Nearly One Third of Medicare Patients with Advanced Cancer Die in Hospitals and ICUs; About Half Get Hospice Care

New report shows end-of-life cancer care varies markedly across the nation’s hospitals and academic medical centers

Lebanon, N.H. (November 16, 2010) – Whether Medicare patients with advanced cancer will die while receiving hospice care or in the hospital varies markedly depending on where they live and receive care, according to the Dartmouth Atlas Project’s first-ever report on cancer care at the end of life. The researchers found no consistent pattern of care or evidence that treatment patterns follow patient preferences, even among the nation’s leading academic medical centers. Rather, with one in three Medicare cancer patients spending their last days in hospitals and intensive care units, the report’s findings demonstrate that many clinical teams aggressively treat patients with curative attempts they may not want, at the expense of improving the quality of their life in their last weeks and months.

The researchers examined the records of 235,821 Medicare patients age 65 or older with aggressive or metastatic cancer who died between 2003 and 2007. In at least 50 academic medical centers, fewer than half of these patients received hospice services. In some hospitals, referral to hospice care occurred so close to the day of death that it was unlikely to have provided much assistance and comfort to patients.

“The well-documented failure in counseling patients about their prognosis and the full range of care options, including early palliative care, leads many patients to acquiesce to more aggressive care without fully understanding its impact on the length and quality of life,” said David C. Goodman, M.D., M.S., lead author and co-principal investigator for the Dartmouth Atlas Project and director of the Center for Health Policy Research at the Dartmouth Institute for Health Policy and Clinical Practice.

Regional variation in hospital care

Across the United States, about 29 percent of patients with advanced cancer died in a hospital between 2003 and 2007. The highest rate of hospital deaths was in Manhattan (46.7 percent). Rates were also high in surrounding hospital referral regions, including Ridgewood, N.J. (42.8 percent), East Long Island, N.Y. (42.5 percent) and Newark, N.J. (41.1 percent). These rates were about six times higher than the rate in Mason City, Iowa, where only 7 percent of cancer patients died in the hospital. Cancer patients were also much less likely to die in the hospital in Cincinnati (17.8 percent) and Fort Lauderdale, Fla. (19.6 percent).
Cancer patients were most likely to be admitted to a hospital during their last month of life in the Michigan hospital referral regions of Detroit (70.2 percent), Royal Oak (69.4 percent), Pontiac (69.4 percent) and Dearborn (69.1 percent). Rates were also high in the southernmost Texas regions of McAllen (69.3 percent) and Harlingen (69.2 percent). In comparison, less than half of cancer patients were hospitalized in San Angelo, Texas (46.3 percent).

There were also differences in the type of care patients received while at the hospital, with admissions to intensive care units varying more than sevenfold across regions. More than 40 percent of cancer patients were admitted to intensive care during their last month of life in Huntsville, Ala., while only 6 percent of cancer patients were admitted in Mason City, Iowa. Additionally, the number of days patients spent in intensive care was 25 times higher in Huntsville than in Mason City.

**Variation in hospital care across academic medical centers**

The percent of cancer patients dying in a hospital varied threefold among patients receiving most of their care at academic medical centers. More than half of cancer patients died in the hospital among those receiving care at New York Methodist Hospital (54.9 percent) and Maimonides Medical Center (54.3 percent), both in Brooklyn. However, other New York City hospitals had much lower rates, such as Montefiore Medical Center in the Bronx (32.1 percent). Overall, the percent of cancer patients dying in the hospital ranged from 18.7 percent of patients using Evanston Northwestern Healthcare in Evanston, Ill., to 57.3 percent of patients using Westchester Medical Center in Valhalla, N.Y.

The percent of cancer patients admitted to intensive care during their last month of life also varied among those frequenting academic medical centers. Nearly half of all cancer patients were admitted to intensive care during their last month of life at St. John Hospital and Medical Center in Detroit (46.1 percent) and Allegheny General Hospital in Pittsburgh (46.0 percent). Use of intensive care units for cancer patients was dramatically lower at Memorial Sloan-Kettering Cancer Center in Manhattan (8.9 percent) and Montefiore Medical Center in the Bronx (12.1 percent).

