

## ***Journal watch***

### **Factors Associated with the High Prevalence of Short Hospice Stays.**

Miller SC, Weitzen S, Kinzbrunner B *J Pall Med* 2003; 6:725-736.

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#### **Abstract**

This study's goal was to gain an understanding of the factors associated with hospice stays of 7 days or less (i.e., short hospice stays), and to test the hypothesis that independent of changes in socio-demographics, diagnoses, and site-of-care, the likelihood of a short hospice stay increased over time. We examined hospice stays for 46,655 nursing home and 80,507 non-nursing home patients admitted between Oct 1994 and Sep 1999 to 21 hospices across 7 states, and owned by 1 provider. Logistic regression was used to determine the factors significantly associated with a higher probability of a short stay. Compared to patients admitted in (fiscal year) 1995, a nursing home resident admitted to hospice had a 26% probability (95% confidence interval [CI] 0.24, 0.28) of a less than 8-day stay and , in (fiscal year) 1999, the probability was 33% (95% CI 0.31, 0.34); a non-nursing home patient had a 32% probability in 1995 (95% CI 0.30, 0.34) and 36% probability in 1999 (95% CI 0.34, 0.37). The probability of a short hospice stay was greater for patients with non-cancer diagnosis, independent of year of hospice admission. In this paper we discuss the possible underlying reasons for the increased probability of short hospice stays and we speculate on what this increase may mean in terms of hospice's ability to provide high-quality end-of-life care.

#### **Comments**

##### Strengths/Uniqueness:

The large number of admissions which were examined strengthened the results. [This study presents the factors associated with high prevalence of short stay, defined as less than 8 days, using a large, national for-profit hospice provider with 21 hospice programs in 7 states in the USA. The results showed an independent increase in the probability of short stays in hospice in each fiscal year subsequent to fiscal year 1995, when controlling for the diagnostic and socio-demographic mix of patients entering hospice. This study also showed that a higher proportion of patients received fewer days of hospice care although more patients were accessing hospice care, which is consistent with results previously reported.

The results led to the discussion of possible underlying reasons for the increased probability of short hospice stays. The potential contribution of closer monitoring of physician certification of hospice eligibility was addressed. This became effective in 1999 based on the conclusion that a large proportion of long stay hospice patients, particularly nursing home patients with non-cancer diagnosis, were ineligible for hospice admission according to the Office of the Inspector General in 1997 and 1998. The authors also referred to the potential contribution of delayed referrals to hospice due to changing practice patterns and increased availability of new technologies and therapies.

##### Weaknesses:

As the authors reflected in the text, the existing computerized database leads to difficulty in fully controlling patient demographics. Patients' detailed information such as physical symptoms is unavailable.

Relevance to Palliative Care:

This study highlights the issue of effective utilization of hospice programs. As the authors indicated short hospice stays may lead to the inability to provide the benefit of high-quality end-of life care, although longer stays also create decreased accessibility to hospice. However, it is always difficult to show the evidence of "high-quality" care in hospice compared to other settings. Economic evaluation of utilization of hospice beds compared with the acute care system is another issue.