Beth Israel Deaconess Medical Center investigated this association in the Surveillance, Epidemiology, and End Results (SEER)-Medicare linked database. This linked database represents a collaboration of the National Cancer Institute and Center for Medicare and Medicaid Services, and includes patients’ clinical and demographic information as well as provider characteristics and utilization data. Using the SEER-Medicare database, the researchers examined records of 260,090 Medicare beneficiaries who died of lung, colorectal, prostate, female breast, bladder, pancreatic, gastric, or liver cancer between 1988 and 1998.

During this period, 32.4% of MMC patients and 19.8% of MFFS patients received hospice care. The duration of hospice care was a week longer for MMC patients than MFFS; median lengths of stay were 32 days and 25 days, respectively. These associations remained statistically significant in multivariate analyses that included patient demographic data, stage at diagnosis, and geographic location.

One important question to ask is whether the additional hospice utilization among MMC patients represents appropriate or inappropriate referrals. Although the size and methodology of this study precludes review of medical records, the SEER-Medicare database does provide some data on which to address this question. For example, the association between hospice care and insurance type was strongest among patients with Stage IV cancer.

The duration of hospice care is another variable that sheds some light on appropriateness of referrals. According to the authors, periods of 2 to 3 months before death have been recommended as appropriate periods of hospice care. Much shorter or much longer durations are less likely to provide optimal care. More MFFS than MMC patients were referred to hospice within 1 week of death (22.6% and 18.6%, respectively); in many cases this probably did not provide enough hospice care. On the other hand, MMC patients were also more likely than MFFS patients to start hospice care at least 180 days before their death (7.8% versus 6.1%), suggesting referral too early in at least some of these cases.

Not surprisingly, the authors suggest that financial incentives are a major reason for the differences in hospice referral patterns; once an MMC plan refers a patient to hospice it no longer incurs costs for remaining end-of-life care. However, the authors suggest that other factors may also contribute to the results. Selection of MMC versus MFFS insurance by patients is not random. Patients with a preference for more intensive care might be likely to prefer MFFS insurance and might be less likely to choose hospice care.

ACS President Mary A. Simmonds, MD, agrees that far too few individuals take advantage of hospice care. She notes that those who do have reported better management of their symptoms and more satisfaction with their care compared with patients cared for in the traditional medical system, who undergo more diagnostic studies and procedures and receive therapy that may be futile.

“Hospice care, therefore, happens to be more cost-effective,” explains Simmonds. “The study published in JAMA is the first large, comprehensive, population-based examination of the utilization of hospice services. It demonstrates that there is variation in utilization and that there are a number of factors, including financial incentives, which influence the initiation of hospice care. It will be important to understand these factors so that providing hospice care can be incentivized and so that education can be directed to encourage utilization of hospice services.”

Being overweight or obese substantially increases the risk of dying from cancer, according to researchers from the ACS.

In a new study published in the New England Journal of Medicine (2003;348:1625–1638), Eugenia Calle, PhD, and colleagues determined that overweight and obesity may account for
20% of all cancer deaths in US women and 14% in US men. That means 90,000 cancer deaths could be prevented each year if Americans could only maintain a healthy body weight.

“As a society, we have not really acknowledged the contribution of obesity to chronic disease in general and cancer in particular,” said Calle, Director of Analytic Epidemiology at the ACS. “We are not taking it seriously enough to turn it around.”

The researchers followed more than 900,000 men and women in the society’s Cancer Prevention Study II cohort for 16 years to determine the role of body mass index, or BMI (weight in kilograms divided by the square of height in meters) in cancer deaths. People with a BMI between 25 and 29.9 are considered overweight; those with a BMI of 30 or more are considered obese. People with a BMI between 18.5 and 24.9 are considered of normal weight. In the year 2000, about 65% of US adults were overweight or obese, according to the Centers for Disease Control and Prevention, and about 31% were obese.

Calle and her colleagues found that the heaviest men in the study had death rates from all cancers combined that were 52% higher than the rates among normal-weight men. The heaviest women had cancer death rates 62% higher than normal-weight women. Their work substantiated previous studies that linked excess weight and obesity to cancers of the uterus, kidney, esophagus, gallbladder, colon and rectum, and breast (in postmenopausal women).

The effects on breast cancer are compounded, Calle said, because obesity increases a woman’s risk of developing the disease in the first place and her risk of dying from it once she has it. This study also found that many types of cancer not previously linked to obesity were, in fact, affected by excess body weight. Those included cancers of the liver, pancreas, prostate, cervix, ovary, and stomach (in men), as well as non-Hodgkin lymphoma and multiple myeloma.

“Overweight and obesity has a very broad impact on cancer across most cancer sites,” Calle said. “That’s not something that’s really in the consciousness of the American people.” In fact, in an ACS survey conducted in 2002, just 1% of Americans identified maintaining a healthy weight as a way to reduce cancer risk.

Obesity is thought to influence cancer risk by raising levels of steroid hormones like estrogen and peptide hormones like insulin and insulin-related growth factors. Losing weight has been shown to improve insulin sensitivity and to decrease the level of sex hormones in the blood, Calle said, so “it is reasonable to assume” that losing weight will also decrease cancer risk. However, she noted, too few people have been able to maintain a significant weight loss for that theory to be studied directly.

In addition to these endocrine mechanisms, obesity can cause acid reflux, an important risk factor for esophageal adenocarcinoma. Excess weight is also associated with gallstone formation, which increases the risk of gallbladder cancer.

But Calle acknowledges that losing weight and keeping it off are increasingly difficult challenges. “We live in a society where people have to work very hard to eat right and get physical activity,” she said. “People work long hours that leave little time for exercise or cooking healthy meals; Americans must rely heavily on cars to get around; sedentary activities like watching television or using the computer have become more common.”