

ONLINE FIRST

Resource Use in the Last 6 Months of Life

What Does It Mean for Patients?

Everything that the human race has done and thought is concerned with the satisfaction of deeply felt needs and the assuagement of pain.

Albert Einstein¹

COUNTRIES AROUND THE WORLD EXPEND substantial resources to relieve the suffering caused by the burden of disease. Three articles published Online First in the *Archives* examine health care at the end of life. Two articles report on health care use and costs of care for older patients with heart failure in the last 6 months of life. One study was performed in the United States and the other in Canada, 2 countries that have markedly different health care systems. The third article examines the use of hospice in men with prostate cancer in the United States.

Unroe et al² examine health care use and costs for US Medicare beneficiaries with heart failure in the last 6 months of life who died between 2000 and 2007. In a companion article, Kaul et al³ analyze resource use in the last 6 months of life among patients with heart failure in

*See also pages 196,
204, and 211*

Alberta, Canada, who died between 2000 and 2006. Both studies report that use of health care services and the cost of care spiraled upward.

Commonalities in the use of health care services were found. The 2 articles report that most patients with heart failure were admitted to the hospital in the last 6 months of life. In the United States, the percentage of these patients who were admitted to an acute care facility was 80%, a figure that did not change during the study period. In Alberta, the percentage of patients hospitalized at least once in the final 6 months of life was broadly similar to that found in the United States, yet it had decreased from 84% in 2000 to 76% in 2006.

Three differences in care between the United States and Alberta are noteworthy. First, the place of death varied considerably. In Alberta, more than half of patients with heart failure, or 54%, died in the hospital compared with one-third, or 35%, of patients in the United States. The Canadian authors attribute the higher percentage of in-hospital deaths to limited alternatives to hospital care. In the latter years of the study, however, patients in Alberta had greater access to care in settings outside of the hospital, which the authors say accounts

for the decline in inpatient hospital deaths from 60% to 54% during the study period.

A second distinction between the 2 countries is that a higher percentage of patients in the United States had 4 or more comorbidities. In 2000, 61% of Medicare patients had 4 or more comorbid conditions; by 2007, this percentage had increased to 73%. In Alberta, 41% of patients had 4 or more chronic conditions in addition to heart failure at the beginning of the study, and this figure increased to 44% by 2006.

Third, hospice use for patients with heart failure in the United States has increased dramatically. In 2000, 19% of patients with heart failure were enrolled in hospice care compared with almost 40% in 2007. Length of stay in hospice also increased from 36.5 days to 44 days. Unroe et al² attribute this shift to an increase in hospital discharges directly to hospice. At the beginning of the study, a modest 5% of patients were admitted directly. By 2007, this figure had grown to 34%. In Alberta, the use and cost of home care, including hospice, was not included in the analysis.³

Has the growth in palliative care programs in hospitals contributed to the rapid rise in hospice referrals? The number of palliative care programs in the United States in hospitals with 50 or more beds increased from 658 in 2000 to 1486 in 2008.⁴ Hospital-based programs provide palliative care for patients at any stage of an advanced illness, whereas hospice provides palliative care exclusively for patients who are dying. Palliative care consultations in hospitals may have increased the number of patients with heart failure referred directly to hospice, although Medicare's approach to coding for palliative care services makes it difficult to determine a possible effect.

In 2005, the American College of Cardiology/American Heart Association heart failure guidelines⁵ included palliative care for patients with end-stage heart failure. Similarly, in 2006, the Canadian Cardiovascular Society guidelines⁶ recommended that the use of palliative care be considered for patients with heart failure. These guidelines were issued during the latter part of the study periods. Do the US guidelines explain the increase in hospice use among patients with heart failure? A significant increase in hospice referrals, length of stay, and the percentage of patients discharged directly to hospice was observed prior to the 2005 guidelines. For example, in 2000, 5% of patients were discharged directly to hospice; this figure had increased to 28% by 2004 and continued to increase to 30% in 2005 and 34% in 2006 and 2007. Factors other than the issuance of the guide-

lines account for the increase in hospice use, which merits further inquiry.

What health care services should patients with advanced heart failure receive? Singer et al⁷ asked people living with serious and life-limiting illnesses about what they considered quality health care. Participants identified 5 domains of quality end-of-life care: receiving adequate pain and symptom management, avoiding inappropriate prolongation of dying, achieving a sense of control, relieving burden, and strengthening relationships with loved ones. These domains are consistent with the aims of palliative care, which are to prevent and relieve suffering and support the best quality of life for patients and their families.

Did patients in the 2 studies receive care consistent with these domains of quality? This line of inquiry, understandably, was outside the scope of the research. Kaul et al³ reference a study that reported low levels of patient satisfaction with end-of-life care in Canadian hospitals, especially among patients with heart failure.⁸ In the United States, the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments (SUPPORT)⁹ reported that hospitalized patients with advanced chronic illness in teaching hospitals experienced untreated pain and other symptoms. Health care providers' communication with patients and families about their preferences for treatment was lacking.

The *Archives* article by Bergman et al¹⁰ examines use of health care services among men dying of prostate cancer in the United States. More men are receiving hospice care but often late in the course of the disease. Patients not enrolled in hospice are more likely to receive high-intensity diagnostic tests and treatments with questionable impact on the quality of care and quality of life.

Does providing more health care services for heart failure or prostate cancer respond to patients' wishes for the relief of suffering? Cassell¹¹ wrote in his 1982 essay, "The Nature of Suffering and the Goals of Medicine," that suffering occurs not only during the course of a disease but also in the course of treatment. Are more tests, treatments, and procedures relieving patients' burden of suffering or adding to it?

Recent research¹² has found that patients with newly diagnosed metastatic non-small-cell lung cancer who received palliative care on diagnosis along with standard care lived nearly 3 months longer and reported a higher quality of life compared with patients who received standard oncology care alone. In the palliative care group, 33% of people received aggressive end-of-life care while 54% in the standard care group received aggressive care. Median survival was longer among patients receiving early palliative care (11.6 months vs. 8.9 months).

Conversations that allow the patient to describe what is important as he or she lives life with serious illness or near life's end should be paramount in guiding the course of treatment. High-quality palliative care—provided in hospitals, nursing homes, at home, or in hospice—can help patients understand their illness and make informed decisions about their care, together with their families.¹³ It must be integrated into the care of patients in

all settings. Only with the explicit goal of relieving the burden of illness, and relieving the burden of treatment, will health care systems fulfill their intended purpose of caring for the patient.

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