

# Advance directives related to use of palliative care, lower Medicare end-of-life spending

October 4 2011

---

Advance directives do have an impact on health care at the end of life, especially in regions of the country with high spending on end-of-life care, according to a University of Michigan study.

People who had completed advance directives stating their preferences for care were less likely to die in a hospital and more likely to receive palliative hospice care than similar decedents without advance directives.

"Advance directives may help patients get the care they want if they prefer less aggressive care at the end of life, while also providing cost savings to the [Medicare program](#), particularly in higher-spending regions of the country," said Lauren Hersch Nicholas, a U-M [health economist](#) who is the lead author of the study.

The study is in the current (Oct. 5, 2011) issue of the [Journal of the American Medical Association](#).

"Accompanying greater use of palliative care, we found that [Medicare expenditures](#) for those with advance directives were significantly lower than for those without, but only in those regions that spent more than average per person on end-of-life care," she said. In contrast, advance directives seemed to have little effect on care received by people living in regions of the country that have lower levels of medical spending at the end of life.

The study, which is among the first to have national data linking end-of-

life spending, treatments, and patients' advance directives, is based on a sample of 3,302 [Medicare beneficiaries](#) from the Health and Retirement Study, a nationally representative [longitudinal study](#) of more than 30,000 older Americans conducted by the U-M Institute for Social Research (ISR). The study is funded by the National Institute on Aging (NIA), part of the National Institutes of Health, and by the Social Security Administration.

The U-M research team analyzed data on Health and Retirement [Study participants](#) who died between 1998 and 2007. Their records were linked to Medicare claims and the National Death Index. The study conducted interviews with next-of-kin after the survey respondent's death, during which they asked about the decedent's end-of-life experience, including the nature and type of their advance directives.

"The unique design of the Health and Retirement Study makes it the ideal vehicle for this type of analysis," said Richard Suzman, director of the NIA's Division of Behavioral and Social Research, which has funded the study for more than 20 years. "The combination of individual interviews and links to administrative data such as Medicare provides a rich data resource that can be used for analyses. Moving forward, we expect the study will be used to more fully explore quality-of-life issues at the end of life."

"The most exciting thing about this study is that it provides some clear advice for real people, the kind of people who give of their time to participate in research," said David Weir, an economist and research professor at ISR, the senior author of the paper and director of the Health and Retirement Study. "If you care about what may happen to you in your final days, take some time to complete an advance directive, and talk it over with those closest to you. It can make a big difference."

Discussing and documenting the type of care that you want at the end of

life—either with your family or your physician—can be stressful and difficult, said-author Theodore Iwashyna. "But our study suggests these discussions may be very important for getting the type of end-of-life care you want, especially if you live in a region of the country where more aggressive care is the norm."

Nicholas and colleagues employed a unique analytic strategy. "Advance directives can only influence care when the patient wants something different from what the local health care system would otherwise provide," Nicholas said. "Given the wide variation in end-of-life Medicare expenditures across U.S. geographic regions, there are likely default levels of care that also vary regionally. So we examined the relationship of advance directives with the cost and aggressiveness of end-of-life care in geographic regions with high, medium, and low average expenditures for this type of care and found that advance directives made the biggest difference for patients living in regions with higher average levels of spending."

Specifically, they found major differences between geographic regions in the relationship between advance directives and end-of-life spending. In high-spending regions, adjusted spending on patients with treatment-limiting advance directives was \$33,933, while spending for patients without these directives was \$39,518. There was no difference in spending for patients with and without advanced directives in medium- and low-spending regions, which had average expenditure levels of approximately \$26,000 and \$21,000, respectively.

Co-authors of the study are Kenneth Langa, and Iwashyna, both affiliated with the U-M Medical School, the Ann Arbor Veterans Affairs Health System, and ISR.

In addition to regional differences in the economic impact, the study also found significant differences in the type of end-of-life care received by

those with treatment-limiting advance directives. "Patients with these advance directives were less likely to die in hospitals and more likely to receive palliative [hospice care](#) in both high- and medium-spending regions, where patients are most likely to receive aggressive care at the end of their lives," said Langa. "This has important implications for the comfort and quality of patients' last months of life, as well as the well-being of family and close friends. Increasing evidence suggests that focusing on palliative, rather than curative, care for appropriate patients near the end-of life leads to much better outcomes for patients and their families."

Interestingly, the researchers found a weaker relationship between treatment-limiting advance directives and the receipt of aggressive life-sustaining end-of-life treatments such as intubation and mechanical ventilation. "This may suggest that treatment-limiting advance directives still permit trials of intensive care, but that they also may make it easier to stop these aggressive and expensive interventions if they are not working," Iwashyna said.

The researchers also found substantial geographic diversity in the use of treatment-limiting advance directives, with 42 percent of decedents in low-spending regions having these directives, compared to only 36 percent of those in high-spending regions. Even after adjusting for a variety of demographic and socioeconomic characteristics, as well as cause of death, the researchers found that decedents in high-spending regions were less likely to have treatment-limiting advance directives. "This means that advance directives are currently being used the least where they seem to have the biggest impact," said Nicholas, "indicating a real opportunity for public policy to help these patients get the kind of care they really want while potentially reducing Medicare spending."

The mean age at death for the sample was 82.8, and 70 percent of decedents had been hospitalized at least once in the last six months of

their lives. The researchers also found that 41 percent died in a hospital; 61 percent had either a living will or a written Durable Power of Attorney, giving another person the right to make end-of-life treatment decisions for them if they were no longer competent to do so; and 39 percent had a written advance directive limiting the treatment they wished to receive at the end of life. Those with advance directives were more likely to be white, affluent, and highly educated.

The authors noted that the clinical impact of advance directives is critically dependent on the context in which patients receive end-of-life care. "For those who prefer less aggressive care at the end of life, but who are patients in health systems characterized by high intensity of care, [advance directives](#) may be especially important for ensuring care consistent with patients' preferences," they wrote.

**More information:** Map of Medicare spending at end of life, from the Dartmouth Atlas of Health Care  
[www.dartmouthatlas.org/data/map.aspx?ind=23](http://www.dartmouthatlas.org/data/map.aspx?ind=23)

Provided by University of Michigan

Citation: Advance directives related to use of palliative care, lower Medicare end-of-life spending (2011, October 4) retrieved 7 May 2024 from  
<https://medicalxpress.com/news/2011-10-advance-palliative-medicare-end-of-life.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--