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Proxies Viewing Decision Support Video in Nursing Home Report Higher Advance Care Planning Engagement

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Approximately one-third of older Americans die in the nursing home (NH).[1] Despite the NH being a common setting for end-of-life care, it is often associated with poor family satisfaction with the quality of end-of-life care.[2] Advance care planning (ACP) has been

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identified as a means for improving end-of-life care outcomes[3] and is defined as a "process that supports adults at any age or stage of health in understanding and sharing their personal values, life goals, and preferences regarding future medical care."[4] Communication of preferences is particularly important for family members (proxies) of patients with advanced illness, who may need to make health care decisions for their loved one at the end of life. However, these health care proxies are often uneasy about making such decisions and feel unsupported by NH staff.[5,6] To facilitate more informed choices at end of life, video decision support tools have been developed to educate patients and their family members about ACP.[7]

In 2017 and 2018, we surveyed cross-sectional convenience samples of patients and proxies residing in NHs participating in the Pragmatic Trial of Video Education in Nursing Homes (PROVEN).[8] Patients and proxies watched 1 of 5 videos addressing common ACP decisions in NHs and responded to a 14-item survey. The 5 ACP videos that could be shown to the patient and/or proxy depending on their health status were: (1) "Goals of Care for Any Patient," (2) "Goals of Care for Patients With Advanced Dementia," (3) "Decisions About Hospitalization," (4) "Decisions About Hospice," and(5) "General Information About Advance Care Planning for Healthy Adults." Each video included different information depending on the target audience, but all included narrative explanations along with visual images of typical treatments. For example, the Healthy Adult Video is aimed at relatively healthy patients in the NH for limited time recuperation and presents basic ACP information.[8] More information on the ACP videos can be found at www.ACPdecisions.org. We measured ACP engagement by 3 self-reported responses: thinking differently about medical choices, discussing medical choices with a provider, and making changes to advance directives. Multivariable regression was used to identify characteristics associated with ACP engagement. The Brown University Institutional Review Board approved the study by expedited review.

There were 403 survey respondents from 2 NH systems. The sample was majority patients (57%), followed by children (44%) and spouses (25%). The sample of patients and proxies had similar distribution of patients' length of stay in the NH, about 40% short-stay and 60% long-stay. More than 90% of respondents were very or somewhat comfortable watching the video and would definitely or probably recommend the videos to others facing a similar situation. Patients were less likely, compared to proxies, to report that the video prompted ACP engagement: 36% of patients and 46% of proxies were prompted to have discussions with providers, and 21% of patients and 33% of proxies were prompted to complete or make changes to their advance directive.

Results (Table 1) showed that patients who watched the "Healthy Adult" video (vs "Goals of Care" video) were more likely to think differently about medical choices [adjusted odds ratio (AOR)3.36, 95% confidence interval (CI) 1.53–7.39], have a conversation with health care provider about medical care choices (AOR 2.68, 95% CI 1.16–6.17), and make changes to their advance directives (AOR 2.59, 95% CI 1.21–5.55). Factors associated with prompting proxies to think differently about medical choices were being cared for by NH system 2 (vs system 1) (AOR 3.71, 95% CI 1.76–7.84) and rating the patient's health as being excellent (vs fair) (AOR 6.45, 95% CI 1.39–30.01). Similarly, factors associated with

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prompting proxies to have a conversation about medical care choices were being cared for by NH system 2 (vs system 1) (AOR 4.83, 95% CI 2.20–10.58) and rating the patient's health excellent (vs fair) (AOR 7.48, 95% CI 1.80–31.12).