In Pennsylvania, cancer patients spent the most time in intensive care in three hospitals: Allegheny General Hospital in Pittsburgh (4.1 days), Thomas Jefferson University Hospital in Philadelphia (3.3) and Lankenau Hospital in Wynnewood (3.2). By contrast, intensive care day rates among cancer patients at Geisinger Medical Center in Danville, Pa. were less than one day (0.5).

**Variation in cancer care directed toward cure at the end of life**

Chemotherapy and other aggressive, life-sustaining procedures can prolong life and return some cancer patients to home and work. But for frail, elderly patients, and any patient with advanced cancer, research has shown these treatments have limited or no benefit. Nonetheless, the report documents that a significant proportion of cancer patients received these types of interventions. For example, chemotherapy was used in the last two weeks of life for about 6 percent of all patients, but in some regions and academic medical centers, the rate exceeded 10 percent, such as in Olympia, Wash. (12.6 percent).

Cancer patients were also more likely to receive aggressive treatment in the last weeks of life in Manhattan, where 18.2 percent experienced a procedure such as endotracheal intubation, feeding tube placement or CPR. Rates of this type of treatment were also high in Los Angeles (17.5 percent), Orange County, Calif. (16.7 percent) and Chicago (16.2 percent). In comparison,
patients were much less likely to experience these procedures in Minneapolis (3.9 percent), Des Moines (5.1 percent) and Seattle (6.4 percent).

“These findings highlight important opportunities to improve the care of patients with serious, life-limiting illness. Patients and families must understand that they have choices – and that it is critical to have early discussions with their physicians about what most matters to them. Physicians and hospital leaders must also recognize that they have much to learn – and that serious inquiry into their current practices can help make sure that we are providing all the care that our patients want and need, but no more,” said Elliott S. Fisher, M.D., M.P.H., report author and co-principal investigator of the Dartmouth Atlas Project and director of the Center for Population Health at the Dartmouth Institute for Health Care Policy and Clinical Practice.

Discussions of end-of-life care are often polarized, framing patients’ choices as cure versus care, hospital versus hospice, and life versus death. The authors suggest that this black and white view of the course of cancer and its care is a disservice to patients whose wish is to live, but also to live well. Living well has a different meaning for each patient, and it is the responsibility of clinicians and health care systems to help patients articulate their goals for living and for their medical care.

“Hospice and palliative care has been proven to be compassionate and effective but too many patients never get it or get it too late. It should be an integral part of care, not an afterthought,” said John R. Lumpkin, M.D., M.P.H., senior vice president and the director of the Health Care Group at the Robert Wood Johnson Foundation.

The Dartmouth Atlas Project is run by the Dartmouth Institute for Health Policy and Clinical Practice and principally funded by the Robert Wood Johnson Foundation. A link to the full study can be found at www.dartmouthatlas.org.

Methodology
The report identified a 20 percent sample of all Medicare beneficiaries who died between the ages of 66 and 99 years during the period 2003 to 2007. From these decedents, the report identified those with poor prognosis cancer diagnoses on at least one hospital claim or at least two clinician visits in the last six months of life. Decedents with hospitalization were assigned to the hospital providing the most cancer care hospitalizations in the last six months of life. All cancer decedents were also assigned to the hospital referral region of their residence.

About the Dartmouth Atlas Project
For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States. The project uses Medicare data to provide comprehensive information and analysis about national, regional, and local markets, as well as individual hospitals and their affiliated physicians. These reports, used by policymakers, the media, health care analysts and others, have radically changed our understanding of the efficiency and effectiveness of our health care system.

About The Robert Wood Johnson Foundation
The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful, and timely change. For more than 30 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime.
For more information, visit www.rwjf.org.

###

3