

# End-of-Life Health Care Planning Among Young-Old Adults: An Assessment of Psychosocial Influences

Deborah Carr<sup>1,2</sup> and Dmitry Khodyakov<sup>1</sup>

<sup>1</sup>Department of Sociology and Institute for Health, Health Care Policy, and Aging Research, Rutgers University, New Brunswick, New Jersey.

<sup>2</sup>Department of Sociology and Center for Demography of Health and Aging, University of Wisconsin, Madison.

**Objectives.** End-of-life planning among healthy older adults may protect them from unwanted medical treatments in later life, in the event that they become incapable of making health care decisions for themselves. We explore two formal and one informal components of end-of-life planning (living will, durable power of attorney for health care, and discussions) and assess whether one's health and health care encounters, personal beliefs, and experience with others' deaths affect these practices.

**Methods.** Using two waves of data (1992–1993 and 2004) from the Wisconsin Longitudinal Study, we estimated binary and multinomial logistic regression models to predict end-of-life preparations among a sample of community-dwelling persons aged 64–65 ( $N = 3,838$ ).

**Results.** Recent hospitalizations, personal beliefs (Death Avoidance and the belief that doctors should control health care decisions), and recent experience with the painful death of a loved one all influence end-of-life preparations. Consistent with past studies, we also found that education, gender, marital status, and religious affiliation affect end-of-life planning.

**Discussion.** Health care providers may encourage end-of-life preparations by assuaging patients' death anxiety and fostering decision-making autonomy. Initiating discussions about recent deaths of loved ones may be an effective way to trigger patients' own end-of-life preparations.

AT the end of life, most chronically ill older adults experience physical discomfort, limited mobility, and impaired cognitive functioning. Those who are mentally incapacitated and have not made plans for their own end-of-life care may receive either unwanted costly medical interventions or the withdrawal of treatments they may have wanted (Lambert et al., 2005). Difficult decisions about withholding or continuing treatment often fall upon health care providers or distressed family members who may disagree with one another (Breen, Abernathy, Abbott, & Tulskey, 2001). Recognizing the financial and emotional costs associated with unwanted, unnecessary, or contested end-of-life medical care, policy makers have established practices that enable patients to formally state their treatment preferences when they are still physically and mentally well.

The Patient Self-Determination Act (1990), passed by Congress in 1990, requires that all federally funded hospitals and nursing homes give patients an opportunity to complete an advance directive, which comprises a living will and a durable power of attorney for health care (DPAHC). A living will is a legal document that specifies the medical treatment a person would like to receive if incapacitated. A DPAHC permits a person appointed by the patient to make decisions about health care in the event the patient is incapable of making such decisions. Health care professionals also encourage patients to informally discuss their treatment preferences with family members and care providers to ensure that their preferences are clear to surrogate decision makers (Doukas & Hardwig, 2003).

Although debates over end-of-life care capture national attention, researchers know little about the preparations that healthy, young-old adults make for their end-of-life care, or about the psychosocial factors that influence these preparations. Using data from the Wisconsin Longitudinal Study (WLS), a long-term study of men and women who are now in their mid 60s, we investigated the psychosocial and experiential predictors of two formal and one informal end-of-life preparations: having a living will, appointing a DPAHC, and holding discussions about one's health care preferences. Because individuals often complete the two formal components of the advance directive in tandem (Hopp, 2000), we also investigated the factors associated with formal planning only, informal planning only, both, or neither. Given the widely documented limitations associated with both components of advance directives, researchers and practitioners concur that adopting the two-pronged strategy of formal and informal planning is more effective than using formal practices only (Fagerlin & Schneider, 2004).

## Limitations of Formal End-of-Life Planning

Research shows that current end-of-life planning practices have several limitations. Despite widespread professional support for the use of living wills (e.g., American Medical Association, 1996), studies reveal that less than 50% of older adults have one (Hahn, 2003). Health care providers have recently questioned the document's effectiveness in conveying the

patient's wishes (Fagerlin & Schneider, 2004). The content may be unclear, the treatment preferences stated may not be relevant to the patient's condition, and physicians may not have access to the document at the critical decision-making moment (SUPPORT, 1995). Family members may not know (or agree with) the content of the living will, or they may not know how to translate vague preferences into specific treatments (Ditto et al., 2001).

