

An Educational Video Intervention to Increase Advance Care Planning Knowledge and
Advance Directive Completion for Community-Dwelling Veterans

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Abstract

Advance Care Planning is the process by which patients with the healthcare provider and family establish values, goals, and preferences for future care. Advance Directives provide written documentation of patients wishes for future care following Advance Care Planning conversations. The problem exists that only 17% of adults have had Advance Care Planning discussions with a healthcare provider and 18-36% have completed an Advance Directive. Lack of knowledge and awareness regarding ACP is the most common reason people have not completed an Advance Directive. The purpose of this quasi-experimental Doctor of Nursing Practice pilot project was to determine if an educational video intervention increased Advance Care Planning knowledge and Advance Directive completion in 30 community-dwelling Veterans whom are members of American Legion or Veterans of Foreign War Posts. Videos from the Nous Foundation were utilized for this educational intervention. Veterans were administered a questionnaire before and after the educational video intervention. This study supported the use of an educational video intervention to increase Advance Care Planning knowledge and increase participants plan to complete an Advance Directive. The implementation of this pilot project benefits the physical, psychological, psychosocial, spiritual, and financial well-being of patients, families, providers, healthcare organizations, and society.

Keywords: advance care planning, advance directives, patient education video, community-dwelling, veterans

An Educational Video Intervention to Increase Advance Care Planning Knowledge and Advance Directive Completion for Community-Dwelling Veterans

Evidence-based practice guidelines define Advance Care Planning (ACP) as the process by which patients, together with their healthcare provider and family, establish values, goals, and preferences for future care to positively impact quality at end-of-life (EOL; Conroy, Fade, Fraser, Schiff, & Guideline Development Group, 2009; McCusker et al., 2013; Michigan Quality Improvement Consortium [MQIC], 2016; Schrijvers, Cherny, & European Society for Medical Oncology [ESMO] Guidelines Working Group, 2014). According to a poll of Americans, only 17% of adults surveyed had ACP discussions with a healthcare provider and 18-36% completed an Advance Directive (AD; Institute of Medicine [IOM], 2014; Kaiser Family Foundation, 2015). Lack of knowledge and awareness regarding ACP is the most common reason people have not completed an AD (Jackson, Rolnick, Asche, & Heinrich, 2009; Landry, Kroenke, Lucas, & Reeder, 1997; McCarthy et al., 2008). This project piloted patient educational videos to assist with increasing community-dwelling Veterans' knowledge of the importance of ACP and AD completion.

Significance with Economic, Policy, and Health System

ACP is significant to healthcare cost because Medicare is the primary payer for patients over 65, and approximately 80% of US deaths are among people covered by Medicare (IOM, 2014). About 25% of Medicare costs occur in the last year of life and 50% of costs are on acute hospitalization (IOM, 2014; Zhang et al., 2009). Effective January 1, 2016, Medicare started covering ACP as a separate service by providers using the physician fee schedule and the Current Procedural Terminology code 99497. There is also an add-on code 99498 for each additional 30 minutes during annual wellness visits. Providers are reimbursed \$86 for the first

30-minute session conducted in the office or \$80 if done in the hospital. Subsequent sessions in either setting pay \$75 (Centers for Medicare & Medicaid Services [CMS], 2016).

Although death is a universal reality, the US healthcare system does not adequately address the needs of patients who are chronically ill or dying (IOM, 2014). To stress the importance of ACP and EOL care, the IOM (2014) recently published a report, *Dying in America*, with comprehensive studies and recommendations to improve honoring patient preferences and quality of care at EOL. The Centers for Disease Control and Prevention (CDC) also recognized ACP as a major public health issue and called for improvement in the quality of care and support of patient decisions and preferences at EOL (Benson & Aldrich, 2012).

Local Setting

Participants in this study are all Veterans involved with either the American Legion or Veterans of Foreign War (VFW) Posts. The majority of Veterans are from a rural county in Missouri with a population of 102,845 and a Veteran population of 8,464 (United States Census Bureau, 2017). The majority of the population is age 18-65, over 92% of the population is Caucasian, there is an equal distribution of males to females, 92.3% have high school degrees or higher, and 9.2% of people live below the poverty line (United States Census Bureau, 2017).

The American Legion (2017) is the largest nonpartisan, nonprofit Veterans service organization. Members serve as advocates to other Veterans, sponsor programs and activities, and volunteer in their communities (American Legion, 2017). The VFW (2017) is a nonprofit Veteran service organization whose military members include active, guard, and reserve forces. The VFW offers many programs and services that work to support Veterans, service members, and their families, as well as, communities (VFW, 2017). Current membership is about 1.7 million members between the VFW and the associated Auxiliary (VFW, 2017).

Population and Diversity

Veterans exist as a separate cultural group in society with unique healthcare needs. Veteran culture includes health inequalities and health disparities related to posttraumatic stress disorder, anxiety, depression, and substance abuse that must be understood by clinicians in order to provide the best care possible to this population (Hobbs, 2008). Demographic differences can affect AD completion (Landry et al., 1997). Lower rates of African Americans and Hispanics, people with lower incomes, and people with lower levels of education are noted to have lower completion of ADs (Kaiser Family Foundation, 2015).

Problem and Purpose

Problem Statement

Patients lack knowledge and awareness of ACP, leading to not completing ADs (Jackson, Rolnick, Asche, & Heinrich, 2009; Landry, Kroenke, Lucas, & Reeder, 1997; McCarthy et al., 2008). Current practice creates an opportunity for improved ACP patient education and to increase AD completion. ACP and AD completion helps to ensure patients receive healthcare that they prefer toward the EOL (Bernacki, Block, & American College of Physicians High Value Care Task Force, 2014).

Intended Improvement with Purpose

The purpose of this quasi-experimental Doctor of Nursing Practice pilot project is to determine if an educational video intervention will increase ACP knowledge and AD completion in 30 community-dwelling Veterans who are members of American Legion or VFW Posts.

Facilitators and Barriers

When patients lack ACP or have not completed an AD, there can be unnecessary and unwanted interventions and increased cost of care the patient and family incurs (Bernacki, et al.,

2014; IOM, 2014); this scenario is a major facilitator of this pilot project. ACP and ADs are helpful for patients and their healthcare providers because they guide care based on the patient's wishes and preferences even when the patient is unable to speak on their own behalf (Conroy et al., 2009; McCusker et al., 2013; MQIC, 2016; Schrijvers et al., 2014). The main barrier and a factor inhibiting sustainability of this project included the American Legion and VFW Posts not currently having a platform for ACP and AD education. These organizations are established as service clubs for Veteran membership, not as sources to receive primary medical care.

Factors promoting sustainability of this project included utilizing educational videos that were available at no cost to participants via the Nous Foundation website. Participants are able to view these videos again at their own leisure as long as they have an electronic device and internet. Because all the participants are Veterans, using Veteran's Administration (VA) approved patient educational handouts enabled participants to discuss ACP and ADs with their healthcare providers within the VA system if they desired.

Review of the Evidence

PICOTS

Does implementing an educational video intervention increase ACP knowledge and AD completion in 30 community-dwelling Veterans who are members of American Legion or VFW Posts?

Search Strategies

A systematic electronic search was conducted for ACP utilizing the databases PubMed, CINAHL, Ovid Medline, and the University of Missouri Kansas City Health Sciences Library RooSearch. In addition, the search engine Google Scholar was used. Terms searched included evidence based practice, ACP conversation or communication or discussion, EOL decision

making, EOL discussion, advanced directive, living will, durable power of attorney, and patient education video. For the purpose of this study, the student investigator provided definitions for commonly used terms (see Appendix A).

Results of searches included various study designs: 4 evidence-based guidelines, 6 systematic reviews of quantitative studies, 2 quantitative randomized control trials, 3 quantitative quasi-experimental studies, 8 quantitative non-experimental, and 2 qualitative studies. The levels of evidence indicated by Melnyk levels of evidence included 10 level of evidence one, 2 level of evidence two, 3 level of evidence three, 8 level of evidence four, 0 level of evidence five, and 2 level of evidence six (Melnyk & Fineout-Overholt, 2015; see Appendix A).

Evidence by Sub-Topics

Three sub-topics emerged from the synthesis of literature to support the need for this DNP pilot project due to the lack of ACP and AD completion. The topics included 11 studies for approach to ACP timing, 10 studies for challenges and barriers to ACP, and 13 studies for improving quality and performance with ACP (see Appendix B).

Approach to ACP Timing

All patients should have the opportunity to participate in ACP and receive care that is based on their goals, values, and preferences (IOM, 2014). Providers in the primary care setting are not routinely addressing ACP and when they do it is not early or routine (Nolan, 2014; Tung et al., 2014). Two approaches to ACP timing involve earlier and annual or routine ACP conversations.

Earlier ACP. The Institute for Clinical Systems Improvement (ICSI) guidelines reported patients want their providers to discuss ACP prior to them becoming too ill (McCusker et al., 2013). ACP should be discussed prior to becoming ill or early in the chronic disease process with

patients (Bernacki et al., 2014; Conroy et al., 2009; IOM, 2014; Mack et al., 2012; Mack, Weeks, Wright, Block, & Prigerson, 2010). In patients with terminal cancer, the first EOL conversation took place an average of 33 days before death, and 55% occurred while hospitalized (Mack et al., 2012). In a study by Odejide and colleagues (2016), 56% of respondents reported that EOL discussion occurred *too late* to be most beneficial.

Annual or routine ACP. One-third of patients alter their AD because of progression of disease, hospitalization, health status changes, social issues, and functional ability (Conroy et al., 2009). The IOM (2014) recommended frequent evaluation and updates to the ACP to ensure goals, values, and preferences are met in response to the changing circumstances of the patient and family. ACP should be a part of annual checkups for patients with chronic disease (Conroy et al., 2009; MQIC, 2016; Schrijvers et al., 2014). Providers need to improve on the assessment and reassessment of patient's goals of care and documentation of this on-going conversation (McCusker et al., 2013).

Challenges and Barriers to ACP

Results of studies indicated clinicians do not complete ACP because they wait for the patient to bring it up, think another provider will do it or has already done it, think the patient will give up hope, have time constraints of office visits, and lack compensation for the lengthy conversations.

Wait for the patient. Primary care providers need to initiate ACP discussion to make sure patients and families have sufficient knowledge and education, as 84-90% of patients greater than 65 with chronic illness stated they have never been asked about ACP (IOM, 2014; You et al., 2015). Providers cannot rely solely on handing out ACP information brochures alone to initiate EOL discussions; rather providers should initiate ACP discussions and have patient

educational material available (Conroy et al., 2009). Ultimately, improving patient education and awareness of ACP is beneficial in helping patients consider and communicate their preferences to providers who then document their wishes as part of the medical record (Butler et al., 2014; Elwyn et al., 2013).

Another provider's job. Often providers think another provider will do ACP or are unclear who should conduct the conversation first (Bernacki et al., 2014). Mack and colleagues (2012) found in a large prospective cohort study of lung and colorectal patients that 55% had their first ACP discussion in the hospital and only 27% were conducted by their oncologist. Primary care providers need to take the initiative and discuss ACP prior to patient referral to a specialist.

Destroy hope. Some providers may be reluctant to discuss ACP because of fear of affecting the patient's hope and emotional coping or feel the patient may think the provider is *giving up* (IOM, 2014; Odejide et al., 2016). There is no evidence that ACP discussion increases anxiety or hopelessness of patients (Bernacki et al., 2014; Wright et al., 2008). Evidence suggests ACP relieves anxiety and helps patients feel more prepared to make informed health decisions (Bernacki et al., 2014).