We find differences in self-reported engagement in ACP depending on which video the patient watched. The "Healthy Adult" video, which about 15% of survey respondents watched, aimed at relatively healthy patients with limited time recuperation.[8] Previous reports suggest that only about a third of healthy adults have some form of advance directive,[9] so patients who watched the "Healthy Adult" video may have been less exposed to ACP conversations previously. Coupled with a substantial shift toward post-acute care in the last 2 decades,[10] the NH setting may provide an opportunity for improving rates of ACP for healthier adults. Consistent with patient findings, we found that proxies who reported the patient's health to be excellent were more likely to self-report engagement in ACP. However, only 9% of the survey respondents rated the patients' health as excellent, so these findings may be applicable to a small proportion of NH patients overall. Because of the nature of advanced illness within the NH population, many patients have likely made decisions about medical care choices at end of life during prior interactions with other health care settings. However, newer NH admissions and their family members may have a different level of understanding of the choices available, so video decision support tools could be a way to prompt them early on and inform them of the medical care choices available to them.

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Table 1

Characteristics Associated With Reporting ACP Engagement After Watching Video

Respondent Characteristics	Prompted Thinking Differently About Medical Choices		Prompted a Conversation With Health Care Providers About Medical Care Choices		Prompted Completing or Making Changes to Advance Directive	
	Patient	Proxy	Patient	Proxy	Patient	Proxy
NH system						
1	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
2	1.25 (0.65, 2.37)	3.71*** (1.76, 7.84)	1.43 (0.71, 2.87)	4.83*** (2.20, 10.58)	1.01 (0.55, 1.85)	1.81 (0.93, 3.49)
Patient health						
Excellent	1.62 (0.50, 5.22)	6.45* (1.39, 30.01)	1.77 (0.54, 5.75)	7.48** (1.80, 31.12)	0.93 (0.30, 2.86)	2.84 (0.80, 10.11)
Very good	1.18 (0.50, 2.76)	0.92 (0.31, 2.67)	0.92 (0.37, 2.33)	1.54 (0.51, 4.66)	0.85 (0.38, 1.88)	1.27 (0.47, 3.45)
Good	0.78 (0.33, 1.83)	0.75 (0.31, 1.85)	0.52 (0.20, 1.32)	1.11 (0.43, 2.89)	0.82 (0.38, 1.77)	1.09 (0.48, 2.51)
Fair	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Poor	2.73 (0.70, 10.64)	1.26 (0.31, 5.18)	2.29 (0.56, 9.41)	0.87 (0.18, 4.32)	1.77 (0.45, 7.03)	0.95 (0.24, 3.77)
NH length of stay						
<12 wk	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
12 wk	1.38 (0.72, 2.66)	1.70 (0.81, 3.58)	1.36 (0.66, 2.78)	0.91 (0.43, 1.92)	0.78 (0.43, 1.41)	1.20 (0.62, 2.34)
Type of video						
Goals of care	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Advance illness	1.19 (0.49, 2.87)	1.82 (0.81, 4.06)	0.59 (0.19, 1.87)	1.89 (0.82, 4.37)	0.56 (0.22, 1.41)	1.33 (0.64, 2.75)
Healthy adult	3.36** (1.53, 7.39)	1.79 (0.64, 4.99)	2.68* (1.16, 6.17)	1.74 (0.59, 5.13)	2.59* (1.21, 5.55)	2.15 (0.82, 5.66)
Don't remember	0.51 (0.06, 4.47)	0.31 (0.05, 1.92)	1.11 (0.12, 10.22)	0.71 (0.10, 4.89)	0.22 (0.03, 1.86)	0.31 (0.06, 1.69)
Constant	0.23 (0.11, 0.51)	0.23 (0.11, 0.51)	0.20 (0.09, 0.45)	0.19 (0.09, 0.45)	0.69 (0.35, 1.37)	0.69 (0.35, 1.37)
n	216	162	220	164	222	164

Values are AOR (95% CI), which are presented in comparison to reference groups (Ref). The Advance Illness video group includes 3 videos: (1) "Goals of Care for Patients With Advance Dementia," (2) "Decisions About Hospitalization," and (3) "Decisions About Hospice." Each column represents results from 1 multivariable regression.

* $P < .05$;

** $P < .01$;

*** $P < .001$.