DPAHC appointments also have practical limitations. Legally appointed proxies have decision-making authority, yet many find that their decisions create distress or disagreement among family members (Doukas & Hardwig, 2003). Additionally, surrogate decision makers' predictions of patient preferences typically are no better than chance. Older adults may believe that their loved ones intuitively understand their preferences, so they do not need to explicitly inform others of their views (Coppola, Ditto, Danks, & Smucker, 2001).

Moreover, end-of-life preparations often occur too late to be effective (Johnston, Pfeifer, & McNutt, 1995). Older adults report that they want their health care providers and family members to raise end-of-life issues before they become seriously ill (Haisfeld et al., 1994). When discussions occur following trigger events such as a hospitalization, the patient (and family) often is too distressed to make an informed decision (Johnston et al., 1995). Thus, it is important to identify the factors that enhance or impede end-of-life planning among relatively healthy, young-old adults for whom death is still a relatively distal event. Most studies focus on clinical samples of specific disease groups (e.g., Wenger et al., 2005) or institutionalized older adults in poor health (e.g., Allen et al., 2003). We know of no studies that focus on community-dwelling adults in their early 60s; our study is an effort to fill this void. (See Hopp, 2000, for a comparable study of adults in their 70s and 80s.)

### *Factors Related to End-of-Life Planning*

The vast majority of research on end-of-life planning documents the effects of sociodemographic characteristics, such as gender (Bravo, Dubois, & Paquet, 2003; Hopp, 2000), education (Hopp, 2000), religion (Allen et al., 2003; Lambert et al., 2005), age (Bravo et al., 2003; Hopp, 2000), and marital status (Hopp, 2000; Kahana, Dan, Kahana, & Kercher, 2004). We replicated past analyses of the sociodemographic correlates of planning, yet we also explored three additional psychosocial and experiential influences.

First, we considered recent hospital admissions as a possible influence. The Patient Self-Determination Act requires that patients be given an opportunity to complete an advance directive when they are admitted to a hospital. This encounter should raise adults' awareness of, and access to, formal and informal processes of end-of-life planning. Both hospital admissions and one's planning for end-of-life care may be functions of preexisting health conditions, where persons in poor health are both more likely than their healthier counterparts to be admitted to the hospital and more likely to anticipate that their compromised health may hasten their death. Thus we controlled for health in our analyses; we considered self-rated health because past studies have revealed that specific illnesses and symptoms are not significantly associated with

end-of-life planning (Pfeifer, Mitchell, & Chamberlain, 2003; SUPPORT, 1995).

Second, we assessed the extent to which two beliefs—Death Avoidance and desired control over health care decisions—affect end-of-life planning. We expected that persons who had greater anxiety about death would be less likely than their counterparts without such anxiety to engage in any of the forms of planning; health care providers consider fear of death to be one of the main obstacles to discussions pertaining to end-of-life issues (e.g., Wong, Reker, & Gesser, 1994). We also expected that persons who believed that doctors rather than patients should make decisions about medical care will be more likely than their counterparts who do not endorse such beliefs to make preparations; having an advance directive suggests that people would like their preferences to be asserted and heeded at the end of life (Lambert et al., 2005).

Third, we considered one's prior experiences with end-of-life issues. We evaluated whether a recent painful death of one's spouse or parent influences one's own end-of-life planning. Qualitative studies suggest that older adults are more likely to prepare for end-of-life care if they know someone with severe cognitive impairment (Bravo et al., 2003) or a serious illness or injury (Lambert et al., 2005). We expected that persons who experienced the painful death of a loved one would be more likely than individuals without such an experience to prepare for the end-of-life. Those who witness another's suffering may be motivated to avoid a similar fate and may thus prepare for their own end-of-life care.

