

Commentary

Home Telehealth and an Aging Population

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An aging population is driving increased demand for health services and a shift in care from hospital to home. Concerns about the high costs of acute care and the realization that hospitals are “bad places” (e.g., nosocomial infections, functional loss) for old, frail people have focused attention on treating people in their homes, which is for the most part where they prefer to be. Fortunately, technology has the potential to reduce health-care costs, enhance access to services, and improve management of chronic diseases (Center for Aging and Health, 2013).

Home telehealth programs have documented positive outcomes, including reduced health-care costs, fewer hospitalizations and readmissions, improved quality of care, and better chronic disease management (Broderick & Lindeman, 2013; Chetney, 2008). A study of home telehealth implemented in several regional health-care systems in the United States found that health-care utilization decreased 20% for diabetes, 30.3% for hypertension, and 25.9% for congestive heart failure (Broderick & Lindeman, 2013). Another study demonstrated a 50% reduction in hospital readmissions related to heart failure and a total net savings of \$8,155 per patient (Broderick, 2013); the findings indicate high levels of patient satisfaction, reduced hospitalization and readmission, decreased length of hospital stay, and decreased emergency department visits.

What, then, is holding back the wider adoption of home telehealth? Most of the home telehealth programs brought to scale have required development of software unique to each health-care organization, which limits access to data across levels of care (e.g., acute care, home care, primary care). The home health consumer market has seen a proliferation of standalone devices that address specific needs (e.g., personal medical alert systems, medication dispensing devices, blood glucose meters). Home activity sensors (e.g., Lively) that “learn” personal routines and use built-in wireless service to alert caregivers when help may be needed are the latest product to enter the market. However, the usefulness of these

standalone devices is limited by the lack of common data and a secure communications platform to allow remote access. In addition, many of the devices require a separate monthly service charge to cover remote monitoring costs.

Several articles in this issue of *CJNR* provide opportunities to consider ways in which technology might improve care delivery. Remote patient monitoring (RPM) could give families the confidence and support they need to provide home care for alternate level of care (ALC) patients awaiting long-term institutionalization — and possibly even eliminate the need for placement (Cressman, Ploeg, Kirkpatrick, Kaasalainen, & McAiney). A telephone support program for dementia caregivers illustrates the use of low-cost and familiar technology in a care model (Marindale-Adams, Nichols, Burns, Graney, & Zuber). The emotional and informational needs of older adults (McInnis-Perry, Weeks, & Stryhn) might be addressed using network technologies (e.g., Tyze) that enhance communication between friends, families, and neighbours.

The wider adoption and integration of home telehealth will accelerate once a means of bridging existing data silos is found. Nurse scholars need to begin examining the implications of these technologies for nurses' workloads and roles in the future. For example, home telehealth nurses may routinely monitor up to 100 patients a day in lieu of making seven home visits. Such transformations might appear to be a logical response to resource challenges but represent a huge change in the texture of nursing practice (for instance, with respect to the nurse-patient relationship).

Growing concerns over health-care costs and access to care are intensifying interest in leveraging technology to transform the delivery of patient care and improve outcomes for Canada's older population. Nurses are uniquely positioned to influence the delivery of remote patient monitoring to older adults, because they know what clinical information is necessary for informed decision-making and they play a central role in decision-making. Nursing researchers, leaders, and clinicians need to be proactive in the development and assessment of home telehealth programs, to ensure that clinical care needs and patient concerns are addressed.

References

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