"Avoidable" Emergency Department Transfers from Long-Term Care Homes: A Brief Review

Andrea Gruneir

Reducing potentially avoidable use of acute care services has become a priority for many health services providers and funders around the world. Examples of this include efforts to prevent hospital readmissions following discharge and to improve chronic disease management in home and community-based settings (Axon and Williams 2011; Naylor et al. 2004). As well, there has been an uptick in research to identify and describe high-cost health system users who may be better served outside of the acute care sector (Silversides and Tierney 2012). One example of a small yet important high-cost group is residents of long-term care homes (LTCHs).

Who Are the Residents of LTCHs?

LTCHs, known as *nursing homes* in many jurisdictions, are residential settings where nursing and supportive care are provided on a 24-hour basis for individuals who cannot live safely without such support. In Ontario, access to LTCHs is centrally managed through the province's community care access centres. LTCH ownership is a mix of for-profit, not-for-profit and municipal, as well as chain and independent operators (Ontario Ministry of Health and Long-Term Care 2012). There are approximately 75,000 LTC beds in nearly 700 LTCHs in Ontario today.

Residents of LTCHs are actually a small percentage of the older population (usually ranging from 3 to 5%), but they are a highly vulnerable group. They have an average age of 80 years, are predominantly female and have a high burden of medical conditions, including those that affect cognitive and physical functioning. More than 40% of residents have a diagnosis of dementia, with a much higher percentage experiencing cognitive impairment. Other common chronic conditions include diabetes, congestive heart failure and a history of stroke (Gruneir et al. 2010b).

Physicians are generally not on-site; they are more likely to provide care on an on-call basis and through scheduled visits. The vast majority of care is provided by nurses and personal support workers. Nurses oversee care activities, communicate with families and physicians, administer medications and handle charting, while personal support workers assist residents with activities of daily living (Bourbonniere et al. 2006).

Objectives

Acute care, in the form of emergency department (ED) visits and in-patient admissions, is an important component of quality medical care for LTCH residents; however, acute care transfers pose their own risks to residents (Friedman et al. 2008) and should be targeted as part of the larger agenda to reduce avoidable acute care use. Healthcare transitions have been increasingly recognized as a time when patients are vulnerable to adverse events. In particular, transitions from hospital, which have been broadly recognized as problematic in the general older population, appear to pose as much, if not more, risk among the LTCH population. Any such efforts, though, need to be made within a context that prioritizes LTCH quality. This article briefly reviews the evidence on potentially avoidable ED transfers from LTCHs and discusses some of the issues that make this such a complicated matter.

What Do We Know about ED Transfers from LTCHs?

There is a substantial amount of research, largely from the United States, describing hospitalizations from LTCHs (Fried and Mor 1997). A number of non-resident factors have been found to be associated with hospitalization rates, including features of the LTCH (such as staffing and the presence of specialized dementia care units) (Gruneir et al. 2007; Intrator et al. 1999) and regional policies (the most studied include bed-hold policies and daily reimbursement rates) (Intrator et al. 2007), suggesting that there are opportunities for intervention at multiple levels.

There has been less research looking at the specific issue of ED transfers and, consequently, much less understanding of the range of contributing factors. In a comprehensive review of ED use by older adults (Gruneir et al. 2011), we identified only 12 studies that included LTCH residents (Ackermann et al. 1998; Bergman and Clarfield 1991; Brooks et al. 1994; Carter et al. 2006; Chin et al. 1999; Chou et al. 2009; Finn et al. 2006;

Gillick and Steel 1983; Jablonski et al. 2007; Jones et al. 1997; Kerr and Byrd 1991; Wilson and Truman 2005). Common reasons for ED transfer were infections (23.6%) (Chou et al. 2009), fall-related injuries (7–12%), gastrointestinal problems (9.9–15.4%) and altered mental state (9.3–10.1%). Four studies used various clinical criteria to define the appropriateness of transfers (Bergman and Clarfield 1991; Finn et al. 2006; Jones et al. 1997; Kerr and Byrd 1991), with the majority identified as appropriate (55–77%) and only a minority definitively classified as inappropriate (13.1%). Carter and colleagues (2006) were the only authors to use ambulatory care–sensitive conditions as a measure of "avoidability," and they reported that 22% of all ED visits from LTCHs were defined as such. Ambulatory care–sensitive conditions are a set of chronic conditions and infections that are responsive to early primary care activities such that acute care use should be unnecessary or avoidable.

