

Palliative care and the quality of end-of-life: evidence from a major Victorian public hospital

Chris Schilling^{1,3}, Jaclyn Yoong^{2,3}, Monica Gill², Melissa Sajeva², Elizabeth Davies², Nga Dang², Florencia Sjaaf^{1,3}, Alison Giles^{2,3}
¹Melbourne School of Population and Global Health, ²Northern Health, ³University of Melbourne; Melbourne, Victoria, Australia



BACKGROUND

Several studies have investigated the impact of palliative care on healthcare utilization and quality of end-of-life (EOL) metrics such as hospital admissions, intensive care unit (ICU) admissions, and use of invasive procedures in the last year of life. While findings have been heterogeneous, there is growing evidence to suggest that early integration of palliative care is associated with reduced rates of acute care utilization, and an improved quality of EOL. This trend is often attributed to the proactive symptom management, advance care planning, and enhanced communication facilitated by palliative care teams, which can help patients avoid crises and unnecessary interventions.

- **Our aim was to investigate the impact of palliative care on EOL healthcare utilisation and quality at the Northern Hospital in Melbourne.**

METHODS

Linked data on all hospital decedents from January 2018 to December 2023 was obtained from the hospital's Decision Support Unit. Data included patient characteristics and aggregate hospitalisation variables for the last 12 month of life including length of stay, procedure codes, emergency department (ED) visits, and costs of care.

- Palliative care was identified via a palliative care inpatient bed episode, a palliative approach to care Z51.5 code, a consultation team visit or a community care episode.
- Quality of EOL metrics were coded based on algorithms from the literature, included two or more ED presentations in last 30 days of death; and inpatient chemotherapy within 30 days of death.
- Timing of palliative care was categorised into timely (90+ days before death) or late (<90 days before death).

Univariate and multivariate logistic regression models were used to evaluate the impact of palliative care, and timely palliative care, on EOL metrics.

RESULTS

In total, 5,464 decedents were analysed.

- Mean age at death 77.8 years (std dev: 12.9), 45.7 per cent were female, 0.9 per cent were Aboriginal, 63.3 per cent spoke English as their primary language, and 23.7 per cent died of cancer.
- Palliative care was provided to 73.9 per cent of decedents, but only 14.3 per cent received it in a timely manner.

Quality of EOL metrics

- **Provision of palliative care was associated with reduced ICU admissions in the last 30 days of life (OR: 0.01, p<0.001) and reduced inpatient stays of 14 days or longer in the last year of life (OR: 0.43, p=0.082) when the cohort was limited to those with cancer.**
- **Timely palliative care, relative to late palliative care, was associated with further reduced ICU admissions (OR 0.39, p=0.001) for both cancer and non-cancer patients.**
- **Results that were positive but not statistically significant at the 10 per cent level for cancer decedents included the association between palliative and reduced chemotherapy (OR 0.50, p=0.180) and reduced inpatient stays (OR 0.64, p=0.153)**

Selection bias was a limitation of the analysis, with receipt of palliative care potentially due to more complex patients. This could only be partially adjusted for in the dataset.

CONCLUSION

In this single site, public hospital, the provision of palliative care, and timely palliative care, was associated with an improved quality of end-of-life and reduced healthcare utilisation. Expanded coverage of timely palliative care has the potential to further improve the quality of end-of-life.