Lack time. The literature noted providers' lack of time to discuss ACP during routine visits as a major barrier to completion of ACP (IOM, 2014; Tung et al., 2011). In a study by You and team (2015), nurses rated physicians' lack of time to discuss goals of care and multiple physicians providing care for a single patient as important barriers to ACP. Performing ACP conversations has been shown to increase time in the appointment for the providers, but the harm of failing to perform ACP is not addressing the patient's goals of care and EOL preferences (Bernacki et al., 2014).

Lack reimbursement. The literature previously reported lack of reimbursement of time-consuming ACP conversations as a barrier. Beginning in 2016, CMS started compensating for ACP discussions so this barrier has now been resolved (Conroy et al., 2009; Tung et al. 2011). Compensation for ACP is lower compared to reimbursement for procedures or operations, but it is essential to addressing the goals of care for patients.

Improving Quality and Performance with ACP

Improve quality. The literature reported that with ACP that the patients' wishes were more likely to be followed (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Chiarchiaro, Buddadhumaruk, Arnold, & White, 2015; Detering et al., 2010; Mack et al., 2012; Mack et al., 2010; McCusker et al., 2013; MQIC, 2014); experience an increased quality of life (Bernacki et al., 2014; Mack et al., 2012; Mack et al., 2010; McCusker et al., 2013; MQIC, 2014; Nolan, 2014; Wright et al., 2008; Zhang et al., 2009); and express increased empowerment and autonomy (Bernacki et al., 2014; Detering et al., 2010). Patients and families had reduced stress, anxiety, depression, PTSD, and bereavement with ACP (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Chiarchiaro et al., 2015; Detering et al., 2010; Mack et al., 2010; Nolan, 2014; Wright et al., 2008). Also, patients experience improved satisfaction with their care if they participated in ACP (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Conroy et al., 2009; Detering et al., 2010; McCusker et al., 2013).

The ICSI guideline stated that a proactive approach to ACP has been shown to improve agreement on goals of care, increase satisfaction levels, and improve quality of patient care (McCusker et al., 2013). In a randomized control trial of older patients, ACP was associated with higher levels of goal-consistent care (Detering et al., 2010). Zhang and team (2009) found that

patients who discussed ACP with their providers had a better quality of death during their final week of life and had reduced healthcare expenses.

Improve performance. The literature also discussed improved performance of providers and organizations using ACP. Outcomes included lower rates of hospitalization and ICU admission (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Detering et al., 2010; McCusker et al., 2013; Zhang et al., 2009); decreased length of hospital stay (McCusker et al., 2013); decreased resource utilization (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Detering et al., 2010; Mack et al., 2012; MQIC, 2014; Wright et al., 2008; Zhang et al., 2009); decreased cost of care (Bernacki et al., 2014; Conroy et al., 2009; Mack et al., 2010; McCusker et al., 2013; MQIC, 2014; Nolan, 2014; Zhang et al., 2009); and increased hospice use among patients who participated in ACP (Bernacki et al., 2014; Brinkman-Stoppelenburg et al., 2014; Mack et al., 2012; McCusker et al., 2013; Wright et al., 2008).

There were also several recommendations reported in the literature to improve performance with the use of ACP. The current US healthcare system incentivizes life-sustaining or curative treatment more than supportive and comfort care. Inadequate ACP results in more aggressive treatment than what the patient desires (Bernacki et al., 2014; IOM, 2014). Primary care practices, as part of their annual performance review, should evaluate the number of patients who die in their practice that were offered ACP (Conroy et al., 2009). To improve provider compliance of ACP, the IOM (2014) recommended financial incentives for ACP that reduce the use of unnecessary and unwanted medical services that were inconsistent with patient EOL goals, system support of clinician training on the electronic health record (EHR) to better communicate and document ACP, and improved reporting on outcomes, costs, and measures

regarding EOL care. Standards should be developed that are evidence based, measurable, actionable, and be reported publicly (Bernacki et al., 2014; IOM, 2014).

Conceptual and Theoretical Foundation

Understanding theoretical approaches is an important step in applying theories and models to ACP and developing interventions for the ACP process. The Health Belief Model (HBM) was created to understand how a person's behavior is influenced by their belief of a health problem (Rosenstock, 1974). Their belief of this health problem may lead them to change their behavior and take actions to reduce their risk (Rosenstock, 1974). This model has been used in public health, psychology, sociology, medicine, and nursing (Fried, 2009). The HBM provides theoretical framework to guide this pilot educational intervention to increase participant knowledge on the importance of ACP and AD (a change in belief) leading to a behavior change to complete an AD and participate in ACP to impact their EOL care (see Appendix C; Fried, 2009). The HBM states a change in beliefs about a health problem does not always lead to a behavior change as various barriers to ACP and completing an AD exist (Fried, 2009).

Methods

Internal Review Board (IRB) and Site Approval, Ethical Issues, and Funding

IRB and site approval. Primary IRB approval for this project was obtained from the University of Missouri – Kansas City (UMKC). The project was processed as Expedited Review Category #7 research (see Appendix D). There was minimal or no risk involved with participants in this project, but benefits included increasing ACP knowledge and increasing AD completion. Human subjects in this study included community-dwelling Veterans affiliated with the American Legion and VFW Posts in a rural county in Missouri area. UMKC IRB provided a waiver documentation of consent due to minimal risks associated with the study. Copies of the

consent form were provided to each participant at the beginning of the educational session (see Appendix E). The study coordinator read the consent aloud to the entire group of participants at the beginning of the educational session. Voluntary completion of the questionnaire indicated individual consent. Data collected did not include protected health information or identifying data. Confidentiality and anonymity was maintained throughout the study. All participants reserved the right to discontinue their participation from the study at any point in time.

Ethical issues. Ethical consideration for protection of privacy was made available to participants with the alternative of completing the pre-and post-questionnaire and viewing the two videos in a private room, however, no participants chose this option. The alternative was presented by the study coordinator at the beginning of the educational session and included instruction for accommodations to be made to complete the study in a private room. The study coordinator also announced at the beginning of the session that there were no conflicts of interest in this study.

Participants with poor literacy/low educational level, language barrier, visual or hearing disabilities, or learning or speech impairment posed a challenge for the DNP intervention. Accommodations were made by the study coordinator to minimize these challenges by editing the participant questionnaire to a Flesch-Kincaid reading ease score of 72.5 readability of *fairly easy* and grade level of 5.7, providing video viewing via a large projector instead of small television, and enhancing video audio with additional speakers.

Other ethical concerns were participants' different cultural practices, socioeconomic backgrounds, cognitive capacity, and previous attitudes regarding ACP (Landry et al., 1997; National Ethics Advisory Committee, 2014). These concerns could influence participant knowledge of ACP and AD completion.

Funding. Funding for this DNP pilot project was provided by the UMKC Women's Council Graduate Assistance Fund Soroptimist International of Kansas City Award. The amount of the grant was \$610. An analysis of direct and indirect cost indicated that the necessary amount of funding needed was \$1567 (see Appendix F).

Sample and Participants

A convenience sample was used resulting in the Veterans that attended the educational offering. The session was held at the VFW Post location with 34 people in attendance. All individuals that participated in the educational intervention are Veteran members of the American Legion or VFW Posts. Participant inclusion criteria included males and females, adults 18 years and older, English speaking, and all race or ethnicity. Participant exclusion criteria included age under 18 years old, inability to participate in the intervention due to language or cognitive barriers, and unwillingness.

EBP Intervention

Literature noted combined interventions with video, written, and verbal education to be more effective to increasing AD completion and reaching participants of all learning styles compared to a single intervention of written education (Landry et al., 1997). The student investigator began by comprehensively researching and analyzing existing ACP video resources. Those findings led to the selection of the Nous Foundation (2013) videos to be utilized for this pilot project. The Nous Foundation is a nonprofit organization comprised of a group of clinicians with the goal of empowering patients and healthcare providers through the use of ACP support videos (2013). The intervention included two ACP patient educational videos (see Appendix G) provided by the Nous Foundation (2013). These free videos provided an understanding of ACP and guidance to talking with a provider. The educational videos are available in multiple

languages, however, only the English version was viewed. The informational material and AD forms (see Appendix G) utilized for this project were provided through the VA website (US Department of Veterans Affairs, 2017). Informational materials were supplied to each participant in a handout folder. The AD supplied is a federal VA system mandated form and permission to use in the project was not required. Verbal reinforcement of the material was provided by the student investigator.

The student investigator recruited participants from the American Legion and VFW Posts via verbal communication with their commanders. The commanders of the American Legion and VFW Posts directly recruited members of their organizations to participate in the pilot. The commanders used word of mouth with their members to recruit. Additionally, the commanders announced recruitment at the monthly meetings for each post. A script was provided to the commanders for their use for recruitment (see Appendix H). Willingness to participate in the study was up to the individual member.

The study investigator outlined the intervention flow diagram (Appendix I) and chronological order of events used for this study intervention sequence (see Appendix J). The VFW Post determined the study date and time based on building availability. The session was held only one day and the duration of the session lasted approximately 1 hour with 34 participants present.

Change and Evidence Based Practice (EBP) Model

Rosswurm and Larrabee's Model (Melnyk, & Fineout-Overholt, 2015) for EBP Change along with Kotter's Model (2014) served as the foundation to implement this DNP pilot project. This outlines six steps for EBP change include assessing the need for change, locating the best evidence for practice, analyzing the evidence, preparing practice change, implementing change

and evaluating, and sustaining change in practice (Melnyk, & Fineout-Overholt, 2015). Kotter's Model (2014) is an eight-step organizational change tool that links change to the individuals, groups, and system in a systematic process. Kotter's Model (2014) offered a framework to implement ACP patient education videos to promote AD completion into the American Legion and VFW Posts. The student investigator used a logic model to help conceptualize the effect of change for this intervention (see Appendix K).

Study Design and Method

The study design was a feasibility pilot study with a quasi-experimental pre/post-intervention design. A pre-intervention questionnaire was administered to each participant (see Appendix L). The questionnaire collected basic demographic information (gender, age, race, education level, and health status), asked questions related to current ACP understanding such as knowledge of ACP, and identified current status of AD completion (Jackson et al., 2009; Landry et al. 1997; McCarthy et al., 2008).). The participants then viewed the ACP educational intervention videos and received a folder with ACP informational materials and AD form. Then participants completed a post-intervention questionnaire. Once finished, participants submitted their questionnaire into a locked box in the possession of the study coordinator.

Measurement Instrument and Data Collection

The pre/post-intervention questionnaire (see Appendix L) used in this pilot to measure participant's knowledge of ACP and AD status was a modified version used in previous research (Jackson et al., 2009; Landry et al. 1997; McCarthy et al., 2008). The reliability and validity of the questions were tested in the prior studies so not completed by the student investigator (Jackson et al., 2009; Landry et al. 1997; McCarthy et al., 2008). All pre/post-intervention questions were answered with yes or no responses. The data collection template included basic

demographic information (gender, age, race, education level, and health status) and 11 pre/post-intervention questions with one additional post-intervention question regarding intent to complete an AD (see Appendix M). The responses from each questionnaire were manually entered into Microsoft Excel tables for comparison. Responses were individually assessed for each participant and for the overall group. The Microsoft Excel spreadsheet was password protected. The document was secured on a password protected personal laptop. No protected health information was collected.

Validity

The use of educational video interventions has been studied and shown to be valid in different care settings including the hospital (Detering et al., 2010) and ICU (Zhang et al., 2009) and with different patient populations such as oncology (Mack et al., 2012). The design and implementation of this study could have compromised data integrity. Participant comprehension of the questionnaire and educational videos could have manipulated the integrity of the data. Internal validity could have been influenced by a patient's willingness to participate in all the components of ACP and AD completion.

