

Case Study



Personal Videoconferencing: a tool for rebuilding community health care

The Challenge

A shortage of access, not a shortage of doctors

The founding physicians of Appletree Medical Group did not subscribe to the perception that the Ontario healthcare system was underperforming due to a shortage of doctors. Rather, they saw the problem as a “shortage of access to doctors.” As they worked on a solution to the problem, Appletree Medical Group redefined its corporate mission: Rebuild Community Health Care.

The Solution

OTN, electronic medical records and richly-qualified telemedicine assistants

In 2011, Appletree began a telemedicine pilot project using OTN's room-based videoconferencing system. Patients in Toronto and Ottawa were offered the choice of seeing a doctor face-to-face in the clinic or seeing a doctor by telemedicine. Toronto patients who opted for telemedicine care were seen by doctors in Ottawa, and vice versa.

For the pilot, the scope of the telemedicine cases was limited. That is to say, the doctors using telemedicine renewed birth control prescriptions or reviewed lab results with patients, whereas cases such as physical examinations or hidden abdominal pain consults were done face-to-face.

Appletree's process for telemedicine visits differs from that of the group's face-to-face consults. That difference, according to Appletree Medical Director Dr. Tim Bell, inspired the unexpected enthusiasm with which telemedicine was received by Appletree patients. Every person receiving telemedicine care was interviewed before actually seeing the doctor. The interviews were conducted by highly-qualified telemedicine assistants who used a world-class electronic medical record (EMR) system that is tablet-based, that a subsidiary company, Canadian Health Systems, developed to capture the information provided by the patient. Currently Appletree's EMR contains



1.6 million records, 25% of which are of Appletree patients.

Appletree's telemedicine assistants, who have undergone internal training, are registered nurses or foreign-trained physicians studying to become certified in Ontario. Using templates embedded within the EMR, the telemedicine assistant interviews the patient and completes the electronic medical forms that are shared in real time with the doctor at a distance. The telemedicine assistant and the doctor can amend or add to the patient's record as the consultation progresses. Dr. Bell explained that the combination of rich health data collected and the in-depth training of the telemedicine assistants enriched the patient experience, because preventive care became part of the process.

Dr. Bell shared the story on one patient whose previous visit to the doctor was by telemedicine. She asked to see the "virtual doctor." Although she was informed that two doctors were in the clinic, and would be available for a face-to-face consultation within ten minutes, she opted to be seen by telemedicine.

Two telemedicine consultation rooms used during the pilot were supplied by OTN's Personal Videoconferencing service. This web-based service connects the patient to the doctor in Ottawa or Toronto

via a personal computer equipped with a webcam and either a headset or speakerphone. The accessibility and cost-effectiveness of Personal Videoconferencing has convinced Appletree Medical Group that the service is the appropriate tool for future distribution of their health care model to underserved communities and health care institutions across the province.

The Benefits

Affordable accessibility

When asked about the benefits of Personal Videoconferencing during the pilot, Alison Green, Medical Affairs, cited the enthusiastic reception by patients and the rapid adoption by Appletree's physicians. Dr. Bell's response was cost effectiveness. "Compared to the cost of installing room-based equipment, Personal Videoconferencing is 1/100th of the investment."

Recently, the Station Mall clinic in Sault Ste. Marie partnered with Appletree to provide telemedicine as an option for its patients. Within three weeks of launching the service, Appletree's doctors were caring for 25 to 30 patients a day using telemedicine. Only 10% of those patients had a family doctor. This partnership appears to offer a solution to a local healthcare problem. Appletree's health care model enables one doctor to care for as many patients as two doctors practicing in the conventional face-to-face manner.

The interview was conducted with the Appletree Medical Group using OTN's secure Personal Videoconferencing service. In attendance were Dr. Tim Bell, Medical Director, Alison Green, Medical Affairs and Hanan Abou El Yazid, Telemedicine Assistant.

Conservatively, 25 to 40% of medical cases can be handled by telemedicine.

Appletree Medical Group is one of Canada's largest multi-disciplinary medical groups. It was founded in Ottawa in 1992. At the time of printing, it has 34 centres in Ottawa and the Greater Toronto Area. Sixty percent of its 225 physicians are General Practitioners, 40% are specialists.

Appletree's mission is to provide a better practice environment for physicians, and thereby to provide better access to care for patients.





Personal Videoconferencing for Your Health Care Practice

Personal Videoconferencing is secure, safe and reliable, and is subject to Ontario's Personal Health Information Act (PHIPA) and Canada's Personal Information Protection and Electronic Documents Act (PIPEDA). The service is state-of-the-art with privacy protocols that meet or exceed provincial and federal standards.

Patients do not pay additional fees. Physicians may bill OHIP for telemedicine at a premium.

Training and support are provided to Personal Videoconferencing adopters. OTN is a recognized provider of health care distance education. That skill and experience are applied to all online Personal Videoconferencing training modules. Experienced OTN staff provide support to all users.

As the world leader in telemedicine, OTN helps Ontario get more out of the health care system, bridging the distance of time and geography to bring more patients the care they need, where and when they need it. Using innovative technology OTN streamlines the health care process, while also expanding the way knowledge is shared and how the medical community interacts with each other and with patients. The efficiencies achieved help health care budgets go farther. Funded by the Government of Ontario, OTN is a not-for-profit organization. For more information, go to www.otn.ca