## METHODS

### *Sample*

We used data from the WLS, a random sample of men and women who graduated from Wisconsin high schools in 1957. Study participants first completed surveys during their senior year when they were 17–18 years old (in 1957) and again at ages 36 (in 1975), 53–54 (in 1992–1993), and 64–65 (in 2003–2004). Of the 10,317 original sample members, 9,139 (88.6%) were interviewed in 1975, 8,493 (82.3%) in 1992–1993, and 6,278 (61%) in 2003–2004. As of 2004, 1,297 (12.6%) of the original participants were deceased. The sample is broadly representative of older White Americans with at least a high school education (U.S. Census Bureau, 2003).

We focus our analyses on the 3,838 respondents (1,724 men and 2,114 women) who completed telephone interviews and self-administered mail questionnaires in 1992–1993 and 2003–2004. We further limited our analysis to the random 70% subsample who was asked the end-of-life planning questions and the random 80% subsample who was asked about their religious affiliation. Study investigators gave topical modules to random subsamples in order to reduce the interview length. The investigators generated each random subsample independently, so individuals who received one module may not necessarily have received the other.

### *Dependent Variables*

We focused on three outcomes: whether one (a) had a living will, (b) had a DPAHC, or (c) had held informal discussions about end-of-life preparations. In 2003–2004, sample members

were asked the following questions: (a) “Do you have a living will? This is a set of written instructions about the type of medical treatment you would want to receive if you were unconscious or somehow unable to communicate;” (b) “Have you made legal arrangements for someone to make decisions about your medical care if you become unable to make those decisions yourself? This is sometimes called a durable power of attorney for health care;” and (c) “People sometimes make plans about the types of medical treatment they want or don’t want if they become seriously ill in the future. Have you discussed your health care plans and preferences with anyone?” We coded responses of “yes” as 1 in each logistic regression analysis. Because the living will and DPAHC often were obtained together, we also created a four-category variable indicating whether the respondent had engaged in formal planning only (i.e., a living will or DPAHC), informal discussions only, both, or neither (reference category); this was the outcome in a multinomial logistic regression analysis.

### *Independent Variables*

*Hospitalizations and health.*—The WLS assessed hospitalizations in the past year with the question “In the past 12 months, have you been a patient in the hospital for at least one night?” We coded responses of “yes” as 1. The following question measured self-rated health: “How would you rate your health at the present time: excellent, good, fair, poor, or very poor?” We coded responses of “fair” or worse as 1; responses of “good” or better is the reference category.

*Personal beliefs.*—Death Avoidance ( $\alpha = .70$ ) referred to one’s desire to avoid thinking about death; items were from the Death Attitude Profile–Revised (Wong et al., 1994). Respondents indicated their level of agreement with two statements: (a) “I avoid thinking about death altogether;” and (b) “Whenever the thought of death enters my mind, I try to push it away.” The six response categories ranged from strongly agree to strongly disagree. The WLS assessed beliefs about personal versus physician control over one’s health ( $\alpha = .59$ ) with three items from the Wake Forest University Trust Scales (Hall, Dugan, Zheng, & Mishra, 2001). Respondents indicated their level of agreement with the following statements: (a) “When there is more than one method to treat a problem, I should be told about each one” (reverse coded); (b) “I would rather have my doctor make the decisions about what’s best for my health than to be given a whole lot of choices;” and (c) “The important medical decisions should be made by my doctor, not by me.” The five response categories ranged from strongly agree to strongly disagree. We averaged items, and higher scores reflect greater Death Avoidance and greater acquiescence to physician control.

*Direct experiences with end-of-life issues.*—The WLS asked respondents who had lost a spouse or parent in the 10 years prior to interview the following question: “During his/her last week of life, how much pain did your spouse/parent have?” Persons who had experienced both parent and spouse deaths were asked about the spouse only, and those who had experienced the deaths of both parents were asked about the most recent decedent only. Dummy variables indicated: no

deaths of significant other in past 10 years (reference category); parent or spouse died in past 10 years with no, slight, or unknown level of pain; and parent or spouse died in past 10 years with moderate or severe pain.