A threat to validity could be a patient's previous knowledge, experience, and perceptions of ACP and AD (Conroy et al., 2009; IOM, 2014; Nolan, 2014; Tung et al., 2014; You et al., 2015). The population for this pilot project included only willing participants who are Veteran members of the American Legion or VFW Posts and met the qualifying criteria to participate; thus the external validity of this project may not allow for the results to be applicable to the general population.

Outcomes

Increased knowledge of ACP and AD after viewing the educational videos was the primary outcome measured. The secondary outcome was an increase in AD completion. A comparison of participant demographic information (gender, age, race, education level, and health status) was also included.

Data Analysis Plan and Quality of Data

Data was analyzed using the IBM SPSS software to maintain statistical significance using odds ratio and $p < 0.05$, 95% confidence. Descriptive statistics were used to interpret the study data. A McNemar test was used for bivariate data from the pre/post-intervention questionnaires. Frequency and percent analysis was used to test associations among demographic data (gender, age, race, educational level, and health status) and pre/post-intervention questions. To promote quality of data, a power analysis was performed and the study required a sample size of at least 30. The session included a sample size of 34 participants which increased the confidence of the data. Benchmark data discussed in current literature was also compared to the project's findings. This included a 17% occurrence of ACP discussions with healthcare providers and 18-36% AD completion (IOM, 2014; Kaiser Family Foundation, 2015).

Results

Setting and Participants

This study followed a timeline and was completed as a one-cohort project on one day (see Appendix N). This study was conducted in a rural county in Missouri. The project was implemented at the local VFW Post and included VFW and American Legion members. Site approval was granted by each posts' commanders for participation in the study (see Appendix O).

The participants met study inclusion criteria and were community-dwelling Veterans. Participants were primarily male Veterans (76%, 26/34). The majority of participants were older adults with ages greater than 60 (85%, 29/34). Most participants were Caucasian (94%, 32/34); this was consistent with the county statistics reporting 92% of the population as Caucasian (United States Census Bureau, 2017). The majority of participants had a high school level education or higher (91%, 31/34); this was representative of the county statistics with 92% of the population with a minimum high school education (United States Census Bureau, 2017). The most common response to participant self-report of health status was, *Good* (53%, 18/34). Demographics were obtained and summarized (see Appendix P).

Actual Intervention Course

The major components of the intervention included participants completing the pre-intervention questionnaire, viewing the two educational videos, and then completing the post-intervention questionnaire. The timeframe for the intervention sequence was outlined by the study coordinator (Appendix J). There was no change from the previous plan intervention course and the actual intervention sequence.

Outcome Data by Subtopic

Thirty-four questionnaires were completed by 34 participants as part of the study. Questions one, two, nine, 10, and 11 all showed an increase in the frequency of *yes* responses when comparing pre-intervention and post-intervention. Of the 12 questions surveyed, only question 11 was found to have statistical significance ($p < 0.002$); pre-intervention 47% (16/34) of participants identified that they would like to talk to their primary care provider about their EOL wishes compared to an increase post-intervention of 76% (26/34; see Appendix Q). There was no missing data identified in the study which was likely due to the small sample size.

Pre-intervention responses varied to questions one through four relating to participants knowing EOL terminology. When asked pre-intervention about the terms they knew, 74% (25/34) indicated they knew what ACP was; 62% (21/34) stated they knew what an AD was; 97% (33/34) reported they had heard of a living will; and 100% (34/34) specified they had heard of a durable power of attorney (DPOA). These rates all increased or remained the same post-intervention; 100% (34/34) knew what ACP was, 100% (34/34) knew what an AD was, 97% (33/34) had heard of a living will, and 100% (34/34) had heard of a DPOA (see Appendix Q). The educational intervention did improve knowledge of ACP and AD terminology.

Less than half of participants reported they had completed a form stating their EOL wishes. More participants stated they preferred healthcare focus on quality of life compared to quantity of life. The majority of participants reported their family knew their EOL wishes compared to their primary care provider knowing their preferences. Participants also reported higher rates of wanting to talk to their family about their EOL wishes compared to their desire to talk to their primary care provider about EOL plans. Post-intervention 91% (31/34) reported a plan to complete an AD (see Appendix Q).

Having previous knowledge of EOL terms did not support participants having already completed a form stating EOL wishes pre-intervention (see Appendix R). Increasing knowledge of EOL terms post-intervention reinforced intent to complete an AD (see Appendix R). Knowledge of EOL terms post-intervention compared to pre-intervention increased participants' desire to talk with family and their primary care provider about their EOL wishes (Appendix R).

Literature noted that patients talk to their family and healthcare providers about their EOL wishes, but many do not complete an AD so when the time comes and an AD is needed there is not documentation of their preferences for care (IOM, 2014). This study found of the

participants whose family knew their EOL wishes, 63% (15/24) had completed a form stating their preferences (see Appendix R). For the participants whose primary care provider knew their wishes, 78% (7/9) had completed an AD (see Appendix R). The literature also reported the issue of patients completing an AD, but not communicating this information or sharing this document with their family or healthcare providers (IOM, 2014). This study found 100% (15/15) of the participants that had completed an AD had told their family their EOL wishes (see Appendix R). Of the participants that had completed a form stating their EOL, 47% (5/15) reported their primary care provider knew their preferences (see Appendix R).

Age, education level, and health status did not show any correlation to having completed a form stating EOL wishes (see Appendix R). The literature reported that people of advanced age, higher education level, and worsening health status were more likely to have completed an AD (IOM, 2014; Kaiser Family Foundation, 2015).

Discussion

Most Important Successes

The most important success of the study outcomes was 91% (31/34) of participants stated they planned to complete an AD post-intervention. This outcome was important because the main goal of facilitating improvement with this process was to increase the number of people discussing ACP and completing an AD. Another success was a post-intervention increase of participants wanting to discuss their EOL wishes with their family and primary care provider. Finally, a success was a post-intervention increase in participant knowledge of ACP and AD terminology.

Study Strengths

A strength of this study included community-dwelling Veterans that were predominantly older adults ages greater than 60 (85%, 29/34) with a health status rated as, *Good* (53%, 18/34). The review of literature stated ACP should be discussed with people over the age of 55, prior to becoming too ill, early in disease progression, and before hospitalization (Bernacki et al., 2014; Conroy et al., 2009; IOM, 2014; Mack et al., 2012; Mack et al., 2010; McCusker et al., 2013). These study outcomes correlate with the proper population being used for this type of intervention.

An additional strength was utilizing ACP informational material and AD form approved by the VA (see Appendix G). Distributing this material as part of the study instead of other ACP and AD paperwork available to the public enabled the Veteran participants to have access to the material they would receive as part of their medical care through the VA. Utilizing this paperwork enhanced continuity of care. VA approved educational videos were not utilized as part of this study as no VA approved educational videos exist. The videos utilized were freely available on the Nous Foundation (2013) website and could be accessed by the participants in the future if they desired. The links to the videos on the website were provided as a handout to participants (see Appendix G).

Results Compared to Evidence in the Literature

The study found 97% (33/34) of participants post-intervention had heard of a living will which was the exact same result reported in the literature of 97% (IOM, 2014). The study results found 26% (9/34) of participants post-intervention reported their primary care provider knowing their EOL wishes compared to the literature reporting only 17% had ACP discussions with a healthcare provider (IOM, 2014; Kaiser Family Foundation, 2015). This result supports the need for education to encourage patients to inform their healthcare providers about their EOL wishes

in order to avoid unwanted treatment. It is also important for providers to routinely ask and document their patient's preferences (IOM, 2014; Nolan, 2014; Tung et al., 2014).

Results of the study showed 44% (15/44) of participants post-intervention had completed an AD compared to the literature finding of 18-36% had completed an AD (IOM, 2014; Kaiser Family Foundation, 2015). Post-intervention, 94% (32/34) of participants stated they preferred healthcare focus on quality of life more than on quantity of life compared to the literature reporting 71% believe it is more important to enhance the quality of life, even if it means a shorter life, than to extend the life (IOM, 2014). Of those that stated they had completed a form addressing their EOL wishes, 47% (7/15) stated their primary care provider knew their EOL wishes compared to the literature reporting only 12% (IOM, 2014) [see Appendix R].

Limitations

Internal Validity Effects

Some factors regarding the intervention and data collection affected the study outcomes. One factor affecting study outcomes was the design of the intervention. The intervention was completed as a quasi-experimental pre-post one-cohort pilot project on one day. The study outcomes could have differed if a randomized control trial was utilized over a longer time period. This intervention was less time intensive compared to other studies in the literature utilizing one-on-one provider-patient counseling (Bernacki et al., 2014; Mack et al., 2012; Nolan, 2014). The total time to fill out the pre-and post-questionnaire and view the two videos was approximately 15 minutes; this also could have impacted the 100% participation and study outcomes.

Another factor affecting the study outcomes was the data collection. The measurement tool utilized was a modified version used in previous studies (Jackson et al., 2009; Landry et al. 1997; McCarthy et al., 2008). The *yes* or *no* responses could have limited participants in their

ability to provide further information to answer a question leading to participants circling an answer that may not truly reflect their opinion.

External Validity Effects

A few factors about the participants and setting affected the study generalizability. The study sample was small (34), homogeneous (94% Caucasian), and prominently male (76%, 26/34) making it difficult to generalize results that would be representative of the broader population. The majority of participants had achieved a high school education or higher and were Caucasian. These characteristics of the study population could influence generalizability, as the literature noted ethnic, socioeconomic, and educational backgrounds affect AD completion (Kaiser Family Foundation, 2015; Landry et al., 1997).

The rural setting may also affect generalizability due to the difference in access to healthcare resources compared to larger urban areas. As with any study, there is a possibility that those who participated had significantly different knowledge, experience, and preferences related to ACP compared to the general population. This study's outcomes compared to literature findings confirm consistencies between the participants and the general population consensus regarding ACP.

Sustainability of Effects and Plans to Maintain Effects

The organizations utilized for this study do not provide medical care as they are established as service clubs for Veteran membership. This limits the sustainability of a medically driven initiative such as this project. The student investigator used free educational videos available on the Nous Foundation website which could impact sustainability. As long as participants have access to the internet via an electronic device they can view the videos again. Utilizing VA approved patient educational handouts and forms impacted sustainability. If the

Veterans seek healthcare through VA facilities, their VA healthcare providers would provide them with the same paperwork.

Efforts to Minimize Study Limitations

Study limitations had an effect on data interpretation and application of study outcomes. Efforts were made by the student investigator to minimize these limitations and the impact on the study results. A small sample size influenced data interpretation making the statistical significance less effective. The student investigator allowed for open recruitment by the commanders of the American Legion and VFW Posts for all members, however, only 34 Veterans participated.

Participant demographic information was collected in order for application of the study results to be made regarding generalizability. This allowed for study outcomes to be compared to other populations. Patient educational handouts and a VA AD form were provided in folders given to each participant. This allowed for the 91% (31/34) of participants that stated they planned to complete an AD post-intervention to go home, review the resources, and document their EOL wishes.

Interpretation

Expected and Actual Outcomes

The student investigator expected there to be an increase in the knowledge of EOL terms pre-intervention compared to post-intervention. Pre-intervention more participants had heard of living wills and DPOAs compared to ACP and AD. The significance of this finding indicted the need for more education on ACP and AD terminology. Post-intervention participants had consistent knowledge of all terms.

Another expectation was for the majority of participants to desire to complete an AD post-intervention. Also, there was an expectation that an increase in participants would want to talk to their family and primary care provider about EOL post-intervention. These outcomes of improvement were not surprising due to the increased knowledge the participants received as part of the study.

