Title
Physician and nurse practitioner home visits at end of life associated with better patient outcomes: a population-based study

Priority 1 (Research Category)
Palliative and end-of-life care

Presenters
Amy Ramzy, BHSc, Mary Scott, MSc, Sarina Isenberg, Colleen Webber, Carrie Heer, NP-PHC,MN, Maya Murmann, MSc, HBA, Jennifer Rayner, PhD, Roshanak Mahdavi, Peter Tanuseputro, David Ponka, MD, CCFP, MSc, Michelle Howard, PhD, Simone Dahrouge, PhD, Claire Kendall, MD, PhD, Aynharan Sinnarajah, Carol Bennett, Kednapa Thavorn, PhD, Amy Hsu, PhD, kathryn may, NP, Sandy Buchman, MD, CCFP, FCFP, Christopher Klinger, PhD

Abstract
Context: Home visits at the end of life decrease hospitalizations and hospital deaths, which reduces healthcare costs and aligns with most patients’ wishes. In addition to family physicians, nurse practitioners (NPs) play a critical role in meeting the rising demand for home and community-based palliative care. However, very few population-level studies have examined practice patterns of NPs delivering home-based end-of-life care and the collaboration between physicians and NPs.

Objective: To describe the characteristics and outcomes of patients receiving home-based palliative care provided by physicians and NPs in the last 90 days of life.

Study Design and Analysis: Retrospective population-based study with a descriptive analysis of patient characteristics and multivariate logistic regression analyses of end-of-life outcomes controlling for patients’ demographics, health, and healthcare use.

Setting or Dataset: Healthcare administrative data in Ontario, Canada.

Population Studied: Adults 19 years and older who died between January 1, 2018, and December 31, 2019, and received home care in their last 90 days of life (N=103,664).
Intervention/Instrument: Receipt of home visits by an NP, physician, or both.

Outcome Measures: Receipt of medications for symptoms (e.g., pain, delirium/agitation, and terminal secretion) in the last 3 weeks of life, acute care use in the last 3 weeks of life, and location of death.

Results: Over half (56.9%) of the decedents did not receive any visits from an NP or physician; 3.8% received at least 1 visit from an NP (and no physician visits), 34.5% received at least 1 visit from a physician (but no NP visits), and 4.9% received at least 1 visit from each. NP visits were more prevalent among patients living in rural areas. Patients who received at least 1 home visit were less likely to be hospitalized, more likely to have received medications for symptom management, and more likely to experience a community-based death. These associations were strongest when patients received home visits from both NPs and physicians. Results from multivariable regression are forthcoming.

Conclusions: The receipt of at least 1 NP or physician home visit at the end of life can significantly reduce acute care use, improve access to symptom management medications, and mitigate hospital-based deaths. Collaboration between NPs and physicians was associated with greater benefits to patients’ outcomes.