*Sociodemographic characteristics.*—Marital status referred to one’s current (2003–2004) status and included currently married or cohabiting with romantic partner (reference category); never married; and formerly married (i.e., divorced, separated, or widowed). Parental status referred to the number of living children one had; we coded a continuous measure (ranging from 0 to 13) into the following categories: no children (reference category), 1–2 children, 3–4 children, and 5 or more children. The WLS evaluated perceived support from family members in 1992–1993 with the question “Is there a person in your family with whom you can really share your very private feelings and concerns?” We coded responses of “yes” as 1. We used an early (1992) measure to ensure that these beliefs had been assessed prior to the time that the respondent engaged in end-of-life planning.

Educational attainment referred to the number of years of schooling a respondent had completed. Categories included: 12 (reference category), 13–15, and 16 or more years of education. The survey assessed religious affiliation with the question “What is your religious preference?” We coded specific affiliations into the following categories: Catholic (reference group), mainline Protestant, conservative Protestant, other, and no formal religion. We also considered an indicator for state of residence in order to account for state-level variation in laws and policies guiding end-of-life decision making (Gunter-Hunt, Mahoney, & Sieger, 2002). Two thirds of all study participants currently lived in Wisconsin; thus, we used a dummy variable signifying residence in Wisconsin versus all other locations (reference category).

*Other planning.*—Finally, we included an indicator of whether a respondent had held discussions in our models predicting living will and DPAHC completion in order to assess whether informal discussions trigger formal planning. Table 1 presents descriptive statistics for all measures.

## **RESULTS**

Table 1 shows the proportion of men and women in the WLS who had engaged in end-of-life planning. Three quarters of respondents had held discussions about their preferences. Overwhelmingly, these discussions were with close kin; 90% of married persons had spoken with their spouses, whereas two thirds of parents had held discussions with a child (not shown in table). Slightly more than half of respondents had obtained either of the two components of the advance directive: 56% had a living will and 53% had appointed a DPAHC. Most persons who had planned for end of life had adopted a multicomponent approach: 54% of respondents had done both formal and informal planning, whereas just 7% and 21%, respectively, had done formal or informal planning only.

We used logistic regression models to assess the predictors of three end-of-life planning behaviors. Model 1 included indicators of hospitalizations and health, personal beliefs, experience with death, sociodemographic characteristics, and state of

Table 1. Sample Characteristics by Gender: Wisconsin Longitudinal Study, 1957–2004

Characteristic	Total Sample ( <i>N</i> = 3,838)		Men ( <i>n</i> = 1,724)		Women ( <i>n</i> = 2,114)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
End-of-life planning activities						
Has a living will	0.56		0.57		0.55	
Has appointed a DPAHC	0.53		0.52		0.54	
Has had informal discussions	0.75		0.71		0.78***	
Formal planning only	0.07		0.10		0.05***	
Informal planning only	0.21		0.19		0.22**	
Both formal and informal planning	0.54		0.53		0.56 <sup>†</sup>	
Neither formal nor informal planning	0.18		0.19		0.18	
Hospitalizations and health						
Self-rated health = fair/poor	0.09		0.08		0.09	
Admitted to hospital in past year	0.12		0.13		0.11*	
Personal beliefs						
Death Avoidance scale (range = 1–6)	3.11	1.23	3.26	1.22	2.99***	1.23
Physician control over health scale (range = 1–5)	2.12	0.72	2.22	0.72	2.03***	0.71
Experience with death						
Parent or spouse died in past 10 years, no/little pain in final weeks	0.20		0.18		0.21**	
Parent or spouse died in past 10 years, moderate/severe pain in final weeks	0.11		0.11		0.11	
Family roles and relationships						
Currently married	0.80		0.87		0.74***	
Divorced/separated	0.09		0.07		0.10***	
Widowed	0.08		0.03		0.12***	
Never married	0.04		0.03		0.04	
No children	0.06		0.06		0.07	
1–2 children	0.33		0.36		0.30***	
3–4 children	0.45		0.43		0.46	
5 or more children	0.16		0.14		0.17*	
Can share private thoughts with family member (1 = yes)	0.89		0.87		0.90***	
Education						
12 years	0.55		0.48		0.60***	
13–15 years	0.16		0.17		0.16	
16 or more years	0.29		0.35		0.24***	
Religious affiliation						
Roman Catholic	0.39		0.38		0.40	
Mainline Protestant	0.44		0.44		0.45	
Conservative Protestant	0.07		0.07		0.07	
Other religion	0.01		0.01		0.01	
No formal religion	0.08		0.10		0.07***	
Lives in Wisconsin	0.68		0.67		0.68	

Notes: *SD* = standard deviation; DPAHC = durable power of attorney for health care. Two-tailed *t* tests were used to assess significant gender differences. Means and standard deviations are presented for continuous measures; proportions are shown for categorical variables.

