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Enhancing Elderly Advance Care Planning Experience at a Primary Care Clinic

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ABSTRACT

ENHANCING ELDERLY ADVANCE CARE PLANNING EXPERIENCE AT A PRIMARY CARE CLINIC

The purpose of the project was to examine if the identification of readiness for an advance care planning (ACP) discussion of elderly participants would enhance the outcomes of participants' satisfaction, improve the likelihood of having an ACP discussion and increase the completion rates of an advance directive (AD) document after an office visit.

Forty-four elderly participants, who met the selection criteria, were recruited from a primary clinic in Northern California from October 1, 2017 to December 31, 2017 (Female, $n = 28$). All participants were randomly assigned to either an intervention group ($n = 22$) or a control group ($n = 22$). Their age ranged from 65 to 89 years ($M = 72.89$; $SD = 7.31$). A pre- and a post-visit self-administrated questionnaire were used for data collection with a follow-up phone call made to the participants post-visit.

Project findings indicated that the intervention participants who were ready for an ACP discussion were more likely to have an ACP discussion and complete an AD document than the control participants post-visit ($p < .05$). Although there were significant differences of some demographic variables between groups to confound the ACP outcomes, findings of this project were clinically significant.

In conclusion, the investigator advised that primary care providers should initiate the ACP discussion, document the conversation and complete an AD document when the elderly patients clearly state that they are ready for an ACP discussion.

Oi S Wong
April 2018

ENHANCING ELDERLY ADVANCE CARE PLANNING
EXPERIENCE AT A PRIMARY CARE CLINIC

by
Oi Shan Wong

A project
submitted in partial
fulfillment of the requirements for the degree of
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APPROVED

For the California State University, Northern Consortium
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I have gained a new perspective about end-of-life care from this ACP project in the last couple months. We only have one short life to live, and we are supposed to live every day to the fullest so that we can improve our relationships with loved ones and live a regretless life, embracing life as it is.

Last but not least, thank you so much for Miss Hilary Lopez and Miss Antoinette Taylor who voluntarily worked on this project as the medical assistant and the front desk secretary at the clinic to improve ACP outcomes one participant at a time. Thank you.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1: INTRODUCTION	1
Background.....	1
Problem Statement.....	2
Purpose Statement	4
Significance of the Project.....	5
Theoretical Framework.....	6
CHAPTER 2: LITERATURE REVIEW	14
Overview of Barriers	14
Overview of Interventions to Improve ACP Experience	17
Synthesis of Clinical Evidence and Practice Recommendations	21
CHAPTER 3: METHODOLOGY	23
Method	23
Data Analysis Plan.....	30
CHAPTER 4: RESULTS	32
Participant Selection Summary	32
Demographic Characteristics.....	33
Outcome Analysis.....	36
Summary of Data Analysis	39
CHAPTER 5: DISCUSSION.....	40
Discussion of Findings	40
Discussion of Strengths and Limitations of the Project	47

Contributions to Nursing, Its Implications and Conclusion	50
REFERENCES.....	51
APPENDICES	58
APPENDIX A: LETTER OF INVITATION	59
APPENDIX B: CONSENT FORM	61
APPENDIX C: PRE-VISIT QUESTIONNAIRE.....	64
APPENDIX D: POST-VISIT QUESTIONNAIRE	67
APPENDIX E: ACP SCRIPT FOR PROVIDERS.....	70
APPENDIX F: READINESS STAGING ALGORITHM FOR ACP DISCUSSION	73

LIST OF TABLES

	Page
Table 1 <i>Participant Characteristics by Randomized Group at Pre-Visit</i>	34
Table 2 <i>Post-Visit Participant Outcomes by Randomized Group</i>	35
Table 3 <i>Crosstabulation of Readiness by Participant Group</i>	37
Table 4 <i>Crosstabulation of ACP Discussion by Participant Group Post-Visit</i>	38
Table 5 <i>Crosstabulation of the Completion of an AD Document by Participant Group Post-Visit</i>	38
Table 6 <i>Post-Visit Participant Outcomes by Randomized Group</i>	39

LIST OF FIGURES

	Page
<i>Figure 1.</i> The Stages of Change. (Pro-change, n.d.)	8
<i>Figure 2.</i> Relationships among the stages of the <i>Transtheoretical Model</i> by processes of change. (Pro-Change, n.d.)	11
<i>Figure 3.</i> The consort diagram of study participants	33

