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Feasibility of a Video-Based Advance Care Planning Website to Facilitate Group Visits among Diverse Adults from a Safety-Net Health System

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Abstract

Background: Primary care providers in safety-net settings often do not have time to discuss advance care planning (ACP). Group visits (GV) may be an efficient means to provide ACP education.

Objectives: To assess the feasibility and impact of a video-based website to facilitate GVs to engage diverse adults in ACP.

Design: Feasibility pilot among patients who were ≥ 55 years of age from two primary care clinics in a Northern California safety-net setting. Participants attended two 90-minute GVs and viewed the five steps of the movie version of the PREPARE website (www.prepareforyourcare.org) concerning surrogates, values, and discussing wishes in video format. Two clinician facilitators were available to encourage participation.

Measurements: We assessed pre-to-post ACP knowledge, whether participants designated a surrogate or completed an advance directive (AD), and acceptability of GVs and PREPARE materials.

Results: We conducted two GVs with 22 participants. Mean age was 64 years (± 7), 55% were women, 73% nonwhite, and 55% had limited literacy. Knowledge improved about surrogate designation (46% correct pre vs. 85% post, $p=0.01$) and discussing decisions with others (59% vs. 90%, $p=0.01$). Surrogate designation increased (48% vs. 85%, $p=0.01$) and there was a trend toward AD completion (9% vs. 24%, $p=0.21$). Participants rated the GVs and PREPARE materials a mean of 8 (± 3.1) on a 10-point acceptability scale.

Conclusions: Using the PREPARE movie to facilitate ACP GVs for diverse adults in safety net, primary care settings is feasible and shows potential for increasing ACP engagement.

Keywords: advance care planning; group visits; safety net; videos

Background

THE GOAL OF ADVANCE CARE PLANNING (ACP) is to ensure medical care consistent with people's values, goals, and preferences during serious and chronic illness.¹ However, many patients from disenfranchised populations do not engage in ACP.²⁻⁴ Multiple system barriers to ACP exist, including lack of culturally appropriate materials, limited time, and discomfort discussing the topic among physicians.⁵⁻¹⁰

Group visits (GVs) have shown promise for ACP education.¹¹⁻¹⁴ In a GV, patients with a shared condition or

interest receive medical care and education in a group setting, guided by a clinician. GVs also provide peer support from other patients.^{15,16} Conducting ACP in safety-net settings, where patients are uninsured, on Medicaid, or otherwise vulnerable, is limited by resources for trained facilitators to provide educational content. Videos may provide ACP education without significant facilitator resources and have been shown to promote ACP behavioral change.^{17,18} However, evidence of the feasibility and impact of using video decision aids to provide ACP education in GVs is limited.

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The PREPARE website (www.prepareforyourcare.org) is a patient-centered, evidenced-based, multimedia website designed to engage patients in the process of ACP. PREPARE can be viewed in an interactive or movie format. PREPARE has been shown to engage diverse older adults in ACP,⁸ but has not been studied in a GV setting. Preliminary usability testing suggested that a movie version would be more conducive to viewing in a group, especially for computer-naïve individuals. Therefore, we conducted a feasibility pilot of the PREPARE movie in GVs and assessed whether the PREPARE GV improved ACP knowledge, surrogate designation, and advance directive (AD) completion in a safety net, primary care setting.

Methods

Setting

PREPARE GVs were conducted between December 2013 and January 2014 at two primary care clinics in an urban safety-net health system in Northern California. Study approval was obtained from the Institutional Review Board.

Participants

Participants were English-speaking, 55 years of age and older, had at least two chronic medical conditions based on ICD-9 codes, and at least two primary care visits in the past year.¹⁹ Subjects were excluded if they self-reported, had ICD-9 codes or chart review evidence of blindness, deafness, dementia or psychosis, active drug or alcohol abuse, an alert of disruptive behavior, or screened positive for moderate-to-severe cognitive impairment.^{20,21}

Recruitment

Flyers were posted in clinics, mailed to eligible participants, and followed by a phone call with a target of 30 enrolled patients and at least 10 attendees per GV. Informed consent was obtained for all participants, and baseline demographic information was collected, including health literacy.²²

Intervention

Participants attended two 90-minute PREPARE GVs one week apart at the clinic. They viewed the PREPARE movie, which provides multimodal educational content, including voice-overs of all website text, videos modeling ACP communication and decision-making, and questions asked within the videos about viewers' values. Participants viewed PREPARE steps 1–3 during the first visit and steps 4 and 5 during the second visit. Video viewing time was approximately 80 minutes. Participants also received a validated easy-to-read AD and a PREPARE workbook.²³ Two clinician facilitators set up the movie and encouraged discussion among patients, but all educational content was provided from the PREPARE movie. At the end of the GV, facilitators encouraged participants to complete their AD and discuss wishes with family and friends. However, no assistance with ACP documentation was provided.