<sup>†</sup>*p* ≤ .10; \**p* ≤ .05; \*\**p* ≤ .01; \*\*\**p* ≤ .001.

residence. For the outcomes of living will and DPAHC appointments only, we adjusted Model 2 for whether one had held informal discussions. Table 2 presents odds ratios and confidence intervals.

Persons who had been hospitalized in the past year and those who had experienced the painful death of a significant other in the past decade were more likely than their counterparts without these experiences to have engaged in each of the three types of end-of-life planning (range of odds ratios = 1.3–1.8). Higher scores on the Death Avoidance scale were associated with reduced odds of each type of planning. Respondents who believed that physicians should control patients' health care decisions had reduced odds of each of the three types of planning. However, the association between these beliefs and the odds of engaging in either type of formal planning was no longer statistically significant when we controlled for informal discussions. Holding discussions was the most powerful predictor of formal planning: Those who had held discussions were more than seven times as likely as their counterparts who had not held discussions to have had a living will or DPAHC.

Consistent with past studies, having advanced education and a family confidante were positively associated with each of the three types of planning. Women were more likely than men to have had informal discussions and were less likely to have had a living will. Formerly married and unmarried persons were less likely than married persons to have held discussions. Although Model 1 revealed that formerly married persons and the childless were less likely than currently married persons and parents, respectively, to have had a living will, these effects were no longer statistically significant when we controlled for discussions. Persons with spouses and children were more likely than their unmarried and childless counterparts, respectively, to have engaged in discussions, which, in turn, increase the likelihood of engaging in formal planning.

Similar characteristics predicted the completion of the living will and the appointment of a DPAHC. This reflects the fact that individuals often do the two practices in tandem. In the WLS sample, 90% of persons with a DPAHC also had a living will, and 80% of those with a living will also had a DPAHC. We conducted multinomial logistic regression models in order to assess whether distinctive factors affect whether a respondent used formal planning, informal discussions, or a combination thereof. (We have not shown the models here, but they are available from the first author). Recent hospitalizations, painful deaths of loved ones, and advanced education were significantly associated with adopting a two-pronged approach. Persons who showed high levels of death anxiety were significantly less likely than individuals with lower levels of death anxiety to have adopted the two-pronged approach or to have engaged in discussions only. However, stronger adherence to the belief that physicians should control their health care increased the likelihood of engaging in formal planning only. Women were half as likely as men to have used formal planning only. Unmarried persons were less likely than their married counterparts to have done informal planning only.

## DISCUSSION

Our study documented the end-of-life planning activities of persons in their early 60s and revealed the ways that encounters with the health care system, personal beliefs, and end-of-life experiences affect those preparations. Our analyses yielded five findings that have implications for health care practice. First, persons who had been hospitalized in the year prior to interview

Table 2. Logistic Regression Predicting End-of-Life Planning Activities: Wisconsin Longitudinal Study, 1957–2004 (N = 3,838)