CHAPTER 1: INTRODUCTION

Advance care planning (ACP) is an important part of elderly care. ACP is making decisions about end-of-life (EOL) care preferences and treatment options one would like to receive in the event of a life-threatening emergency or change in health condition if one became incapacitated or unable to speak for oneself (Centers for Disease Control and Prevention, CDC, 2014). The CDC (2014) stated that ACP discussion is associated with patient satisfaction, the reduction of unwanted treatments and unnecessary health care costs. Primary care settings are preferred for providers to initiate the ACP conversations because primary care providers have more established relationships with patients (Ahluwalia et al., 2015). However, the underutilization of ACP programs is severe in a private primary care clinic in Northern California where the investigator works.

The purpose of this project was to examine whether the identification of readiness of elderly participants for an ACP conversation during an office visit at a primary care clinic would improve the satisfaction of ACP experiences, enhance the likelihood of further ACP conversations initiated by the elderly participants, and increase the completion rates of an advance directive (AD) document by the participants after the visit.

Background

Since the advent of the Patient Self-Determination Act (PSDA) of 1990, evidence to support the inclusion of an ACP discussion as the part of EOL care has grown (Sabatino, 2007). According to Teno, Gruneir, Schwartz, Nanad, and Wetle (2007), family members of 1,578 patients who died in a nursing facility, hospital, or at home were telephonically interviewed about the use of written ADs, EOL care options, and the patients' quality of life. Results indicated that 70.8% of

the deceased ($n = 1,130$) had an AD in place at the time of death. Patients who died at home or in a nursing facility with hospice were more likely to have a written AD when compared to the ones without a written AD document (66% vs 50.8%). In addition, those who had an AD form were less likely to receive unwanted life-sustaining treatments, such as a feeding tube when compared to those without an AD (17% vs 27%).

Using a randomized controlled trial design, Detering, Hancock, Reade, and Silvester (2010) followed 309 legally competent patients aged 80 years or older for six months or until their demise. Patients were randomized to the interventional group with ACP discussions ($n = 154$). Among 154 patients in the interventional arm, 125 (81%) received ACP, and 108 (84%) expressed EOL preferences, appointed a proxy, or both. Overall, 56 patients died by six months and among them, their EOL preferences were likely discussed and honored in the interventional group when compared to the control group (86% vs 30%, $p < .001$). The results indicated that the satisfaction of the patients or their families was higher in the interventional group versus the control in terms of less stress, anxiety, and depression ($p \leq .02$).

Aforementioned evidence suggested that having an ACP discussion could improve the satisfaction of the patients toward their EOL care and could honor their EOL decisions. However, the prevalence of having ACP conversations or completing an AD document remained low (Rao, Anderson, Lin, & Laux, 2014). As a result, EOL care of many elderly individuals appears to be a priority concern.

Problem Statement

Despite the growing evidence that ACP has a positive influence on EOL care of patients and their families, the momentum of ACP awareness to the public

is stagnant. In the U.S. Current Population Surveys of community-dwelling adults conducted in 2009 and 2010, Rao et al. (2014) reported that among 7,946 respondents, 26.3% adults 18 years or older had completed an AD document. In the surveys, 51.2% of elderly people who were 65 years or older had completed an AD document.

Data from the electronic health records (EMRs) of the clinic where the investigator works indicated the underutilization of ACP programs was severe in the year 2017. The completion rates of any AD documentations uploaded to the EMR system were below 10% when compared to the national surveys of the AD completion rates at 26.3% (Rao et al., 2014).

In the past, physicians were assuming the role to initiate ACP discussion(s) and to complete the related documents, particularly the Physician Orders for Life Sustaining Treatment (POLST) form in the state of California. Since January 1, 2016, nurse practitioners (NPs) and physician assistants (PAs), under the direction of a physician and within their scope of practice, have been authorized to sign the POLST form and to make them actionable medical orders under the Assembly Bill, AB 637 (Coalition for Compassionate Care of California, 2015).

In response to this regulatory change in 2016, there were events at the investigator's workplace to prepare clinicians, including NPs, to sign the POLST forms with elderly members. However, the low completion rates of the POLST forms remained low, which supported what Prochaska claimed: that action-oriented programs do not work (Pro-change, n.d.). Simply asking patients to sign the POLST form is ineffective because patients may not be ready to discuss this important topic regarding their EOL care options. This indicates a need for providers to identify if patients are ready for an ACP discussion.

