



Ontario Telemedicine Network Case Study

Telemedicine Enabled Health Links: An Innovative Solution to Coordinated Care.

Toronto Central LHIN's Telemedicine IMPACT Plus Model of Care

How telemedicine is used to increase collaboration between patients, their family physician and specialists to deliver high quality patient-centred care in the right place, at the right time.

CHALLENGE

Chronic disease is a major challenge of our time. One third of Ontarians have a chronic health condition. This figure is expected to rise with our aging population. Individuals with chronic health conditions are often high-users of our system and account for 65 per cent of Ontario's health care costs. A fundamental transformation in care delivery is required to sustain Ontario's healthcare system with the rising pressures chronic disease places on our system.

Coordinated and efficient patient-centred care is the driving motivator behind the Ontario Ministry of Health and Long-Term Care's vision for its Health Links initiative. Health Links aim to improve the co-ordination of care for complex high-needs patients. This coordination, however, is a challenge due to fragmentation within the health care system. Care providers lack the tools needed to easily collaborate with one another and, as a result, silos in patient records and care management are created, putting patient safety and outcomes at risk.

SOLUTION

The Toronto Central LHIN has created nine Health Links to improve people's access to health services in their communities. Toronto is the fifth largest city in North America with 2.6 million people - 1.15 million of which live within the Toronto Central LHIN.

To improve the way it delivers care to its diverse communities, the Toronto Central LHIN has adopted the Ontario Telemedicine Network's (OTN) innovative solutions within its Health Links. More specifically, the LHIN has supported its Health Links in the creation of a new innovative model of care called Telemedicine IMPACT Plus (TIP). This model relies on the use of telemedicine for case conferences, inviting the patient to meet with a group of interprofessional care providers and his/her solo family physician by video call.

"Telemedicine plays a crucial part in facilitating TIP clinics", says Priscilla Tang, TIP Project Manager. "Telemedicine allows for a more efficient use of existing healthcare resources, and enables us to coordinate case conferences and meetings faster, eliminating

time-consuming travel for practitioners.” TIP clinics, which all Health Links have access to, virtually connects members of a care team with one another and the patient, over a private and secure network - making collaboration easier and more efficient.

A TIP clinic, which is a case conference conducted via telemedicine, is run by a nurse who, with the primary care physician at his/her office and the patient, uses OTN's personal computer videoconferencing technology to connect with an interprofessional care team for a one-hour case consultation. For patients who are home-bound, TIP will facilitate a three-way call to include the patient and family without requiring travel to the family physician's office. These care providers participate in the videoconferencing call by using their personal computer or one of OTN's room-based videoconferencing system located across the region. All connections are made over OTN's private and secure network and can connect multiple people in different locations for the purpose of communication through audio and video. It can also connect solo family physicians and their patients to specialist across the province from anywhere at any time.

These Health Links target complex patients who may be referred by their primary care physician, from the emergency or the hospital, and could benefit from the support of an interdisciplinary care team including clinical specialists. Over the past year, the Toronto Central LHIN has served over 100 patients.

Within the Toronto Central LHIN the TIP nurses take a lead role facilitating telemedicine, or “TIP”, sessions. These nurses are the equivalent to a Health Links coordinator or telemedicine nurse elsewhere. They interact with the patient on behalf of the team and keep all members of the care team up-to-date on the patient's care plan. They also ensure the patient experience is seamless and hassle-free by establishing a relationship of trust with patients.

The average age of patients in the Toronto Central Health Links is 70.6 years and has approximately three chronic conditions and two complicating factors. Telemedicine is used to bring together a number of interprofessional providers and connect them, via videoconference, with these patients to discuss the best care plan for their unique needs. This saves the patient the time and stress associated with travel.

This new model of care can be easily implemented within any Health Link by adopting 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.

RESULTS

Patient satisfaction is at an all-time high!

TIP offers its patients many benefits. Patient and provider experience surveys conducted by the program found that 97 per cent of patients and their caregivers felt increased confidence that the patient's chronic care will be better managed as a result of the TIP case conference. 97 per cent of family physicians served felt hopeful that the patient's care will improve in the next six months as a result of TIP, and 98 per cent would use telemedicine technology again to facilitate a case conference.

Out of the over 125 patients served by TIP, the majority experience mental-health related issues in addition to their chronic conditions, but by delivering the patient care in a familiar setting - either their home or local physician's office - patient anxiety was reduced.

“Telemedicine facilitates a comfortable environment for patients to discuss sensitive issues with a group of healthcare providers, without the intimidation of being physically situated in a room full of practitioners”, says Priscilla Tang, TIP Project Manager.

