Telehomecare: holding a promise of collaborative healthcare

With the right care model, telehomecare lets clinicians touch more patient and family lives than ever before. What success takes is a healthy commitment to change and integrating care across settings.

In Canada, patients receive world-class care. To ensure this level of care continues under the pressures of increasing costs and constrained public health budgets, telehomecare, a sub-field of telehealth, is a viable approach to increasing access to care at lower costs. Provinces across Canada are turning to telehomecare as a key action for empowering patients to successfully manage their health conditions in the comfort of their homes with improved access to services across the care continuum. According to COACH's 2013 study of Telehealth in Canada', the rate of growth for telehome care is well below the overall growth of telehealth services. Telehomecare currently exists in Ontario, Quebec, New Brunswick, British Columbia and the Yukon Territory. The most common disease pathways supported by these programs include Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD), and to a lesser extent, Diabetes and Mental Health.

How can telehomecare technology help to solve our health system’s problems? Simply installing an application and providing equipment to patients and providers does not allow an organization to maximize the value from its investment in the technology. Just as any new initiative requires a vision, champions, and the right incentivization, so too, does the introduction of telehomecare in an organization.

Integrated Care Planning As An Enabler.

Cost savings, by way of reducing the number of hospitalizations and reducing length of stay are typically identified as positive outcomes of telehomecare. Critical to both of these benefits is a well thought out, well planned, and well implemented integrated care model. At the heart of this model is the patient and their family who are then supported by primary and community based care teams. Integrated care planning from the inception of the care model right through to the patient’s transition to the home is critical for success. Hospital avoidance is the result of successful care management at home by patients, their families and integrated primary and community teams. However, reducing length of stay through telehomecare takes motivated patients, education, development of trust and integrated care planning between primary, community, specialty and acute care providers during the patient’s hospital stay and right through to their transition from hospital to home. When hospital care providers are aware, informed, and trust that community providers can closely monitor and quickly intervene with appropriate measures at the first sign of a patient’s deterioration, more confidence is instilled to release patients sooner than their expected length of stay. Integrated care planning in a telehomecare setting requires partners and champions from across the care continuum if maximal benefit from telehomecare is to be realized.
Models of Telehomecare

Several care models involving telehomecare exist in Canada. Models of care can range from programs delivering services from their private offices, through specialty clinics or community offices, to contracting the service need to large, centralized tele-nurse triage centres, leaving infrastructure considerations and training needs to a smaller group. Hybrid models also exist where telehomecare technology is managed and implemented centrally but is then tailored regionally or locally to the target population’s specific needs.

One such example of a hybrid model is the Ontario Telemedicine Network (OTN). OTN is a provincial based, centrally managed telehealth model where participating health organizations can tailor the use of the technology for their own targeted and specific purposes. When healthcare organizations become contractual members of OTN, they receive OTN assistance and support for development of telemedicine applications and programs within their organizations. In the OTN model, telehomecare nurses must complete a curriculum to obtain the OTN Telehomecare Certification (which includes modules for clinical and patient self-management support, privacy and security, processes and tools, and practicum). An online virtual platform has been introduced for patients, telehomecare nurses and other healthcare professionals to share their experiences, challenges, and proposed solutions for reference in order to build a community of practice. What has proven to be key in the OTN model is the ability to customize at the local level where administrative and clinical champions can tailor the service to a targeted population.

Contrast the hybrid model to a local, purpose specific model. As an example, The Ottawa Hospital is currently piloting a telehealth initiative using TELUS Health’s Remote Patient Monitoring (RPM) solution. In this pilot, patients who have just undergone hip or knee replacements are discharged early (early acute discharge) and are closely monitored in the home by trained nursing staff for post-op care and during rehabilitation.

For many organizations, the right model(s) of care will be developed over time, through continuous improvement. The most appropriate care model(s) will depend on an organization’s resources, limitations, and capabilities, including management of organizational change capacity. However, of critical importance to a successful care model and telehomecare implementation is having the right champions, administrative and clinical, to maintain focus and purpose based on the targeted need.