As a follow-up to this review, we undertook a series of studies using administrative data at the Institute for Clinical Evaluative Sciences (ICES) to better characterize ED transfers from LTCHs. We created a cohort of all LTCH residents over the age of 65 years in Ontario in the latter part of 2005 (the year before the Resident Assessment Instrument was phased into LTCHs) and followed up residents for up to six months (a total of 64,589 residents in 589 LTCHs). As far as we are aware, this study is the most comprehensive population-based overview of LTCH to ED transfers (Gruneir et al. 2010a). Over a six-month period, 23% of residents were transferred to the ED at least once (a total of 21,773 transfers). One quarter of transfers were classified as potentially preventable (a set of diagnoses derived from the ambulatory care–sensitive conditions). Of potentially preventable transfers, 88.8% were classified in the ED as either urgent or emergent, 62.4% ended in hospitalization and 23.6% resulted in death within 30 days of the visit. These findings suggest that, while these transfers were likely not avoidable at the time when they occurred, there may be a role for more proactive management of common conditions within the LTCH. Injuries were the most common reason for transfers, accounting for 21.5% of all transfers (86.8% were related to falls). Although we did not include injuries in our definition of potentially preventable transfers, others have, illustrating that some proportion of these events is considered amenable to proactive intervention (Walker et al. 2009).

In our next study, we focused specifically on the timing of ED transfers relative to transitions into the LTCH (Gruneir et al. 2012). The six-month incidence of ED transfers decreased from 35.0% among newly admitted residents (less than 30 days at baseline) to 22.0% for longer-stay residents (more than 90 days at baseline). Regardless of how long a resident had been in the LTCH, the likelihood of ED transfer was double among those who had experienced a recent hospitalization, even after controlling for other characteristics. These findings suggest that improved transitional care within LTCHs may have an impact on improving resident care and reducing the need for ED transfers.

What Do We Still Need to Learn?

Despite the potential for reducing avoidable acute care use among LTCH residents, there are significant gaps in our understanding of the issue. Most notable is concern around the definition of avoidable (or preventable) acute care use. Although the concept has frequently been included in studies, including our own (Carter et al. 2006; Gruneir et al. 2010a), it continues to be problematic, both from a measurement perspective and a clinical one. In a recent review, Ouslander and Maslow (2012) described the existing standards used to define potentially preventable hospitalizations and identified two issues that hinder resolution. First, definitions commonly used to describe such transfers from the LTCH setting are derived from those created for the community setting; moreover, many of these definitions were originally developed for younger populations. Second, these definitions are driven purely by diagnoses and do not consider important factors such as comorbid conditions, patient complexity or resource availability. Given the medical complexity of LTCH residents and the real-world constraints on medical care provision in the LTCH, a more nuanced approach to defining potentially preventable or avoidable transfers may be warranted.

From a clinical perspective, there continues to be a lack of consensus on what is truly avoidable or preventable. Few studies have explored LTCH staff perceptions of this issue, but an in-depth look by Lamb and colleagues (2011) found that staff had widely varying views. When asked to classify recent transfers as either avoidable or not, staff classified the majority as non-avoidable even though the narratives used to describe each avoidable and non-avoidable transfer were largely indistinguishable; for instance, common reasons for both transfer types were family/resident insistence and missed symptoms. For policies targeting avoidable transfers from LTCHs to have an impact, it is clear that we need a relevant definition of avoidable that can be articulated across the spectrum of individuals involved in resident care.

Summary

Access to acute care, in particular the ED, will always be an important component of quality care for LTCH residents. Yet increasing evidence suggests that targeting specific care issues for improvement within the LTCH may help to reduce ED transfers. These issues include better access to medical management for common chronic conditions and infections, fall prevention and transitional care activities. However, for any such initiatives to serve the broader policy agenda of reducing avoidable acute care use, ongoing discussions about what we mean by avoidable within the LTCH context are required. HQ

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About the Author

Andrea Gruneir, PhD, is a scientist at the Women's College Research Institute and an adjunct scientist at the Institute for Clinical Evaluative Sciences, both in Toronto, Ontario. She is an assistant professor at the Institute of Health Policy, Management and Evaluation, University of Toronto, and an adjunct assistant professor in the Department of Community Health Sciences, University of Calgary, in Calgary, Alberta. Dr. Gruneir can be reached at andrea.gruneir@wchospital.ca.