Measurements

We assessed ACP knowledge before the first GV and one week after the second GV with multiple-choice questions about who can be a surrogate, who is an optimal surrogate, whether a potential surrogate needs to be formally asked to serve in the role, when to ask someone to be a surrogate, how to choose flexibility in surrogate decision making, and who needs to be notified of an appointed surrogate and their preferences for medical care.

Participants also completed an adapted version of the validated ACP Engagement Survey before and after the GVs that included 15 behavior-change process items assessing knowledge, contemplation, self-efficacy, and readiness on a 5-point Likert scale about identifying and asking someone to be a surrogate and talking with a surrogate and a doctor about preferences for medical care. We included four validated action items about whether participants had designated a surrogate decision maker, communicated this information to clinicians, or completed an AD. Participants completed validated acceptability surveys that assessed the ease-of-use of PREPARE on a 10-point scale, and, on a 5-point Likert scale, comfort with and the helpfulness of the PREPARE workbook and the likelihood they would recommend the GV to others.⁸

Analysis

All pre-to-post response options were calculated as percentages or means and compared using Fisher's exact tests or t-tests. Statistical analyses were conducted using Intercooled Stata, version 13 (StataCorp, College Station, TX).

Results

Participants

We mailed 163 patients recruitment fliers followed by 124 phone calls to reach our enrollment target of 30 participants in total, 15 per GV (18% participation rate). Twenty-two of the 30 enrollees attended both GV sessions (73%), including 9 and 13 participants, respectively. Mean age was 64 years (± 7), 55% were female, 73% were racial or ethnic minorities, 23% reported English as a second language, 41% reported fair-to-poor health, and 46% had limited health literacy (Table 1).

ACP knowledge

One week after PREPARE GVs, participants demonstrated improved knowledge about surrogate designation (46% pretest versus 85% posttest, $p=0.01$) and talking to others about their designated surrogate (59%–90%, $p=0.01$). There was a nonsignificant trend toward improved knowledge about the optimal time to choose a surrogate (55%–75%, $p=0.17$); informing others of their wishes (73%–90%, $p=0.15$); surrogate definition (64%–70%, $p=0.66$), identifying the optimal surrogate (86%–95%, $p=0.34$), and medical decision-making flexibility (41%–55%, $p=0.36$).

ACP engagement

Behavior change processes. There was a significant increase in how informed participants felt about who can be a surrogate (3.2 vs. 4.1, $p=0.02$) and who is an ideal surrogate

TABLE 1. CHARACTERISTICS OF PREPARE GROUP VISIT PARTICIPANTS (N=22)

Characteristic	Mean (SD) n (%)
Mean Age, years	64 (7)
Women	12 (55)
Race/ethnicity	
White, Non-Hispanic	6 (27)
African American	9 (41)
Asian or Pacific Islander	4 (18)
Latino or Hispanic	3 (14)
English as primary language	17 (77)
Education	
<High school graduate	7 (32)
High school graduate/GED	4 (18)
Some college	8 (36)
College or beyond	3 (14)
Self-rated health status ^a	
Fair-to-poor	9 (41)
Limited health literacy ^b	10 (45)
Comfort using Internet ^c	
Quite a bit to extremely comfortable	7 (32)

^aSelf-rated health: 5-point Likert categories: “poor, fair, good, very good, excellent.”

^bLimited health literacy: Categories of confidence with medical forms. Categories of “not at all, a little, somewhat, quite a bit, extremely” and “somewhat” to “not at all” categorized as limited literacy.

^cComfort using the internet: 5-point Likert categories of “not at all, a little, somewhat, quite a bit, extremely.”