Variable	Living Will		DPAHC		Informal Discussions
	Model 1	Model 2	Model 1	Model 2	Model 1
<b>Hospitalizations and health</b>					
Self-rated health = fair/poor	0.85 (0.67–1.07)	0.81 <sup>†</sup> (0.63–1.04)	0.85 (0.67–1.07)	0.81 <sup>†</sup> (0.63–1.04)	1.08 (0.82–1.42)
Admitted to hospital in past year	1.54*** (1.25–1.91)	1.44** (1.14–1.81)	1.76*** (1.43–2.18)	1.69*** (1.34–2.13)	1.44** (1.12–1.86)
<b>Personal beliefs</b>					
Death Avoidance scale (range = 1–6)	0.86*** (0.81–0.91)	0.92** (0.86–0.98)	0.86*** (0.81–0.91)	0.92** (0.87–0.98)	0.78*** (0.73–0.83)
Physician control over health scale (range = 1–5)	0.90* (0.81–0.99)	0.98 (0.88–1.09)	0.92 <sup>†</sup> (0.83–1.01)	1.01 (0.91–1.12)	0.76*** (0.68–0.84)
<b>Experience with death</b>					
Parent or spouse died, moderate/severe pain	1.46*** (1.18–1.82)	1.38** (1.09–1.75)	1.41** (1.14–1.75)	1.33* (1.05–1.68)	1.38* (1.06–1.79)
Parent or spouse died, no pain	1.18 <sup>†</sup> (1.00–1.40)	1.14 (0.95–1.37)	1.16 <sup>†</sup> (0.98–1.37)	1.12 (0.93–1.34)	1.18 <sup>†</sup> (0.97–1.44)
Gender (1 = female)	0.92 (0.81–1.06)	0.81** (0.69–0.94)	1.10 (0.96–1.26)	0.99 (0.85–1.15)	1.37*** (1.17–1.60)
<b>Family roles and relationships</b>					
Formerly married	0.77** (0.64–0.93)	0.87 (0.71–1.06)	0.86 <sup>†</sup> (0.71–1.03)	0.98 (0.80–1.20)	0.65*** (0.53–0.80)
Never married	0.91 (0.56–1.49)	1.29 (0.75–2.21)	0.84 (0.52–1.38)	1.19 (0.69–2.05)	0.45** (0.26–0.76)
1–2 children	1.53* (1.05–2.22)	1.46 <sup>†</sup> (0.97–2.18)	1.20 (0.83–1.75)	1.10 (0.73–1.65)	1.34 (0.88–2.04)
3–4 children	1.47* (1.01–2.12)	1.41 <sup>†</sup> (0.95–2.11)	1.13 (0.78–1.64)	1.04 (0.70–1.56)	1.28 (0.84–1.94)
5 or more children	1.20 (0.81–1.79)	1.14 (0.74–1.74)	1.01 (0.68–1.49)	0.92 (0.60–1.41)	1.24 (0.80–1.94)
Has family member confidante	1.44*** (1.17–1.77)	1.27* (1.01–1.59)	1.33** (1.08–1.64)	1.15 (0.92–1.44)	1.60*** (1.28–2.00)
<b>Education</b>					
13–15 years	1.33** (1.10–1.61)	1.23* (1.00–1.51)	1.28* (1.06–1.54)	1.18 (0.96–1.44)	1.41** (1.12–1.77)
16 or more years	1.38*** (1.17–1.63)	1.32** (1.10–1.57)	1.41*** (1.20–1.66)	1.35*** (1.13–1.61)	1.31** (1.08–1.58)
<b>Religious Affiliation</b>					
Mainline Protestant	0.98 (0.85–1.13)	0.95 (0.81–1.11)	0.96 (0.83–1.11)	0.92 (0.79–1.08)	1.08 (0.92–1.28)
Conservative Protestant	0.73* (0.56–0.95)	0.77 <sup>†</sup> (0.58–1.02)	0.64*** (0.49–0.83)	0.66** (0.49–0.88)	0.76 <sup>†</sup> (0.56–1.03)
No formal religion	0.94 (0.72–1.21)	0.98 (0.74–1.30)	0.83 (0.64–1.08)	0.86 (0.65–1.13)	0.86 (0.64–1.15)
Other religion	0.65 (0.36–1.17)	0.66 (0.35–1.23)	0.49* (0.27–0.89)	0.48* (0.26–0.90)	0.83 (0.41–1.65)
Lives in Wisconsin	0.92 (0.79–1.06)	0.94 (0.80–1.10)	0.88 <sup>†</sup> (0.76–1.02)	0.90 (0.77–1.05)	0.90 (0.76–1.07)
Did informal planning		7.07*** (5.93–8.44)		7.48*** (6.23–8.98)	
Pseudo R <sup>2</sup>	.051	.225	.050	.225	.090
χ <sup>2</sup> ; df	150.34; 20***	704.30; 21***	145.55; 20***	709.15; 21***	241.16; 20***

Notes: Odds ratios (and confidence intervals) are presented. DPAHC = durable power of attorney for health care.