One unexpected result of the study outcomes included the pre-intervention responses of 50% (17/34) of participants stating they had filled out a form stating their EOL wishes compared to the post-intervention responses decreasing to 44% (15/34). The student investigator believes this 6% decrease may have been due to the intervention increasing participant comprehension of what a form stating their EOL wishes is so the participants that thought they had completed a form pre-intervention realized they actually had not following the intervention.

Another unexpected outcome was a reduction, not significant, from pre-intervention (32%, 11/34) to post-intervention (24%, 8/34) in the participants stating they preferred health care focus on quantity of life more than on quality of life. The student investigator thinks this 9% decrease may have been due to the intervention increasing participants understanding of what quantity verse quality at the EOL actually means. This result indicated the need for proper education regarding EOL care.

There was also a reduction in the response for the question regarding family knowing EOL wishes. Pre-intervention 74% (25/34) reported their family knew their EOL wishes. Post-intervention 71% (24/34) stated their family knew their EOL wishes. This finding could indicate that participant education increased interpretation of what discussion with family entails.

Intervention Effectiveness

The student investigator believes the study was effective due to the straightforward and simple intervention of a pre-post-questionnaire with two short videos. People are more willing to participate in a study that is not time consuming or complicated (Detering et al., 2010). The commanders of the American Legion and VFW Posts recruited the Veterans that participated in the study. Because participation was voluntary, Veterans that entered into the study were already motivated to be involved.

This intervention, which highlighted the importance of ACP and AD completion, encouraged participants to examine the need to discuss and document their EOL wishes. Similar studies have already been completed on hospitalized patients (Detering et al., 2010; Landry et al., 1997) and with critically or terminal illness (Mack et al., 2012; Zhang et al., 2009). This intervention is likely to be useful in other community settings or primary care outpatient clinics. It can be adapted to any setting with any population.

Intervention Revision

The student investigator believes revising the intervention to an online study would impact the setting, population, and sample size. Utilizing a web-based questionnaire format with embedded links to the videos could provide for easier distribution. The American Legion and VFW have social media accounts on Facebook that could be used for disseminating the study. Instead of implementing to a small group in rural Missouri, the study could be implemented nationally with the use of this technology.

Another possible revision to the intervention would include using a VA approved ACP video however none currently exist, but for future studies with Veterans a VA ACP video could be produced and approved. Finally, another possible revision could include use of a different

measurement tool. A tool that had more questions and tested knowledge in a multiple-choice format may improve outcomes.

Expected and Actual Impact to Health System, Costs, and Policy

This intervention did not likely have direct impact on a health system, healthcare costs, and policy given the small scale. However, the student investigator believes the impact on the 34 participants is immeasurable. If even one participant completes an AD and ultimately receives EOL care based on their wishes, this project was worth the time and effort.

This project was partially funded by the UMKC Women's Council Graduate Assistance Fund Soroptimist International of Kansas City Award. The student investigator received a grant for \$610 from this organization. Direct and indirect cost for this project was \$1567 (see Appendix F). The student investigator paid \$957 out-of-pocket for the remaining cost not covered by the grant. The project being a pilot study and being funded by a small grant, limited the ability to target a larger population; but the study could serve as a first step to larger studies.

To maintain economic sustainability of this intervention, the student investigator used free ACP videos and printed VA resources that would also be free to Veterans receiving care through VA facilities. If the intervention was revised to an online questionnaire, no materials would need to be printed. A secured box to submit completed questionnaires would also not be needed. Instead of renting a projector, use of small portable electronic devices like cell phones or tablets could be used.

Conclusions

Practical Usefulness of Intervention and Opportunities

To ensure that care reflects a patient's values, goals, and preferences, providers need to make ACP a priority (IOM, 2014). Opportunities for improvement exist for increasing ACP

discussions and AD completion. Patients should be educated about the ACP process and how it can impact their future healthcare. The patient educational videos utilized for this DNP pilot project could be implemented in to other practice settings to enhance education about ACP and ADs.

Further Study of Intervention

Outcomes from this study may be utilized to build on assisting patients with ACP and AD completion. In the future, this student investigator may consider implementing a different project with a population and setting other than with community-dwelling Veterans, but this is not included in the current study protocol. Implementing a different study in a large primary care outpatient clinic or in a large academic medical center on inpatients may provide results to be inferred on the general population instead of just community-dwelling Veterans. Another IRB application would be completed in the future if the student investigator decided to carry out the implementation of a new study in one of these settings or populations.

Dissemination

The student investigator disseminated the synthesis of evidence poster at the UMKC Health Sciences Research Summit, The University of Kansas Hospital Research Symposium, and the Association of Missouri Nurse Practitioners summer conference. The DNP project proposal poster was presented at the Advance Practice Nurses of the Ozarks Conference and Magnetizing Kansas City Conference. The student investigator plans for further dissemination of this DNP pilot project with abstract submission for journal publication to the Hospice and Palliative Nurses Association (HPNA), Gerontological Advance Practice Nurses Association (GAPNA), or American Association of Nurse Practitioners (AANP). For poster or podium presentation, the student investigator will submit abstracts to professional organization's

conferences and submit to the local Missouri and Kansas AANP conferences to foster EOL quality of care through ACP.

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Appendix A

Definition of Terms

ACP: is the process by which patients with the healthcare provider and family establish values, goals, and preferences for future care.

AD: is a written notarized document that is the result of ACP discussion and includes instructions that reflect a patient's wishes for health care in the event that a patient is unable to speak for themselves.

Chronic illness: terminal illness or terminal disease condition that has become advanced, progressive and incurable.

Community-dwelling: a person living independently in their own home, not in a facility or institution

End-of-life: patients in the final hours or days of their lives.

Veteran: a person who has served in the military.

Appendix B

Synthesis of Evidence Table

Author(s) Year	Title & Publisher	Purpose/Aim /Objective	Research Design/ Study Type Level	Sample Size (N)	Sample Setting	Target Patient Population	Measures (P- value, CI) & Reliability	Methods	Results/ Findings
Approach to ACP Timing									
Michigan Quality Improve ment Consortium 2016	Advance care planning National Guideline Clearingh ouse - AHRQ	Improve ACP with development and implementatio n of EBPG, Engage patient in ACP, Recommend tools for ACP, Design EBPG	EBPG Level 1	N/A	N/A	1. Conditions for which death within the next 12 months would not be surprising 2. Chronic, life- limiting illnesses 3. Any stage of health in people over the age of 55	N/A	N/A	N/A

Odejide, O. O., Cronin, A. M., Condrón, N., Earle, C. C., Wolfe, J., & Abel, G. A. 2015	Timeline of End-of-Life Discussions for Blood Cancers JAMA	Timing of ACP discussion with patients with blood cancers	Quantitative Non-intervention/experimental Qualitative study Level 4 Level 6	349	Postal survey of hematologic oncologist	US hematologist		Postal survey of US hematologists from Sept. 16, 2014 to Jan. 21, 2015 from the directory of the American Society of Hematology.	Need for provider intervention to improve timing of ACP discussion.
Schrijvers, D., Cherny, N. I., & European Society for Medical Oncology (ESMO) Guidelines Working Group. 2014	ESMO clinical practice guidelines on palliative care: Advanced care planning. Annals of Oncology	ACP defined	EBPG Level 1	N/A	N/A	N/A	N/A	All patients in need of ACP	Defined opportunities of ACP
Bernacki, R. E., Block, S. D., & American College of Physicians High Value Care Task Force.	Communication About Serious Illness Care Goals A Review and Synthesis	Review EBP of ACP, Offers provider advice for quality and timing of ACP	SR Level 1	N/A	N/A	N/A	N/A		ACP should take place routinely, by providers in all settings for all patients

2014	of Best Practices JAMA								
Nolan, M. 2014	Education al Interventi on Increases Primary Care Providers' Comfort in Discussin g Advance Care Planning Austin Journal of Nursing & Health Care	Discussed benefits of ACP to benefit patient, family, cost, health system, Only 1/3 have ACP discussions, patients want provider to start ACP discussion, Providers are uncomfortabl e with ACP discussion, Provider intervention for improving comfort	Qualitativ e Level 6	64	NYC		A convenience sample of providers was surveyed	An 8 step educational intervention on best practice for discussing ACP using (MOLST) Model was conducted in provider offices.	MOLST intervention significantly improved comfort in discussing ACP for PCP with their patients (p < 0.001).

<p>Institute of Medicine (IOM) 2014</p>	<p>Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life. The National Academies Press</p>	<p>Report on current state, studies, and improvements to ACP</p>	<p>SR Level 1</p>	<p>over 1500 studies</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>21-member Committee to review ACP EBP</p>	<p>Education and development for ACP</p>
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<p>Tung EE, Wieland ML, Verdon BP, Mauck KF, Post JA, Thomas MR, Bundrick JB, Jaeger TM, Chas SS, Thomas KG. 2014</p>	<p>Improved resident physician confidence with advance care planning after an ambulatory clinic intervention. American Journal of Hospice & Palliative Medicine</p>	<p>The aim of this intervention was to assess internal medicine residents' advance care planning (ACP) practices and improve residents' ACP confidence.</p>	<p>Quantitative Quasiexperimental and Nonexperimental Level 3 Level 4</p>	<p>106 Physicians 873 Charts Audited</p>	<p>Mayo Clinic IM Residency Program's ambulatory continuity clinic practice.</p>	<p>Patients ≥ 65y/o</p>	<p>The Pearson chi-square test and 2-sample t test were used to compare the pre- and post-intervention survey results. Multivariate logistic regression models were used to determine the association between ACP completion and patient and provider variables. P values less than .05 were statistically significant.</p>	<p>Residents participated in a facilitated ACP quality improvement workshop, which included an interactive presentation and chart audit of their own patients. Pre- and post-intervention surveys assessed resident ACP-related confidence.</p>	<p>Residents reported significantly improved confidence with ACP and identified important training gaps.</p>
<p>McCusker, M., Ceronsky, L., Crone, C., Epstein, H., Greene, B.,</p>	<p>Palliative care for adults National Guideline Clearingh</p>	<p>Improve provider understanding of Palliative Care, Increase identification of patients</p>	<p>EBPG Level 1</p>	<p>N/A</p>	<p>N/A</p>	<p>Adult patients with a serious illness who may benefit from palliative care</p>	<p>N/A</p>	<p>N/A</p>	

Halvorson, J., Kephart, K., Mallen, E., Nosan, B., Rohr, M., Rosenberg, E., Ruff, R., Schlecht, K., & Setterlund, L. 2013	ouse - AHRQ	who would benefit from Palliative Care, Improve provider comfort with discussions and assessment, Increase ACP and AD							
Mack, J. W., Cronin, A., Taback, N., Huskamp, H. A., Keating, N. L., Malin, J. L., Weeks, J. C. 2012	End-of-life care discussions among patients with advanced cancer: A cohort study. Annals of Internal Medicine	Evaluate if ACP discussions with patients with lung or colon cancer are taking place per EBPG recs	Prospective cohort study Level 4	2155	California, North Carolina, Iowa, Alabama and received care at 1 or 5 HMOs or the VA.	Patients diagnosed with lung or colorectal cancer from 2003 to 2005.		ACP discussions documented in EMR 15 months after diagnosis	73% of patients had ACP discussion. Of those that died, 87% had ACP vs 41% of those alive. 55% occurred in the hospital. 27% were documented. Of those that died, ACP took place a median of 33 days before death.