TABLE 2. ADVANCE CARE PLANNING ENGAGEMENT BEFORE AND AFTER PREPARE GROUP VISITS (N=22)

Topic	Pre-GV mean (SD)	Post-GV mean (SD)	p-value
Behavior change processes (5-pt Likert scale)			
Informed about			
Who can be a surrogate	3.2 (1.3)	4.1 (1.0)	0.02 ^a
Who is a good surrogate	3.3 (1.0)	4.1 (1.1)	0.03 ^a
Types of decisions made my surrogate	3.1 (1.2)	3.8 (1.1)	0.07
Thought about			
Who you would want as your surrogate	3.2 (1.4)	3.8 (1.3)	0.13
Asking that person to be your surrogate	2.5 (1.6)	3.2 (1.5)	0.21
Talking with you doctors about your surrogate preference	2.1 (1.4)	2.2 (1.5)	0.82
End of life care preferences	3.1 (1.6)	3.2 (1.7)	0.92
Discussing these preferences with your surrogate	2.5 (1.6)	3.0 (1.8)	0.41
Discussing these preferences with your doctor	3.4 (1.6)	3.8 (1.5)	0.42
Confidence you could			
Ask someone to be your surrogate	3.0 (1.4)	3.9 (1.2)	0.03 ^a
Talk with your doctors about your surrogate	3.0 (1.4)	4.0 (1.3)	0.02 ^a
Discuss end of life care with your surrogate	3.3 (1.6)	4.1 (1.3)	0.09
Discuss end of life care with your doctor	3.4 (1.6)	3.8 (1.5)	0.42
Readiness to			
Sign an advance directive	1.8 (1.0)	3.0 (1.1)	0.01 ^a
Decide on a surrogate	2.5 (1.1)	4.6 (1.3)	<0.01 ^a
Topic	Pre-GV n (%)	Post-GV n (%)	p-value
ACP actions (yes/no)			
Identified surrogate	11 (48)	19 (85)	0.01 ^a
Asked someone to be surrogate	9 (41)	11 (50)	0.57
Talked with your doctor about your surrogate	3 (14)	5 (23)	0.21
Completed an advance directive	2 (9)	5 (24)	0.21

^aStatistically significant at the $p \leq 0.05$ level. ACP, advance care planning.

(3.3 vs. 4.1, $p=0.03$), with a trend toward being more informed about the types of decisions made by a surrogate (3.1 vs. 3.8, $p=0.07$) (Table 2). Participants also showed increased self-efficacy in their ability to ask someone to be a surrogate decision maker (3.0 vs. 3.9, $p=0.03$) and in their ability to share that information with their doctor (3.0 vs. 4.0, $p=0.02$). Confidence about discussing end-of-life care with their surrogate and their doctor also increased, but the improvement was not statistically significant. Furthermore, participants reported greater readiness after the GVs to choose a surrogate (2.5 vs. 4.6, $p < 0.01$) and to sign an AD (1.8 vs. 3.0, $p=0.01$).

Actions. One week after the GVs, more participants reported identifying a surrogate (48% vs. 85%, $p=0.01$) with a trend toward increased AD completion (9% vs. 24%, $p=0.21$) and talking with their doctor about their surrogate (14% vs. 23%, $p=0.21$). Formally asking someone to be a surrogate did not increase.

Feasibility and acceptability

Participants rated the GVs a mean of 8.8 (± 2) on a 10-point acceptability scale. They rated their comfort with the PREPARE GV workbook a 4.4 (± 0.8) on a 5-point scale, helpfulness of the workbook a 4.7 (± 0.6) on a 5-point scale, and likelihood they would recommend the GV to others a 4.6 (± 0.7) on a 5-point scale.

Discussion

Using PREPARE in a GV setting to facilitate ACP for diverse adults in a safety-net primary care setting was feasible and improved ACP engagement. Patients attended the visits, found the experience helpful and the materials easy to use. Participants showed improved knowledge, confidence, and readiness about ACP topics and took steps toward designating a decision maker and completing an AD.

Other studies of ACP GVs using videos to support ACP discussions and education have shown benefit.^{11,24} However, in those groups, most of the educational content was provided by clinician facilitators who ultimately facilitated ACP documentation. To our knowledge, this is the first study demonstrating feasibility of using the validated PREPARE website to deliver educational content in a GV setting. These findings suggest that the PREPARE movie may prove an efficient model for delivering ACP information in safety-net settings and in GVs.

Our study has several limitations. Generalizability may be limited, as the sample size was small, the study was in one geographic region, and the GVs were facilitated by two physicians and with support from a research assistant for recruitment. As this was a feasibility study, there was no control group. Participants were aware of the pilot project, and results may be subject to the Hawthorne effect and social desirability bias. Our visits excluded patients with cognitive impairment and those who did not speak English, but understanding the needs of these populations is important for future studies.

In conclusion, use of the movie version of the ACP PREPARE website can potentially be used in GVs to improve ACP engagement in resource-poor environments and for diverse populations with low health literacy. More research is needed to determine whether the PREPARE movie format can be used in other patient populations and settings and be conducted by nonclinicians.

Author Disclosure Statement

No competing financial interests exist

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