<sup>†</sup>p ≤ .10; \*p ≤ .05; \*\*p ≤ .01; \*\*\*p ≤ .001.

were more likely than people who had not been hospitalized to have engaged in each of the three forms of planning and to have adopted a two-pronged approach. The Patient Self-Determination Act appears to be at least somewhat successful in increasing awareness and use of advance care planning.

Second, persons who believed that physicians rather than patients should make decisions about health care and those with greater death anxiety were significantly less likely to have engaged in end-of-life planning. Both of these beliefs are potentially modifiable, however; carefully targeted interventions or

cognitive therapy may help to assuage patients' fear of death and may help them to develop a greater sense of efficacy over their health-related decisions.

Third, having survived the painful death of a loved one was a significant predictor of all three types of end-of-life planning. Patients may learn more about end-of-life issues when a loved one is in danger than when they themselves face a health threat or when they receive generic recommendations from health care providers. Rather than using abstract or hypothetical examples, doctors may instead talk to patients about their experiences with and feelings about a loved one's death (Hopp, 2000). Recalling these distressing experiences may help doctors and patients to develop strategies so that similar experiences do not befall the patient. Fourth, holding informal discussions was the most powerful predictor of making formal preparations; public service announcements could encourage both older adults and their children or extended family members to raise these difficult yet necessary conversations.

Finally, we found that adults adopted planning strategies that were consistent with their personal resources and needs. Although several characteristics—such as death anxiety, hospitalizations, painful deaths of loved ones, and education—were significant predictors of all three types of planning, other characteristics were associated with the adoption of only one practice. For instance, persons who acquiesce to physician control have heightened odds of using formal planning only. These patients may complete an advance directive at their physician's urging, yet they may not assert their own views in conversations with loved ones. Women are less likely than men to do formal planning only, perhaps reflecting traditional gender-role socialization where women do not acquire expertise in legal or financial tasks. Our results suggest that practitioners should not adopt a one-size-fits-all approach to end-of-life planning but should instead recognize that specific strategies may be particularly daunting (or appropriate) for some individuals.

Our study has several limitations, reflecting our reliance on secondary data. We focused exclusively on young-old, White, high-school educated adults, the majority of whom still resided in Wisconsin. As such, the WLS respondents had a considerably higher rate of advance directive completion than researchers have documented in more diverse community-based samples (e.g., Hopp, 2000). The WLS respondents also may have been too young of a sample in which to effectively study end-of-life planning; some studies show that older, chronically ill adults typically make preparations (Kahana et al., 2004). The WLS participants, by contrast, were quite healthy; just 12% had been admitted to a hospital in the year prior to interview. Future studies should investigate life course, regional, ethnic, and socioeconomic status differences in the end-of-life planning process (Kwak & Haley, 2005).

Moreover, we did not evaluate the effectiveness of one's end-of-life preparations. Future studies should explore whether older adults appoint as their DPAHC, and hold discussions with, the person who is most knowledgeable about their end-of-life health care preferences. Finally, we explored only a limited set of predictors. Our low pseudo- $R^2$  values (range = .05–.27) suggest that researchers should consider a broader array of contextual (e.g., urban/rural status), family-level (e.g., frequency of contact), cognitive (e.g., IQ), and attitudinal factors (e.g., religious views) factors in future analyses.

Despite these limitations, our results may have important implications for developing practices to encourage effective planning among the large baby boom cohort, the oldest of whom are now turning age 60. This cohort is more highly educated than past cohorts, and may be particularly proactive in making health care decisions. How this cohort prepares for end of life will be of critical interest to scholars, practitioners, and policy makers in coming decades.

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Address correspondence to Deborah Carr, Department of Sociology and Center for Demography of Health and Aging, University of Wisconsin-Madison, 1180 Observatory Drive., Madison, WI 53706. E-mail: carr@ssc.wisc.edu.

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