<p>Mack, J. W., Weeks, J. C., Wright, A. A., Block, S. D., & Prigerson, H. G. 2010</p>	<p>End-of-Life Discussions, Goal Attainment, and Distress at the End of Life: Predictors and Outcomes of Receipt of Care Consistent With Preferences Journal of Clinical Oncology</p>	<p>Evaluate factors that help patients to receive care consistent with their preferences</p>	<p>Longitudinal multi-institutional cohort study Level 4</p>	<p>325</p>		<p>Patient with advanced cancer</p>		<p>Baseline preferences vs actual care received.</p>	<p>Patients with cancer are more likely to receive EOL care that is consistent with their preferences when they have had the opportunity to discuss their wishes for EOL care with a physician.</p>
<p>Conroy, S., Fade, P., Fraser, A., Schiff, R., & Guideline Development Group. 2009</p>	<p>Advance care planning: Concise evidence-based guidelines . Clinical Medicine</p>	<p>ACP defined and EBPG provided</p>	<p>EBPG Level 1</p>					<p>Each research paper identified was graded using the appraisal tool</p>	<p>Details are given in the full guidelines along with the list of references.</p>

Challenges and Barriers to ACP									
Odejide, O. O., Cronin, A. M., Condrón, N., Earle, C. C., Wolfe, J., & Abel, G. A. 2015	Timeline of End-of-Life Discussions for Blood Cancers JAMA	Timing of ACP discussion with patients with blood cancers	Quantitative Non-intervention/experimental Qualitative study Level 4 Level 6	349	Postal survey of hematologic oncologist	US hematologist		Postal survey of US hematologists from Sept. 16, 2014 to Jan. 21, 2015 from the directory of the American Society of Hematology.	Need for provider intervention to improve timing of ACP discussion.
You, J. J., Downar, J., Fowler, R. A., Lamontagne, F., Ma, I. W. Y., Jayaraman, D. . . Canadian Researchers at the End of Life Network. 2015	Barriers to goals of care discussions with seriously ill hospitalized patients and their families: A multicenter survey of clinicians. JAMA	Determine provider barriers to ACP discussion in hospitalized patients, Willingness to engage in ACP	Cross Sectional Cohort Study Level 4	1256 clinicians; 13 university-based hospitals from 5 Canadian provinces.	Medical teaching units	Nurses, internal medicine residents, and staff physicians	21 barriers to goals of care discussions rated on a 7-point scale (1 = extremely unimportant; 7 = extremely important).	Multicenter survey of clinicians	Most important barriers related to patients and families. Findings can improve interventions for improving provider barriers.

<p>Bernacki, R. E., Block, S. D., & American College of Physicians High Value Care Task Force. 2014</p>	<p>Communication About Serious Illness Care Goals A Review and Synthesis of Best Practices</p> <p>JAMA</p>	<p>Review EBP of ACP, Offers provider advice for quality and timing of ACP</p>	<p>SR Level 1</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>		<p>ACP should take place routinely, by providers in all settings for all patients</p>
<p>Butler, M., Ratner, E., McCreedy, E., Shippee, N., & Kane, R. L. 2014</p>	<p>Decision Aids for Advance Care Planning: An Overview of the State of the Science</p> <p>Annals of Internal Medicine</p>	<p>Provides an overview of current EBPG for ACP</p>	<p>SR Level 1</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>Interview conducted. Searched online information and conducted literature search about available decision aids for adult ACP as an intervention.</p>	<p>Decision aids tend to be constructed for the general population or for disease-specific conditions.</p>

<p>Institute of Medicine (IOM) 2014</p>	<p>Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life. The National Academies Press</p>	<p>Report on current state, studies, and improvements to ACP</p>	<p>SR Level 1</p>	<p>over 1500 studies</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>21-member Committee to review ACP EBP</p>	<p>Education and development for ACP</p>
<p>Elwyn, G., Scholl, I., Tietbohl, C., Mann, M., Edwards, A. G., Clay, C. . . Frosch, D. L. 2013</p>	<p>Many miles to go ..: A systematic review of the implementation of patient decision support interventions into routine clinical practice.</p>	<p>Search for and analyze the findings of published peer-reviewed studies about success of implementing decision support interventions</p>	<p>SR Level 1</p>	<p>17</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>Search of databases: ASSIA, CINAHL, Embase, HMIC, Medline, Medline-in-process, OpenSIGLE, PsycINFO, Scopus, Social Services Abstracts, and the Web of Science.</p>	<p>No best way to implement patient decision support into routine practice</p>

	BMC Medical Informatics and Decision Making								
Mack, J. W., Cronin, A., Taback, N., Huskamp, H. A., Keating, N. L., Malin, J. L., Weeks, J. C. 2012	End-of-life care discussions among patients with advanced cancer: A cohort study. Annals of Internal Medicine	Evaluate if ACP discussions with patients with lung or colon cancer are taking place per EBPG recs	Prospective cohort study Level 4	2155	California, North Carolina, Iowa, Alabama and received care at 1 or 5 HMOs or the VA.	Patients diagnosed with lung or colorectal cancer from 2003 to 2005.		ACP discussions documented in EMR 15 months after diagnosis	73% of patients had ACP discussion. Of those that died, 87% had ACP vs 41% of those alive. 55% occurred in the hospital. 27% were documented. Of those that died, ACP took place a median of 33 days before death.
Tung, E. E., Vickers, K. S., Lackore, K., Cabanela, R., Hathaway, J., & Chaudhry, R. 2011	Clinical decision support technology to increase advance care planning in the primary care setting	Time and cost constraints are barriers for providers to perform ACP.	RCT Level 2		Primary Care clinics at Mayo Clinic Rochester.	Older adults without an advance medical directive		23-week intervention. An ACP educational packet was sent to intervention patients before their health maintenance examination (HME).	21.6% of intervention participants completed an AD, compared with 4.1% of control participants. Combining clinical decision support systems and standardized processes enhances the ACP process.

	American Journal of Hospice & Palliative Medicine								
Conroy, S., Fade, P., Fraser, A., Schiff, R., & Guideline Development Group. 2009	Advance care planning: Concise evidence-based guidelines . Clinical Medicine	ACP defined and EBPG provided	EBPG Level 1					Each research paper identified was graded using the appraisal tool	Details are given in the full guidelines along with the list of references.
Wright, A. A., Zhang, B., Ray, A., Mack, J. W., Trice, E., Balboni, T. . Prigerson, H. G. 2008	Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment.	Determine if ACP discussion with providers result in less intervention	Prospective Cohort study Level 4	332		Patients with advanced cancer and their informal caregivers	Aggressive medical care and hospice in the final week of life. Secondary outcomes included patients' mental health and caregivers' bereavement adjustment.	Patients were followed up from enrollment to death, a median of 4.4 months later. Bereaved caregivers' psychiatric illness and quality of life was assessed a median of 6.5 months later.	ACP discussions were associated with fewer interventions. More intervention was associated with worse patient quality of life and worse bereavement adjustment.

	JAMA								
Improving Quality and Performance with ACP									
Michigan Quality Improvement Consortium 2016	Advance care planning National Guideline Clearinghouse - AHRQ	Improve ACP with development and implementation of EBPG, Engage patient in ACP, Recommend tools for ACP, Design EBPG	EBPG Level 1	N/A	N/A	1. Conditions for which death within the next 12 months would not be surprising 2. Chronic, life-limiting illnesses 3. Any stage of health in people over the age of 55	N/A	N/A	N/A
Chiarchiaro, J., Buddadhumaruk, P., Arnold, R. M., & White, D. B. 2015	Prior advance care planning is associated with less decisional conflict among surrogates for critically ill patients. Annals of	Examined if ACP results in less surrogate decisional conflict for critically ill patient families	Prospective Cohort Study Level 4	471	Five U.S. academic medical centers	Surrogates of 257 patients with acute respiratory distress syndrome.	Multilevel linear regression modeling to measure the association between decisional conflict and advance care planning.	Surrogates' burden of decision making as measured using the Decisional Conflict Scale. Surrogates completed a questionnaire item addressing whether they had had any prior ACP conversations with their loved ones.	½ of surrogates for critically ill patients have moderate or high levels of decisional conflict. Prior ACP was associated with less decisional conflict. There is benefit for ACP for surrogates

	the American Thoracic Society								
Bernacki, R. E., Block, S. D., & American College of Physicians High Value Care Task Force. 2014	Communication About Serious Illness Care Goals A Review and Synthesis of Best Practices JAMA	Review EBP of ACP, Offers provider advice for quality and timing of ACP	SR Level 1	N/A	N/A	N/A	N/A		ACP should take place routinely, by providers in all settings for all patients
Brinkman-Stoppelenburg, A., Rietjens, J., & Van der Heide, A. 2014	The effects of advance care planning on end-of-life care: A systematic review. Palliative Medicine	Overview of ACP and effectiveness of types of ACP	Systematic Review Level 1	113	Most studies were observational (95%), originated from the United States			We systematically searched PubMed, EMBASE and PsycINFO databases for experimental and observational studies on the effects of advance care planning published in 2000-2012.	DNAR (39%) and AD (34%) were most often studied. ACP was found to decrease life-sustaining treatment, increase use of hospice and palliative care and prevent hospitalization, increase compliance with patients' end-of-

<p>Nolan, M. 2014</p>	<p>Education al Interventi on Increases Primary Care Providers’ Comfort in Discussin g Advance Care Planning Austin Journal of Nursing & Health Care</p>	<p>Discussed benefits of ACP to benefit patient, family, cost, health system, Only 1/3 have ACP discussions, patients want provider to start ACP discussion, Providers are uncomfortabl e with ACP discussion, Provider intervention for improving comfort</p>	<p>Qualitativ e Level 6</p>	<p>64</p>	<p>NYC</p>		<p>A convenience sample of providers was surveyed</p>	<p>An 8 step educational intervention on best practice for discussing ACP using (MOLST) Model was conducted in provider offices.</p>	<p>life wishes. MOLST intervention significantly improved comfort in discussing ACP for PCP with their patients (p < 0.001).</p>
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<p>Institute of Medicine (IOM) 2014</p>	<p>Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life. The National Academies Press</p>	<p>Report on current state, studies, and improvements to ACP</p>	<p>SR Level 1</p>	<p>over 1500 studies</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>21-member Committee to review ACP EBP</p>	<p>Education and development for ACP</p>
<p>McCusker, M., Ceronsky, L., Crone, C., Epstein, H., Greene, B., Halvorson, J., Kephart, K., Mallen, E., Nosan, B., Rohr, M., Rosenberg, E., Ruff, R., Schlecht,</p>	<p>Palliative care for adults National Guideline Clearinghouse - AHRQ</p>	<p>Improve provider understanding of Palliative Care, Increase identification of patients who would benefit from Palliative Care, Improve provider comfort with discussions and assessment, Increase ACP</p>	<p>EBPG Level 1</p>	<p>N/A</p>	<p>N/A</p>	<p>Adult patients with a serious illness who may benefit from palliative care</p>	<p>N/A</p>	<p>N/A</p>	

K., & Setterlund, L. 2013		and AD							
Mack, J. W., Cronin, A., Taback, N., Huskamp, H. A., Keating, N. L., Malin, J. L., Weeks, J. C. 2012	End-of-life care discussions among patients with advanced cancer: A cohort study. Annals of Internal Medicine	Evaluate if ACP discussions with patients with lung or colon cancer are taking place per EBPG recs	Prospective cohort study Level 4	2155	California, North Carolina, Iowa, Alabama and received care at 1 or 5 HMOs or the VA.	Patients diagnosed with lung or colorectal cancer from 2003 to 2005.		ACP discussions documented in EMR 15 months after diagnosis	73% of patients had ACP discussion. Of those that died, 87% had ACP vs 41% of those alive. 55% occurred in the hospital. 27% were documented. Of those that died, ACP took place a median of 33 days before death.

