Impact of community paramedic interventions on transfers from long term care to emergency departments: results of a systematic review

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Dear Editor,

Long term care (LTC) facilities are essential living arrangements for many older adults living with frailty who require assistance with their daily needs and management of chronic health issues. In times of acute medical distress, LTC residents may require transfer to the emergency department (ED). Approximately 25% of Canadian LTC residents are transferred to the ED when experiencing acute changes in health status. While sometimes necessary, transfers from LTC to the ED can lead to poor outcomes for LTC residents and add strain on resources available in ED and ambulance transport services. Several common acute changes in health could be managed within LTC, if appropriate resources were available. However, many LTC facilities have high resident to staff ratios, overworked employees, a paucity of skilled healthcare workers, and limited access to resources needed to manage acute issues. Therefore, finding efficient, effective, and affordable ways to support LTC staff to care for acute issues within LTC are needed to improve both patient and health system outcomes.

Community paramedicine, a form of community-based health care delivery that utilizes specially trained emergency medical services (EMS) personnel and systems, has the potential to help meet the acute health needs of LTC residents. Results from our recent systematic review of five databases (Medline; CINAHL, PubMed, Embase, Cochrane)

searched from 1990 to June 2020 provided 19,178 citations. 181 articles were reviewed; four articles from one observational study (one Canadian study) suggest community paramedicine programs can reduce transfers from LTC to ED [1–4].

In the Canadian study, LTC residents were successfully treated by community paramedicine on-site and stayed at the LTC facility in nearly 70% of cases, compared to only 21% of those who were attended to by traditional EMS [1]. A low relapse rate (i.e., repeat calls 48 h after community paramedicine visit) was also reported in the study. Not surprisingly, higher call times were noted when community paramedicine attended to residents in LTC as compared to EMS [1].

Questions remain regarding the impact of community paramedicine programs on resident outcomes, the acuity levels of patients eligible for community paramedicine care, the acceptability of community paramedicine programs by both residents and health practitioners, training required for community paramedicine involved in LTC, and the cost effectiveness of having community paramedicine programs involved in the acute care of residents within LTC [5]. Going forward, we believe this is an area of research that requires further attention, given the projected impact of the aging Canadian population on EDs.

Declarations

Conflict of interest The authors declare no conflict of interest with this publication. Results of the systematic review are available upon request.

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