## Investigation of a Technology Enabled Model of Home Care: the eShift Model of Palliative Care

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Abstract : Palliative home health care provision within the Canadian context is challenged by: (i) a shortage of registered nurses (RN) and RNs with palliative care expertise, (ii) an aging population, (iii) reliance on unpaid family caregivers to sustain home care services with limited support to conduct this 'care work', (iv) a model of healthcare that assumes client self-care, and (v) competing economic priorities. In response, an interprofessional team of service provider organizations, a software/technology provider, and health care providers developed and implemented a technology-enabled model of home care, the eShift model of palliative home care (eShift). The eShift model combines communication and documentation technology with non-traditional utilization of health human resources to meet patient needs for palliative care in the home. The purpose of this study was to investigate the structure, processes, and outcomes of the eShift model of care. Methodology: Guided by Donebedian's evaluation framework for health care, this qualitative-descriptive study investigated the structure, processes, and outcomes care of the eShift model of palliative home care. Interviews and focus groups were conducted with health care providers (n = 45), decision-makers (n = 13), technology providers (n = 3) and family care givers (n = 8). Interviews were recorded, transcribed, and a deductive analysis of transcripts was conducted. Study Findings (1) Structure: The eShift model consists of a remotely-situated RN using technology to direct care provision virtually to patients in their home. The remote RN is connected virtually to a health technician (an unregulated care provider) in the patient's home using real-time communication. The health technician uses a smartphone modified with the eShift application and communicates with the RN who uses a computer with the eShift application/dashboard. Documentation and communication about patient observations and care activities occur in the eShift portal. The RN is typically accountable for four to six health technicians and patients over an 8-hour shift. The technology provider was identified as an important member of the healthcare team. Other members of the team include family members, care coordinators, nurse practitioners, physicians, and allied health. (2) Processes: Conventionally, patient needs are the focus of care; however within eShift, the patient and the family caregiver were the focus of care. Enhanced medication administration was seen as one of the most important processes, and family caregivers reported high satisfaction with the care provided. There was perceived enhanced teamwork among health care providers. (3) Outcomes: Patients were able to die at home. The eShift model enabled consistency and continuity of care, and effective management of patient symptoms and caregiver respite. Conclusion: More than a technology solution, the eShift model of care was viewed as transforming home care practice and an innovative way to resolve the shortage of palliative care nurses within home care. Keywords : palliative home care, health information technology, patient-centred care, interprofessional health care team Conference Title: ICCHI 2016: International Conference on Clinical and Health Informatics Conference Location : Zurich, Switzerland

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