As a result, care teams noticed that patients often opened up and shared more over videoconference than they would elsewhere.

Pham Family Physician and Director, South East Toronto Family Health Team and Deputy Chief of the Department of Family Medicine, Toronto East General Hospital.

Telemedicine offers:

1. **Timely and easy-to-schedule case conferences** with patients and members of the care team
2. **Access to programs and services** that can support a patient's health care needs and goals
3. **Primary care engagement** to refer complex patients into a Health Link and to become part of the care team
4. **Collaboration** with specialists who can electronically respond to non-urgent clinical requests in a timely manner
5. Ability to **learn, share and apply best practices health information** and knowledge



Telemedicine gives physicians increased access to interprofessional resources.

Telemedicine makes the inaccessible, accessible. This technology gives solo family physicians rapid access to specialists and other interprofessional resources to support care coordination pre and post-clinic. TIP care teams, which consist of a core membership of an internist, psychiatrist, social worker, dietician, pharmacist, and CCAC coordinator, provide solo physicians access to the expertise and resources needed to ensure their patients receive the right care. Some TIP clinics feature a geriatrician and geriatric psychiatrist, or endocrinologist and diabetes educators to offer specialty consultations based on patient needs. As a result, 97 per cent of family physicians agreed or strongly agreed that TIP has effectively increased their access to new interprofessional resources.

"I'm a huge advocate of OTN's telemedicine solutions. OTN empowers physicians, with the ability to easily and conveniently come together and collaborate to improve the quality of care we deliver", says Dr. Thuy-Nga

TIP allows family doctors to stay connected to their patients and receive up-to-date recommendations on their patient's care plan. 94 per cent of family physicians feel increased confidence, as a result of the TIP process, in managing their patient's chronic conditions. These providers also have access to OTN's Learning and Webcast Centre where they can share best practices and educational resources on a variety of topics.

TIP case conferences are OHIP-billable.

PATIENT STORY

A middle-aged man living downtown Toronto was visiting the emergency department (ED) about every other week with one health crisis after another. He struggled to cope with numerous physical and psychological health conditions, including chronic obstructive pulmonary disease (COPD), gastro-intestinal issues, bipolar disorder, and anorexia. While he visited the emergency room often, he felt extremely anxious every time he left the house, and would avoid visiting his family doctor as a result.

Last summer, his case was brought forward to his local Health Link after a long-term stay at the Toronto General Hospital. The TIP nurse facilitator introduced TIP to both the patient and family doctor, and gained their consent to coordinate a case conference. The Registered Nurse (RN) then contacted the most appropriate care providers to create the patient's multidisciplinary care team which included a psychiatrist, internist, social worker, dietician, CCAC coordinator, and pharmacist.

Over the course of the one-hour case conference via OTN's videoconference service, the patient felt relaxed enough to open up about issues affecting his health which had not been shared before. The nurse aided the patient in the conversation, while each provider on the care team took turns asking questions and consulting one another through video. As a result, a number of recommendations were made by the care team to the family physician as options and avenues not already tried for the patient. Specifically, the patient was connected with a dietitian in the community to help guide him through some dietary changes, and upon understanding how fragile the patient was, the team scheduled him for an occupational therapy assessment.

At the end of the telemedicine clinic, the patient expressed his gratitude for the experience. Not only did he feel empowered being at the centre of his care, but he felt at ease knowing he didn't even have to leave the house. The patient stated, "I have a

variety of health-related needs that can't be cared for by just one doctor", he said. "This is the first time multiple doctors have taken the time to meet with me and address all my needs at one time. On top of that, I didn't even have to leave my own home!" The patient indicated that he felt well cared for and confident that his health would be better managed long-term.

On the patient's last follow-up visit, he said "I've never felt so cared for by our healthcare system than I have now. This is great practice, and I hope others take advantage of this service and experience similar outcomes". This is a patient who had been visiting the ED every two weeks prior to entering the TIP program. Since the case conference in February 2014, he has not visited the ED.

OTN is leading the way in telemedicine services

OTN is working to make OTN's telemedicine services more convenient to use than ever. As an OTN telemedicine user, you have access to OTNhub – an online space that delivers enhanced convenience and functionality to Ontario's healthcare providers. OTNhub.ca gives you a single-point of access to all your relevant telemedicine services, including videoconferencing capabilities over your PC, and lets you connect and collaborate with patients and peers from anywhere to everywhere in Ontario. For more information, go to www.OTNhub.ca.