Optimizing the Function of the Telehomecare Monitoring Role

To do good through therapeutic relationships with patients is often a driving factor for people entering health care professions. These relationships are often fostered through in-person visits. Although telehomecare offers a different method to establish relationships with patients,
a professional’s identity can be challenged during the introduction of telehomecare, and can therefore feel threatened. In one study concerning COPD and telehomecare, teams faced significant problems in meeting perceived demands for both relationship continuity and continuity of clinical management in the development of telemonitoring services.

The process of developing telemonitoring roles and responsibilities will challenge clinicians to consider how existing interactions with patients will change, how to manage risk without increasing the need to visit patients in their homes. Some may perceive increased risk with reduced patient contact, reducing effectiveness of the clinician’s ability to provide the right care. Some may sense that too much emphasis is placed on meeting expected target volumes of monitored patients. Rather than emphasizing metrics, organizations can support clinicians’ adoption of the new system by exploring their concerns about de-personalization of service, perceived and actual safety risk from reducing the amount of time spent with each patient. These discussions about risk are important to have, as they support the development of risk mitigation strategies in operational processes, which enable clinicians to fulfill their responsibilities as stewards for patient safety. Discussions should support clinicians to recognize the human benefits of telehomecare: coaching patients to take better care and stay as well they can, possessing the ability to connect with dozens more patients compared to traditional contact methods, and having the potential to save more patients and families from the negative consequences of hospitalization by intervening early at the first sign of deterioration. With telehomecare, clinicians have the ability to positively impact the lives of more patients and families than ever before.

**When is Telehomecare implementation not effective?**

There are several factors that Telehomecare programs need to take into consideration to ensure success. These include: perceived ease of use of technology, patient/nurse educational support needs, language barriers, and access to non-professional personal care supports when needed.

One study identified the risk of patient’s lack of acceptance of the technology and reported their patients as “feeling too sick to bother” with the technology and therefore refused to use or allow installation. Strategies to mitigate this risk require collaboration between physicians, nurses and family members to help patients see the benefit and value that monitoring provides in their lives. For example, emphasizing the alignment of the use of the technology with the client’s goals such as staying active and spending time with family and friends. In addition to coaching and mentoring the patient to keep their service goals in mind, consideration should also be given to ensuring ease of use through wireless technology and simple user interface (UI) display of plain language.

Another scenario involves telehomecare teaching methods as not being flexible enough to meet the wide range of patients’ learning needs. A patient’s steep learning curve can decrease the
confidence of the teaching clinician to transfer the knowledge of using the device to the patient. Strategies to mitigate this situation include the application of adult learning principals to the teaching methodology. In addition, providing easy access to reference documentation in one centralized spot, such as a simple FAQ document which includes commonly encountered issues and solutions, can help alleviate the anxiety attached to recall and knowledge retention.

The lack of assessing patients’ understanding of self-care management techniques can also hinder success of telehomecare. Reviewing biometrics with patients without employing self-care assessment strategies, such as “Teach Back”, may result in loss of educational value. Ensuring the clinician has successfully taught intended messages is of vital importance. Support to the patient’s self-management should include reinforcement of the messages over time, as well as providing tips and tricks required for self-care and lifestyle changes on an ongoing basis.

For a patient who does not have a caregiver, telehomecare relies on the patient to be able to not only understand and interpret the system but to also take action. Careful consideration must be given to subpopulations with moderate to severe cognitive impairment, and those who may not understand English and/or French, which are the two predominantly available languages for existing telehomecare software. Additionally, patients who have deteriorating memory and motor skills might also hinder submission of timely data required for nurses to assess the individual.

Conclusion

Faced with the challenges of a growing population, long waitlists for residential care, as well as rising acute care costs, Canadian provinces have shifted their health strategies to include providing care closer to home. As adoption of telehomecare increases, there will be no shortage of opportunities to examine implementation efforts, evaluate programs, learn, and adapt to challenges that arise along the way. An integrated approach to care planning coupled with the right care model and careful attention to the provider patient relationship are important to ensuring success. Not to be overlooked is the ease of use of technology, patient educational support needs and access to non-professional personal care supports. To reach the masses, telehomecare solutions must address the wider prospect of language and cultural considerations, as well as ethical and privacy dilemmas in the context of agency regulations and patients’ rights and freedoms. Going forward, it will be beneficial for health organizations across Canada to share their knowledge and experiences, to collaborate more effectively, and to develop better understanding of the factors that support successful telehomecare implementation.

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