

## RESEARCH BRIEF - e-Shift, an innovative home care model: Chart Review of eShift Patients

### What is the topic of this research?

In response to the needs of older adults at the end-of-life and challenges in recruitment and retention of healthcare providers in home care in the South West Community Care Access Centre, a new and innovative model of home care, eShift, has been developed. eShift connects unregulated care providers (technicians) providing home care to a remotely-situated Directing Registered Nurse (DRN), through a smart phone application using real-time communication and documentation technology. The DRN monitors and directs appropriate, safe, and effective care provided in collaboration with the technician in real-time, enhancing quality of care delivery for older adults and their family caregivers.

### How was the study done?

A retrospective chart review was conducted using a data extraction tool developed for the purpose of the project. A total of 75 randomly selected patient charts of individuals who were on palliative home care services, received eShift and died between April 1, 2014 and March 31, 2015 were reviewed.

Two cohorts of patient charts were chosen as the focus for the analysis:

1. Patients who died in place of choice and
2. Patients who chose to die at home / hospice but died in hospital.

Analyses examined differences among the two patient groups and their family caregivers.

### What did the researchers find?

- Deceased patients were 52% male and 48% female patients; the average age of the all patients was 79 years (range 77-83 years of age); with most patients living in an urban location.
- Patients' primary caregivers were mostly their spouse/partner followed by adult children; approximately 1/3 of patients did not have a primary caregiver in the home.
- All of the patients who chose home or hospice but died in hospital were hospitalized at least once in their last

month of life whereas about 1/3 of patients who died in their place of choice were hospitalized in their last month of life:

- 45% of patients who died in hospital but wanted to die at home or in hospice had 2 or more hospitalizations in their last month of life.
- There was a significant difference between the two groups with respect to the presence of shortness of breath (SOB). A greater percentage of patients who died in hospital but indicated a preference to die at home or in hospice experienced SOB compared to patients who died in their place of choice.
- Reasons for patient hospitalization in the last 30 days of life were significantly different among the two cohorts:
  - Over-extended and overwhelmed caregivers and/or aspects of the patient's medical condition contributed to hospitalizations among patients who chose home or hospice but died in hospital whereas medical aspects of patients' condition were more prevalent in contributing to hospitalizations among patients who died in their place of choice.
- Evidence of caregiver education pertaining to the end of life and signs and symptoms of imminent death, were statistically significant between the two groups:
  - a greater percentage of caregivers of patients who died in their place of choice were reported as receiving end of life education. This finding reinforces the opportunity for enhanced provider in-service on clear, concise communication and the importance of ongoing caregiver education pertaining to symptom control and end of life care.

### Who are the researchers?

A team of researchers are led by co-principal investigators:

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