<p>Mack, J. W., Weeks, J. C., Wright, A. A., Block, S. D., & Prigerson, H. G. 2010</p>	<p>End-of-Life Discussions, Goal Attainment, and Distress at the End of Life: Predictors and Outcomes of Receipt of Care Consistent With Preferences</p> <p>Journal of Clinical Oncology</p>	<p>Evaluate factors that help patients to receive care consistent with their preferences</p>	<p>Longitudinal multi-institutional cohort study Level 4</p>	<p>325</p>		<p>Patient with advanced cancer</p>		<p>Baseline preferences vs actual care received.</p>	<p>Patients with cancer are more likely to receive EOL care that is consistent with their preferences when they have had the opportunity to discuss their wishes for EOL care with a physician.</p>
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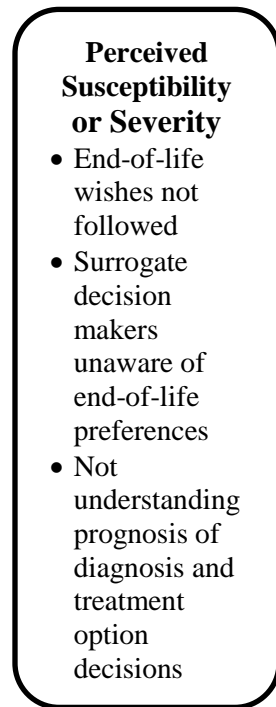
<p>Detering, K. M., Hancock, A. D., Reade, M. C., & Silvester, W. 2010</p>	<p>The impact of advance care planning on end of life care in elderly patients: randomised controlled trial</p> <p>British Medical Journal</p>	<p>Impact of ACP on end-of-life care</p>	<p>RCT Level 2</p>	<p>309</p>	<p>This study was carried out in a university hospital in Melbourne, Australia</p>	<p>Participants were competent, English speaking, medical inpatients (internal medicine, cardiology, or respiratory medicine) aged 80 or more</p>	<p>End-of-life wishes were more likely to be known and followed in the intervention group (25/29, 86%) compared with the control group (8/27, 30%; P<0.001)</p>	<p>Randomized to receive usual care or usual care plus facilitated ACP. Randomization was carried out using sealed envelopes containing allocation cards assigned by random number.</p>	<p>ACP ensures that patients' end-of-life wishes are known and respected and improves perspective of both patients and their relatives</p>
<p>Zhang, B., Wright, A. A., Huskamp, H. A., Nilsson, M. E., Maciejewski, M. L., Earle, C. . . Prigerson, H. G. 2009</p>	<p>Health care costs in the last week of life: associations with end-of-life conversations</p> <p>Archives of Internal Medicine</p>	<p>Do ACP conversations during last week of life impact healthcare use and costs.</p>	<p>Quantitative quasiexperimental Level 3</p>	<p>627</p>	<p>Multi-Center</p>	<p>Patients with advance cancer</p>	<p>t Test, Cochran-Mantel-Haenszel, and χ^2 test statistics were used</p>	<p>Patient Interviews of ACP. Cost analysis for last week of life were aggregated.</p>	<p>Patients with advanced cancer who reported having EOL conversations with physicians had significantly lower health care costs in their final week of life. Higher costs were associated with worse quality of death.</p>

<p>Conroy, S., Fade, P., Fraser, A., Schiff, R., & Guideline Development Group. 2009</p>	<p>Advance care planning: Concise evidence-based guidelines . Clinical Medicine</p>	<p>ACP defined and EBPG provided</p>	<p>EBPG Level 1</p>					<p>Each research paper identified was graded using the appraisal tool</p>	<p>Details are given in the full guidelines along with the list of references.</p>
<p>Wright, A. A., Zhang, B., Ray, A., Mack, J. W., Trice, E., Balboni, T. . Prigerson, H. G. 2008</p>	<p>Associations between end-of-life discussions, patient mental health, medical care near death, and caregiver bereavement adjustment. JAMA</p>	<p>Determine if ACP discussion with providers result in less intervention</p>	<p>Prospective Cohort study Level 4</p>	<p>332</p>		<p>Patients with advanced cancer and their informal caregivers</p>	<p>Aggressive medical care and hospice in the final week of life. Secondary outcomes included patients' mental health and caregivers' bereavement adjustment.</p>	<p>Patients were followed up from enrollment to death, a median of 4.4 months later. Bereaved caregivers' psychiatric illness and quality of life was assessed a median of 6.5 months later.</p>	<p>ACP discussions were associated with fewer interventions. More intervention was associated with worse patient quality of life and worse bereavement adjustment.</p>

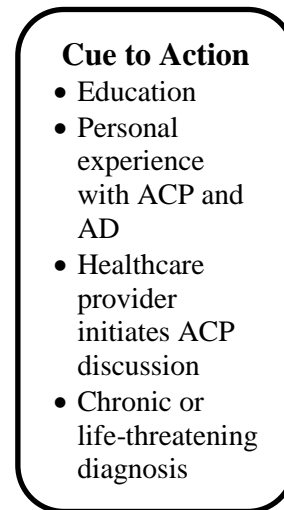
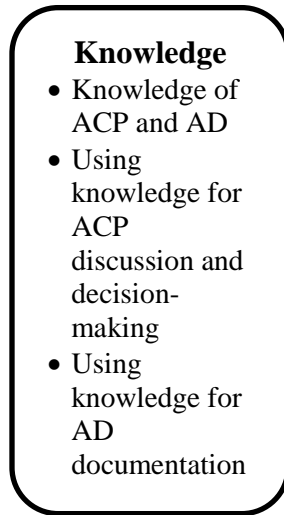
Appendix C

Theory to Application Diagram:

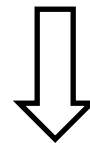
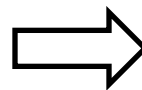
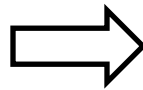
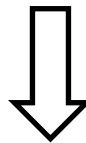
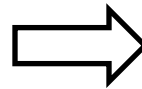
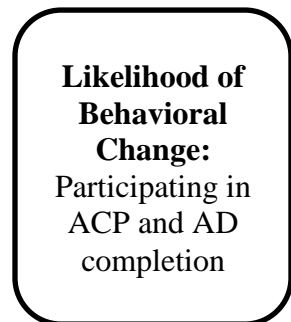
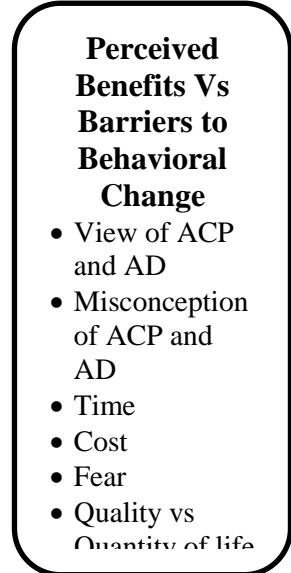
Individual Perceptions



Modifying Factors



Likelihood of Action



(Rosenstock, 1974).

Appendix D



UMKC
 6319 Rockhill Road
 Kansas City, MO 64110
 TEL: (816) 235-5927
 FAX: (816) 235-5662

NOTICE OF NEW APPROVAL

Principal Investigator: Dr. Lyle Lindholm
 UMKC Health Sciences Building
 Kansas City, MO 64110

Protocol Number: 17-03

Protocol Title: A. Educational Video Intervention to Increase Advance Care Planning Knowledge and Advance Directive Completion for Community-Dwelling Veterans

Type of Review: Designated Review

Expedited Category: 1, 2

Date of Approval: 05/13/2017

Date of Expiration: 06/12/2018

Dear Dr. Lindholm,

The above referenced study, and your participation as a principal investigator, was reviewed and approved, under the applicable IRB regulations at 21 CFR 50 and 56 (FDA) or 45 CFR 46 (DHQP), by the UMKC IRB. You are granted permission to conduct your study as described in your application.

Your protocol was approved under Expedited Review Regulatory Criteria at 45 CFR 46.110 or 21 CFR 56.110 Under Category #7 as follows: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus groups, program evaluation, human factors evaluation, or quality assurance methodologies.

Your protocol was approved for a waiver of documentation of consent under regulatory criteria at 45 CFR 46.117(c) having met either of the following criteria:

1. That the only means linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality; each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or
2. That the research presents no more than a minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the course of context.

In cases in which the documentation requirement is waived, you may be required to provide subjects with a written statement regarding the research.

This approval includes the following documents:

Attachments:

- Recruitment Script
- Blank Consent, project acceptance faculty letter
- Burdette Security Box
- EBD - American Legion Site Approval Letter



UMKC
5319 Rockhill Road
Kansas City, MO 64110
TEL: (816) 235-6527
FAX: (816) 235-6802

EBB - VFW Site Approval Letter
Community-Dwelling Veterans

If a consent is being used in this research study you may find the stamped version in section 16 of your application.

The ability to conduct this study will expire on or around 05/12/2015 unless a request for continuing review is received and approved. If you intend to continue conduct of this study, it is your responsibility to provide a Continuing Review form prior to the expiration of approval or a final report if you plan to close the study.

This approval is issued under the University of Missouri - Kansas City's Federal Wide Assurance FWA00006427 with the Office for Human Research Protections (OHRP). If you have any questions regarding your obligations under the Board's Assurance, please do not hesitate to contact us.

Here are 5 stipulations of approval:

- 1) No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date. (PIs and sponsors are responsible for initiating Continuing Review proceedings).
- 2) All unanticipated or serious adverse events must be reported to the IRB.
- 3) All protocol modifications must be IRB approved prior to implementation unless they are intended to reduce risk. This includes any change of investigator.
- 4) All protocol deviations must be reported to the IRB.
- 5) All recruitment materials and messages must be approved by the IRB prior to being used.

Please contact the Research Compliance Office (email: humktr@umkc.edu); phone: (816)235-6527 if you have questions or require further information.

Thank you!

Cynthia Thompson

Appendix E

CONSENT FORM FOR PARTICIPATION IN A RESEARCH STUDY

An Educational Video Intervention to Increase Advance Care Planning Knowledge and Advance Directive Completion for Community-Dwelling Veterans

Introduction

You are being asked to volunteer for a research study. This study is being conducted on Community-Dwelling Veterans in the Harrisonville, MO area.

The researcher in charge of this study is Emily Barnett-Doyle.

The study team is asking you to take part in this research study because you are a Community-Dwelling Veteran. Research studies only include people who choose to take part. The study coordinator will go over consent with you. Ask her to explain anything that you do not understand. This consent explains what to expect, the risks, and benefits.

Purpose

The purpose of this research study is to determine if an educational video intervention increases Advance Care Planning knowledge and Advance Directive completion.

You will be one of about 30 subjects in the study.

Study Procedures

If you agree to take part in this study, you will view two brief videos regarding Advance Care Planning and complete a questionnaire. General demographic information will be collected as part of the questionnaire including gender, age, race, education level, and health status. Completing the videos and questionnaire will take about 15 minutes. You will also receive helpful handouts for you and your family to use to plan for future healthcare along with how to communicate your preferences to your primary care provider.

When you are done taking part in this study, you will have access to the free videos via the provided website: www.acpdecisions.org.

Possible Risks of Taking Part in this Study

There are no foreseen risks associated with this study.

Possible Benefits of Taking Part in this Study

A direct benefit to research subjects will include increased knowledge of Advance Care Planning and Advance Directives. A possible indirect benefit may include reflecting on healthcare

preferences leading to a better understanding of future healthcare goals. Other people may benefit in the future from the information that comes from this study.

