Institute for Population Health Policy
The University of Texas–Pan American

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End-of-Life Decision Making

End-of-Life Medical Treatment Choices: Do Survival Chances and Out-of-Pocket Costs Matter?

Over the past four decades, the poverty rate of the US elderly population has fallen by more than 60%, and the most recent data show that only about one of every 10 people aged 65 and older (3.6 million) earned less than the poverty level. Yet, the poverty rate of elderly widows is three times higher than that of elderly married women. Recent studies provide convincing evidence that out-of-pocket health care expenditures incurred prior to the death of a spouse are partially responsible for the impoverishment of the surviving spouse. As much as one fourth of the increase in elderly poverty after widowhood has been attributed to end-of-life (EOL) out-of-pocket health care expenditures. Although out-of-pocket medical expenditures prior to the death of a spouse can drive the surviving spouse into poverty, it is unclear from the literature whether people would and should forego expensive late-life medical care to prevent asset depletion.

A recent study published by Li-Wei Chao, José A. Pagán and Beth J. Soldo analyzez the various EOL medical treatment choices that elderly and near elderly adults would recommend for a hypothetical elderly woman with cancer, when the treatment choices have varying probabilities of success and substantially different financial implications. Data used was from Asset and Health Dynamics Among the Oldest Old Study (AHEAD) and the Health and Retirement Study (HRS)—which include identical experimental modules with various vignettes on EOL medical treatment—to study the AHEAD and HRS respondents' expressed recommendations for various hypothetical treatments for cancer. The vignettes used in the study came from the 1995 AHEAD and the 1996 HRS.

The authors employed nonparametric statistical tests in their bivariate comparisons. They used the within-group Wilcoxon signed rank test to test for whether the respondent's opinion changed—on whether the hypothetical married woman should accept or reject the various treatment options—when different survival probabilities and financing mechanisms were presented in four vignettes. To test for whether the distribution of the respondent's choices to the same vignette differed between groups of respondents (who were presented with different sequences of the vignettes), they used the Kruskal-Wallis test to compare between groups.

The authors found that many respondents would recommend foregoing costly EOL treatments for a hypothetical woman in a set of vignettes when the treatment cost would wipe out the patient's savings. Among the total of 663 respondents who would recommend opting for care when it was financed by Medicare, 243 (or 36.7% of them) would not recommend accepting

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the same treatment if the woman in the vignette had to deplete savings to pay for the treatment. These numbers indicate that when treatment cost is not covered by Medicare, the respondents feel that the patient must be "compensated" with a higher treatment survival probability for them to recommend accepting treatment. Viewing this from an alternative angle, when treatment cost is covered by Medicare, respondents would recommend opting for care that even had a low survival probability. This latter phenomenon is the well-studied and well-documented moral hazard, which essentially says that people will consume more care when the out-of-pocket cost is low. Although it seems self-evident that people would be more likely to recommend opting for treatment if the patient's out-of-pocket costs were low, it is interesting that many of the respondents would recommend against treatment even when it entailed a low financial cost to the patient. This may reflect concerns about various direct, indirect, and intangible costs related to the treatment.

The authors also found that women were far more likely than men to switch out of treatment that they had recommended accepting under Medicare financing but now had to be paid out of the patient's pocket. Many reasons can explain why there is this strong gender differential in recommendations. The vignettes asked about an elderly married woman with a threatening form of cancer needing treatment, and it is possible that the respondents were more altruistic than selfish: married male respondents might have identified more with the husband in the vignettes and felt that the wife should get care even if it meant impoverishing the patient's husband, but married female respondents might have identified more with the woman in the vignette and felt that the patient herself should forego care to prevent impoverishing her spouse. Another possible reason for the gender differential is that men might be more aggressive than women in opting for medical treatments, as in treatments for coronary artery disease. Given that women and men differed in their recommendations in these vignettes, the use of spouses as durable powers of attorney to make EOL care decisions should be further examined because women and men clearly had different preferences.

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