

## Journal Watch

### ***Using More End-of-Life Homecare Services is Associated With Using Fewer Acute Care Services: A Population-Based Cohort Study.***

Reference: Seow H, Barbera L, Howell D, Dy SM. *Medical Care*. 2010, 48: 118-124.

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#### Abstract

**BACKGROUND:** Healthcare systems are investing in end-of-life homecare to reduce acute care use. However, little evidence exists on the timing and amount of homecare services necessary to reduce acute care utilization.

**OBJECTIVES:** To investigate whether admission time to homecare and the amount of services, as measured by average nursing and personal support and homemaking (PSH) hours/week (h/wk), are associated with using acute care services at end-of-life.

**RESEARCH DESIGN:** Retrospective observational cohort study.

**SUBJECTS:** Decedents admitted to end-of-life homecare in Ontario, Canada.

**MEASURES:** The odds ratios (OR) of having a hospitalization or emergency room visit in the 2 weeks before death and dying in a hospital.

**RESULTS:** The cohort (n = 9018) used an average of 3.11 (SD = 4.87) nursing h/wk, 3.18 (SD = 6.89) PSH h/wk, and 18% were admitted to homecare for <1 month. As admission time to death and homecare services increased, the adjusted OR of an outcome decreased in a dose response manner. Patients admitted earlier than 6 months before death had a 35% (95% CI: 25%-44%) lower OR of hospitalization than those admitted 3 to 4 weeks before death; patients using more than 7 nursing h/wk and more than 7 PSH h/wk had a 50% (95% CI: 37%-60%) and 35% (95% CI: 21%-47%) lower OR of a hospitalization, respectively, than patients using 1 h/wk, controlling for other covariates. Other outcomes had similar results.

**CONCLUSION:** These results suggest that early homecare admission and increased homecare services will help alleviate the demand for hospital resources at end-of-life.

#### Strengths:

- Large cohort that is heterogeneous
- Uses real world data
- Addresses issues that are currently relevant with the healthcare system

#### Weaknesses:

- Administrative data does not capture aspects of care which would affect the amount of homecare services used, such as caregiver support, symptom severity, and privately obtained services.
- Does not account for rurality and clustering by regions
- Does not include patients from long-term care facilities
- Reference point of 3-4 weeks and excluding those admitted less than 2 weeks may have skewed the data
- Quality of life should also be a measure

Relevance to palliative care:

This study shows that palliative homecare is a policy that needs to be considered. Identification and admission of patients into end-of-life homecare may help reduce acute care service use and improve quality of life.