Costs for Taking Part in this Study

You will not have to pay to take part in this study.

Payment for Taking Part in this Study

You will not be paid to take part in this study.

Alternatives to Study Participation

The alternative is to not take part in this study.

Confidentiality and Access to your Records

The results of this research may be published or presented for scientific purposes. You will not be named in any reports of the results. The study team will keep all information about you confidential as provided by law, but complete confidentiality cannot be guaranteed.

By completing the questionnaire, you consent for the study team to use your responses as part of this research.

Contacts for Questions about the Study

You should contact the IRB Administrator of UMKC's Institutional Review Board at 816-235-5927 if you have any questions, concerns or complaints about your rights as a research subject. Reference study #17-163. You may call the researcher Emily Barnett-Doyle at 573-473-0297 if you have any questions about this study. You may also call her if any problems come up.

Voluntary Participation

Taking part in this research study is voluntary. If you choose to be in the study, you are free to stop participating at any time and for any reason. If you choose not to be in the study or decide to stop participating, your decision will not affect any care or benefits you are entitled to. The researchers may stop the study or take you out of the study at any time

- if they decide that it is in your best interest to do so,
- if you no longer meet the study criteria, or
- if you do not comply with the study plan.

They may also remove you from the study for other administrative or medical reasons. You will be told of any important findings developed during the course of this research.

This Consent Form has been read to you. You have been told why this research is being done and what will happen if you take part in the study, including the risks and benefits. You have had the chance to ask questions, and you may ask questions at any time in the future by calling Emily

Barnett-Doyle at 573-473-0297. By completing the questionnaire, you volunteer and consent to take part in this research study. Study staff will give you a copy of this consent form.

Appendix F

Itemized Cost Table

Item	Cost
Direct:	
Project Food for Participants	\$650
Jump Drive for Data Storage	\$15
Buddy Security Box	\$25
Folders and Labels	\$46
Copies of Handouts for Participants	\$213
Projector Rental	\$25
Total	\$974
Indirect:	
Local Dissemination:	
APNO Conference Poster & Printing Fees	\$150
APNO Membership & Registration Fees	\$180
APNO Conference Lodging	\$81
APNO Gas to Conference	\$77
APNO Conference Food \$35 x 3 days	\$105
Total	\$593
Grand Total	
Grand Total	\$1567

Appendix G

Videos

- 1) Understanding Advance Care Planning: The Conversation
<https://www.acpdecisions.org/video-category/understanding-acp/#>
- 2) Talking to Your Doctor
<https://www.acpdecisions.org/video-category/understanding-acp/>

Handouts

- 1) Advance Care Planning Handout and Values Worksheet
http://www.va.gov/geriatrics/images/Advance_Care_Planning_handout.pdf
- 2) Let's Talk: Starting the Conversation about Health, Legal, Financial and End of Life Issues
<http://www.eldercare.gov/Eldercare.NET/Public/Resources/Brochures/docs/Conversations.pdf>
- 3) Information for Patients: Common Life-Sustaining Treatments
http://www.ethics.va.gov/docs/policy/ADTraining/ad_training_info_life_sustaining_handout_091615.pdf
- 4) What You Should Know About Advance Directives
http://www.va.gov/vaforms/form_detail.asp?formno=0137b-1g%20print
- 5) Your Rights Regarding Advance Directives
http://www.va.gov/vaforms/form_detail.asp?formno=0137a
- 6) VA Advance Directive form
http://www.va.gov/vaforms/form_detail.asp?formno=0137

(Nous Foundation , 2013; US Department of Veterans Affairs, 2017).

Appendix H

Recruitment Script

You are being asked to volunteer for a research study to improve Advance Care Planning practice. The study team is asking you to take part in this research study because you are a Community-Dwelling Veteran. The purpose of this research study is to determine if an educational video intervention increases Advance Care Planning knowledge and Advance Directive completion.

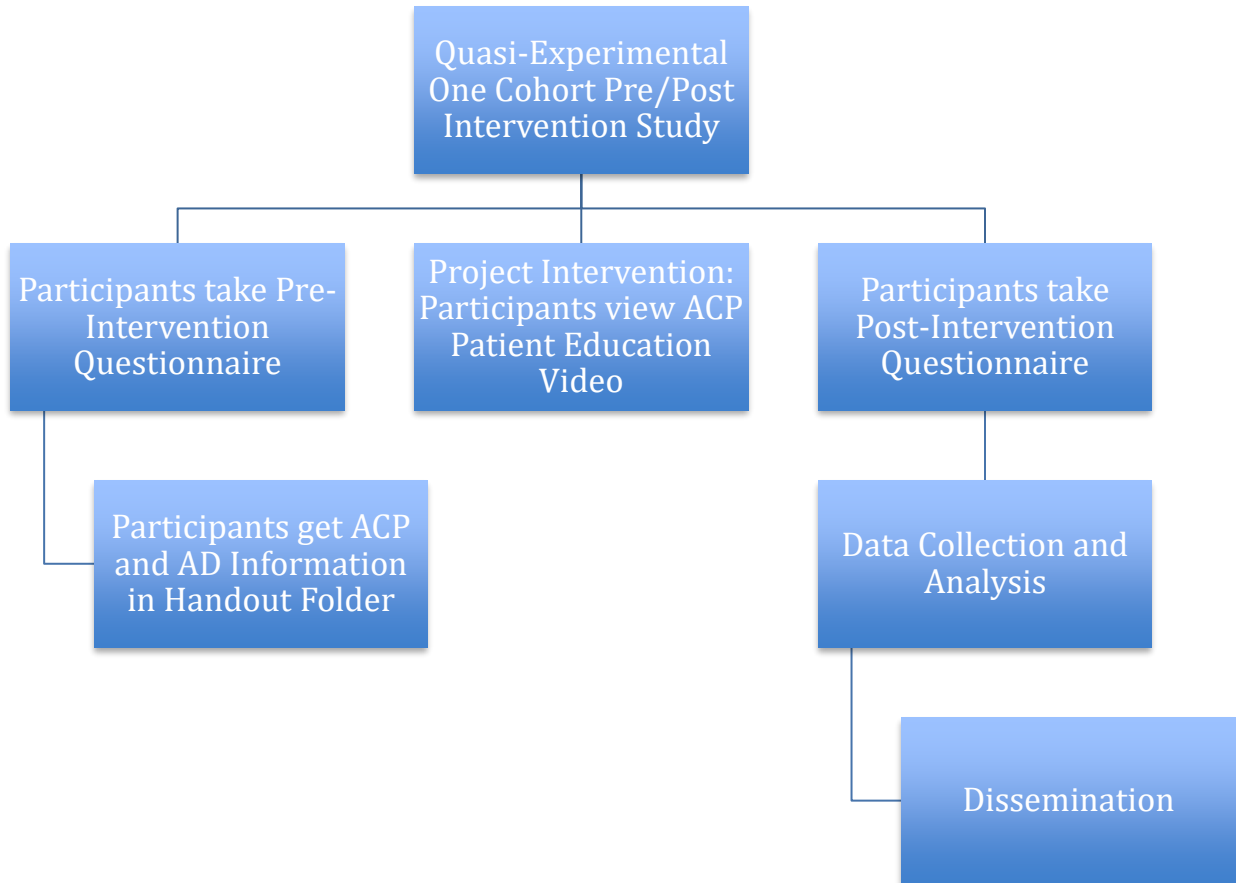
The session will be held at the VFW Post. If you agree to take part in this study, you will view two brief videos regarding Advance Care Planning and complete a questionnaire. Completing the videos and questionnaire will take about 15 minutes.

Your participation in this study is anonymous as no identifying information is collected. There are no associated risks as part of this study. Taking part in this research study is voluntary. You are free to stop participating at any time and for any reason. By completing the questionnaire, you volunteer and consent to take part in this research study.

If you have any questions regarding this study please contact the study coordinator Emily Barnett-Doyle at (573) 473-0297 or emily.j.barnett@mail.umkc.edu. For questions about the rights of research participants, contact the UMKC Institutional Review Board (IRB) at (816) 235-5927 or umkcIRB@umkc.edu.

Appendix I

Intervention Flow Diagram



Appendix J

EBP Intervention Sequence

Step	Action	Time
1	Welcome and introduction by study coordinator	2-4 min.
2	Study coordinator passes out consent copies to participants	1-2 min.
3	Consent read aloud to group by study coordinator	1-2 min.
4	Study coordinator passes out questionnaire, informational material in handout folder, and pens	1-2 min.
5	Instructions provided for completing questionnaire and discussion of information included in handout folder	1-2 min.
6	Participants complete pre-intervention questionnaire	2-5 min.
7	Participants view two brief ACP videos	5-7 min.
8	Participants complete post-intervention questionnaire	2-5 min.
9	Q & A for participants provided by study coordinator	5-10 min.
10	Thank you from study coordinator and dismissal to dinner	1-2 min.
11	Participants insert questionnaire into locked security box handled by study coordinator during exit from room	2-4 min.

Appendix K

Logic Model

Inputs	Intervention(s) <i>Activities</i>	Outputs <i>Participation</i>	Outcomes -- Impact		
			<i>Short</i>	<i>Medium</i>	<i>Long</i>
<p>Evidence, sub-topics</p> <ul style="list-style-type: none"> - Approach to ACP Timing - Challenges and Barriers to ACP - Improving Quality and Performance with ACP Intervention <p>Major Facilitators or Contributors</p> <ul style="list-style-type: none"> - Prior valid studies with educational video intervention - EBP recommendation - CMS payment for ACP (Jan. 1, 2016) - Align care with patient preferences - Reduced utilization of unwanted or unnecessary resources <p>Major Barriers or Challenges</p> <ul style="list-style-type: none"> - Participant comprehension - Willingness to participate - Previous knowledge or perceptions 	<p>The EBP intervention which is supported by the evidence in the Input column</p> <p>Implementation of an ACP patient education video to increase ACP knowledge and AD completion.</p> <p>Pre/Post-Intervention Questionnaire</p> <p>Rosswurm and Larrabee's Model Major Steps of Change:</p> <ol style="list-style-type: none"> 1. Assess the Need for Change in Practice 2. Locate the Best Evidence 3. Critically Analyze the Evidence 4. Design Practice Change 5. Implement and Evaluate Change in Practice 6. Integrate and Maintain Change in Practice 	<p>The participants (subjects)</p> <p>Community-dwelling Veterans</p> <p>Site</p> <p>VFW Post</p> <p>Time Frame</p> <p>1 day, 1 cohort</p> <p>Consent Needed or other</p> <p>UMKC IRB American Legion and VFW Posts Site Agreement</p> <p>Person(s) collecting data</p> <p>Emily Barnett-Doyle</p> <p>Others directly involved.</p>	<p>Outcome(s) to be measured with reliable measurement tool(s)</p> <p>Increased knowledge of ACP and AD completion</p> <p>Statistical analysis to be used.</p> <p>McNemar test Frequency and percent of demographics</p>	<p>Outcomes to be measured (DNP student time).</p> <p>Analyze data to determine if implementing ACP patient education video increased AD completion.</p>	<p>Outcomes that are potentials (past DNP student)</p> <p>Comparison of interventions: current state, handouts only, video only, combined handouts and video</p>

Appendix L

An Educational Video Intervention to Increase Advance Care Planning Knowledge and Advance Directive Completion for Community-Dwelling Veterans

Questionnaire: Please circle responses below.

