraged to leverage existing resources. For example, if funding isn't available for a Telemedicine Nurse an existing staff member can take on the role of coordinating telemedicine appointments as they would in-person visits.

Result:

Launched in late 2013, TIP now offers an average of 25 case conferences a month across the Toronto Central LHIN. To date, 260 patients and 190 solo family physicians have participated. A 2015 evaluation found that patients who participated in a TIP consultation experienced a 40 per cent reduction in hospital and Emergency Room (ER) visits over the 12 months following the consultation. In addition, 93 per cent of primary care physicians indicated their confidence in managing their patients' multiple chronic conditions had increased. Satisfaction with the technology was also very high. A full 100 per cent of family physicians indicated they would use telemedicine again to facilitate case conferences.

Additional Resources:

- Project Summary TIP_IMPACT.pdf
- TIP Process and Time Allocation_GandO_presentation.pdf
- <u>TIP Patient Follow -Up pdf</u>

