Block 10 Gabler

Spilsbury Katrina, Rosenwax Lorna, Arendts Glenn, Semmens James. The Association of Community-Based Palliative Care with Reduced Emergency Department Visits in the Last year of Life Varies by Patient Factors. *Annals of Emergency Medicine*. 2017:69(4):416-425.

## Background:

Utilization of the ED increases near the end of life. Palliative care was in part developed to improve end of life care for cancer patients but it has expanded quite a bit in the last several years to include many more patient conditions such as end stage liver and renal disease, COPD, and CHF. Although palliative care tends to decrease the utilization of acute care near the end of life, some of these visits are certainly warranted. A study in the US showed that 77% of ED visits at near the end of life were unavoidable. However, high quality palliative care should still mitigate some of these visits. The authors of this paper were specifically interested in assessing patterns of ED use in the last year of life for several fatal conditions and whether this varied if patients were receiving community-based palliative care.

## Methods:

This study is a retrospective cohort study. They evaluated the last 365 days of life for patients with several different illnesses amenable to palliative care, mostly, heart failure, neoplasia, renal failure, liver failure, COPD, movement disorders, HIV/AIDS, and Alzheimer's. The patient received palliative care from a nonprofit organization Silver Chain Western Australia who provides more than 90% of in-home palliative care in Western Australia.

## Results:

Of the 11,875 patients studied, 93% had one of 5 of the most frequent conditions; neoplasm, heart failure, renal failure, COPD, and liver failure. Most patients visited a hospital at least once and in total, the cohort had a total of 26,020 ED visits. Most notable, they found that adjusted average of ED visits decreased by 50% when patients were receiving community-based palliative care. The relative reduction was highest in patients older than 90 year old at 60% and less for patients under 60 years old at 43%. Patients living in the least disadvantaged areas also had a greater reduction of 60% compared to 44% for those living in the most disadvantaged areas.

## Limitations:

This study did not assess the severity of disease for any patients and it is possible that patients died earlier than might have been expected. These patients may have been waiting for transplant or still receiving curative treatments. For these patients, they likely tended to visit the ED more as their motivation was different than those with greater insight into the terminal nature of their disease. The ED visits are likely different between these two groups. Also, this study lacks some external validity as Western Australia basically uses one palliative care service that seems to be quite comprehensive, which is quite different from palliative care in the US that is provided by many different groups.

Bottom Line: Overall, patients that receive community-based palliative care use the ED less in their final year of life. Patients that are older and patients that are living in a less disadvantaged area have the great relative reduction in ED visits. This study suggests that the influence of palliative care on utilization of acute care is not uniform and that high-quality palliative care decreases visits to the ED in the last year of life.