Demographic Information

Gender

Male Female

Age

18-29 30-39 40-49 50-59
60-69 70-79 80+

Race

Caucasian Non-Caucasian

Education Level

Less than High School High School/GED
College/Technical School Post-Graduate

Health Status

Excellent Good Fair Poor

Complete this section **BEFORE** viewing videos

- 1) Do you know what Advance Care Planning is?
YES NO
 - 2) Do you know what an Advance Directive is?
YES NO
 - 3) Have you heard of a living will?
YES NO
 - 4) Have you heard of durable power of attorney (DPOA) or healthcare proxy?
YES NO
 - 5) Have you filled out a form stating your end-of-life wishes?
YES NO
 - 6) Do you prefer your health care focus on quantity of life more than on quality of life?
YES NO
 - 7) Do you prefer your health care focus on quality of life more than on quantity of life?
YES NO
 - 8) Does your family know your end-of-life wishes?
YES NO
 - 9) Would you like to talk to your family about your end-of-life wishes?
YES NO
 - 10) Does your primary care provider know your end-of-life wishes?
YES NO
 - 11) Would you like to talk to your primary care provider about your end-of-life wishes?
YES NO
-

Complete this section AFTER viewing videos

- 1) Do you know what Advance Care Planning is?
YES NO
- 2) Do you know what an Advance Directive is?
YES NO
- 3) Have you heard of a living will?
YES NO
- 4) Have you heard of durable power of attorney (DPOA)?
YES NO
- 5) Have you filled out a form stating your end-of-life wishes?
YES NO
- 6) Do you prefer your health care focus on quantity of life more than on quality of life?
YES NO
- 7) Do you prefer your health care focus on quality of life more than on quantity of life?
YES NO
- 8) Does your family know your end-of-life wishes?
YES NO
- 9) Would you like to talk to your family about your end-of-life wishes?
YES NO
- 10) Does your primary care provider know your end-of-life wishes?
YES NO
- 11) Would you like to talk to your primary care provider about your end-of-life wishes?
YES NO
- 12) Do you plan to complete an Advance Directive?
YES NO

Modified from (Jackson et al., 2009; Landry et al., 1997; McCarty et al., 2008).

Appendix M

Data Collection Template

Demographics						Q1 - Do you know what Advance Care Planning is?		Q2 - Do you know what an Advance Directive is?	
Questionnaire Number	Gender	Age	Race	Education Level	Health Status	Q1 - Before	Q1 - After	Q2 - Before	Q2 - After
1	Male	60-69	Caucasian	College/Technical School	Excellent	Yes	Yes	Yes	Yes

Q3 - Have you heard of a living will?		Q4 - Have you heard of durable power of attorney (DPOA) or healthcare proxy?		Q5 - Have you filled out a form stating your end-of-life wishes?		Q6 - Do you prefer your health care focus on quantity of life more than on quality of life?		Q7 - Do you prefer your health care focus on quality of life more than on quantity of life?	
Q3 - Before	Q3 - After	Q4 - Before	Q4 - After	Q5 - Before	Q5 - After	Q6 - Before	Q6 - After	Q7 - Before	Q7 - After
Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes

Q8 - Does your family know your end-of-life wishes?		Q9 - Would you like to talk to your family about your end-of-life wishes?		Q10 - Does your primary care provider know your end-of life wishes?		Q11 - Would you like to talk to your primary care provider about your end-of-life wishes?		Q12 - Do you plan to complete an Advance Directive?
Q8 - Before	Q8 - After	Q9 - Before	Q9 - After	Q10 - Before	Q10 - After	Q11 - Before	Q11 - After	Q12 - After
Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes

Appendix N

Timeline

Activities:	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17
Planning Phase:								
Assess the Need for Change in Practice	Develop PICOTS							
Locate the Best Evidence & Critically Analyze the Evidence	Synthesis of Evidence							
Design Practice Change	Project Funding							
		EBP Paper						
				Proposal Paper				
					IRB Approval			
Implementation Phase:								
Implement Change in Practice							EBP Intervention	
Evaluation Phase:								
Evaluate Change in Practice							Data Collection	
							Data Analysis	
Dissemination Phase								
Integrate and Maintain Change in Practice								Project Paper
								Disseminate Findings

Appendix O



The Cass County Memorial VFW Post 4409
1804 N. Commercial St
Harrisonville, MO 64701
Post Telephone: 816-380-4284
Post Email: vfw4409@cobridge.tv

5/11/2017

To Whom It May Concern,

I, Roy G. Helt, give approval for Emily Barnett-Doyle, UMKC DNP Student, to conduct her student project work at The Cass County Memorial VFW Post 4409 in Harrisonville, MO. This permission is granted on behalf of the Commander, Norma Baldrige.

If you have any further questions, please contact me at (816) 585-1566.

Sincerely,

Roy G. Helt, Assistant Sergeant-In-Charge
PO Box 855
Harrisonville, MO 64701
(816) 585-1566

Norma Baldrige, Commander
19110 S Hickory Grove Rd
Pleasant Hill, MO 64080
(816) 916-2666
njsfamilywellness@gmail.com



THE AMERICAN LEGION

The American Legion Post 42
303 E. Pearl Street
Harrisonville, MO 64701
Post Telephone: (816) 884-4513

5/11/2017

To Whom It May Concern,

I, Roy G. Helt, give approval for Emily Barnett-Doyle, UMKC DNP Student, to conduct her student project work at The American Legion Post 42 in Harrisonville, MO. This permission is granted on behalf of the Commander, Robert Jacobs.

If you have any further questions, please contact me at (816) 585-1566.

Sincerely,

Roy G. Helt, Adjutant
PO Box 855
Harrisonville, MO 64701
(816) 585-1566

Robert J. Jacobs, Commander
301 F St.
Creighton, MO 64739
(816) 392-9425
bobjacobsmc@yahoo.com

Appendix P

Participant Demographics

Gender	Frequency	%
Female	8	24%
Male	26	76%
	34	100%

Age	Frequency	%
18-29	0	0%
30-39	2	6%
40-49	0	0%
50-59	3	9%
60-69	11	32%
70-79	10	29%
80+	8	24%
	34	100%

Race	Frequency	%
Caucasian	32	94%
Non-Caucasian	2	6%
	34	100%

Education Level	Frequency	%
Less than High School	3	9%
High School/GED	19	56%
College/Technical School	9	26%
Post-Graduate	3	9%
	34	100%

Health Status	Frequency	%
Excellent	9	26%
Good	18	53%
Fair	7	21%
Poor	0	0%
	34	100%

Appendix Q

McNemar Test								
Pre-Post Knowledge	Q3	Q5	Q6	Q7	Q8	Q9	Q10	Q11
N	34	34	34	34	34	34	34	34
Exact Sign. (2-Tailed)	1.000	0.500	0.250	1.000	1.000	0.125	1.000	0.002

Questions	Pre-Yes	Post-Yes	Pre-No	Post-No	p-value
Q1 - Do you know what Advance Care Planning is?	25	34	9	0	
Q2 - Do you know what an Advance Directive is?	21	34	13	0	
Q3 - Have you heard of a living will?	33	33	1	1	1.000
Q4 - Have you heard of durable power of attorney (DPOA) or healthcare proxy?	34	34	0	0	
Q5 - Have you filled out a form stating your end-of-life wishes?	17	15	17	19	0.500
Q6 - Do you prefer your health care focus on quantity of life more than on quality of life?	11	8	23	26	0.250
Q7 - Do you prefer your health care focus on quality of life more than on quantity of life?	32	32	2	2	1.000
Q8 - Does your family know your end-of-life wishes?	25	24	9	10	1.000
Q9 - Would you like to talk to your family about your end-of-life wishes?	23	28	11	6	0.125
Q10 - Does your primary care provider know your end-of life wishes?	8	9	26	25	1.000
Q11 - Would you like to talk to your primary care provider about your end-of-life wishes?	16	26	18	8	0.002

Questions	Freq. Pre-Yes (n=34)	% Pre-Yes	Freq. Post-Yes (n=34)	% Post-Yes	Freq. Change	% Change
Q1 - Do you know what Advance Care Planning is?	25	74%	34	100%	9	26%
Q2 - Do you know what an Advance Directive is?	21	62%	34	100%	13	38%
Q3 - Have you heard of a living will?	33	97%	33	97%	0	0%
Q4 - Have you heard of durable power of attorney (DPOA) or healthcare proxy?	34	100%	34	100%	0	0%
Q5 - Have you filled out a form stating your end-of-life wishes?	17	50%	15	44%	-2	-6%
Q6 - Do you prefer your health care focus on quantity of life more than on quality of life?	11	32%	8	24%	-3	-9%
Q7 - Do you prefer your health care focus on quality of life more than on quantity of life?	32	94%	32	94%	0	0%
Q8 - Does your family know your end-of-life wishes?	25	74%	24	71%	-1	-3%
Q9 - Would you like to talk to your family about your end-of-life wishes?	23	68%	28	82%	5	15%
Q10 - Does your primary care provider know your end-of-life wishes?	8	24%	9	26%	1	3%
Q11 - Would you like to talk to your primary care provider about your end-of-life wishes?	16	47%	26	76%	10	29%
Q12 - Do you plan to complete an Advance Directive?	N/A	N/A	31	91%	N/A	N/A

Appendix R

Comparison

Knowledge of Terms (Q1-Q4)	Completion of Form Frequency (Q5, Pre-Yes)	Pre-Yes N =	Pre-Yes %
ACP	14	25	56%
AD	13	21	62%
Living Will	17	33	52%
DPOA	17	34	50%

Knowledge of Terms (Q1-Q4)	Plan to Complete AD Frequency (Q12, Post-Yes)	Post-Yes N =	Post-Yes %
ACP	31	34	91%
AD	31	34	91%
Living Will	30	33	91%
DPOA	31	34	91%

Knowledge of Terms (Q1-Q4)	Desire to Talk to Someone Frequency (Q9 & 11, Pre-Yes)	Pre-Yes N =	Pre-Yes %	Desire to Talk to Someone Frequency (Q9 & 11, Post-Yes)	Post-Yes N =	Post-Yes %	% Change
Family							
ACP	18	25	72%	28	34	82%	10%
AD	17	21	81%	28	34	82%	1%
Living Will	23	33	70%	27	33	82%	12%
DPOA	23	34	68%	28	34	82%	14%
Primary Care Provider							
ACP	12	25	48%	26	34	76%	28%
AD	12	21	57%	26	34	76%	19%
Living Will	16	33	48%	25	33	76%	28%
DPOA	16	34	47%	26	34	76%	29%

Someone Knows Wishes (Q8 & Q10, Post - Yes)	Completion of Form Frequency (Q5, Post-Yes)	Post-Yes N =	Post-Yes %
Family (Q8, Post-Yes)	15	24	63%
Primary Care Provider (Q10, Post-Yes)	7	9	78%

Completion of Form (Q5, Post - Yes)	Someone Knows Wishes (Q8 & Q10, Post-Yes)	Post-Yes N =	Post-Yes %
Family (Q8, Post-Yes)	15	15	100%
Primary Care Provider (Q10, Post-Yes)	7	15	47%

Age	Completion of Form Frequency (Q5, Post-Yes)	Post-Yes N =	Post-Yes %
18-29	0	0	0%
30-39	0	2	0%
40-49	0	0	0%
50-59	2	3	67%
60-69	3	11	27%
70-79	3	10	30%
80+	7	8	88%

Education Level	Completion of Form Frequency (Q5, Post-Yes)	Post-Yes N =	Post-Yes %
Less than High School	1	3	33%
High School/GED	10	19	53%
College/Technical School	2	9	22%
Post-Graduate	2	3	67%

Health Status	Completion of Form Frequency (Q5, Post-Yes)	N =	%
Excellent	3	9	33%
Good	9	18	50%
Fair	3	7	43%
Poor	0	0	0%