Having an ACP discussion is imperative before completing an AD document. Identifying patients who are ready for an ACP discussion is more likely to enhance the effectiveness of the ACP process and improve the satisfaction of the ACP experience for patients. This action supports the investigator's project to examine whether the identification of readiness of elderly participants for an ACP discussion would improve the satisfaction of an ACP experience and promote further ACP conversations with participants after the visit.

Purpose Statement

The purpose of this project was to examine whether the ACP experience of elderly participants could be improved by identifying the readiness for an ACP discussion with the participants at a primary care clinic in Northern California. The concept of readiness is derived from Prochaska's *Stages of Change*. Prochaska stated that behavior change is a process that unfolds over time, involving progress through a sequence of stages (Elder, Ayala & Harris, 1999; Pro-change, n.d.).

Providers conceptualize behavior change of an individual patient as an evolving process along the continuum of change, where the providers can facilitate the identification of needs of a patient so that the patient can work on meeting the needs for the targeted behavior to occur. For example, in this project, the investigator was geared to identify the participants who were ready for an ACP discussion, so that the investigator could facilitate a meaningful ACP conversation with the participants, thus enhancing the effectiveness of the ACP process during office visits.

The CDC (2014) recommended that a meaningful ACP discussion consists of two components: discussing the EOL care options, and completing an AD

document. Evidence suggested that by incorporating the concepts of behavior change, it is possible for providers to identify the patients who are ready for an ACP discussion (Dillman 2015; Pro-change, n.d.). Ahluwalia et al. (2015) stated that using a reiterative approach could potentially enhance the effectiveness of having an ACP conversation. Nevertheless, only by having a meaningful ACP conversation preceded to completing an AD document can the patients, the family members, and the providers be certain about what EOL care options the patients truly desire (Ahluwalia et al., 2015). It cannot be the other way around.

Objective of the Project

The objective of the project was to utilize the concept of Readiness derived from the theory of *Stages of Change* (SOC) to aid the investigator in identifying participants who were ready for an ACP discussion.

Study Questions

The investigator examined if identifying participants who were ready for an ACP discussion would increase:

1. The likelihood of an ACP conversation after the visit.
2. The completion rates of an advance directive (AD) form of the participants after the visit.
3. The satisfaction of the ACP experience of the participants at the care clinic.

Significance of the Project

The intent of the project was to increase the awareness of the importance of having an ACP conversation before health condition changes in the elderly participants at a primary care center in Northern California. As a result, the EOL care options of the elderly participants could be made known and honored. Lastly,

disseminating the results in terms of the identification of elderly individuals who were ready for an ACP discussion could motivate other primary care providers to improve their ACP programs.

Theoretical Framework

It is not uncommon for some patients to change their mind on the ACP decisions they made at their doctor's office, whereas other patients may be reluctant to complete an AD form because they are not ready for an ACP discussion (Elder et al., 1999; Glanz, Burke, & Rimer, 2011). Theorists on health behavior change suggest that decision making is only the beginning of a behavior change (Pro-change, n.d.). The change process should take place over time. By conceptualizing an ACP discussion as a part of the process of a behavior change, providers can identify the needs of an individual patient along the continuum of change to offer the needed interventions that match the stage of readiness of the patient.

Theory Origin

Prochaska and DiClemente's *Transtheoretical Model* (TTM) or *Stages of Change* (SOC) which originated from different theories of psychotherapy, not from nursing, is an integrative behavior model of intentional change (Prochaska & DiClemente, 1982). This theory is named the Transtheoretical Model because providers can apply the TTM to a variety of health behaviors, settings, and populations (Pro-change, n.d.). The TTM focuses on the stages of change of an individual's readiness to adopt healthful behaviors (Elder et al., 1999; Glanz et al., 2011; Prochaska & DiClemente, 1982). This theory was created more than 35 years ago and has therefore undergone many changes and revisions (Hall & Rossi, 2008). The critical assumptions and the key concepts of the TTM which include

the stages of change, decisional balance, self-efficacy, and the processes of change are described as follows (Pro-change, n.d.; Prochaska & DiClemente, 1982).

Assumptions of the TTM

Pro-change (n.d.) outlined five critical assumptions of the TTM. First, behavior change is a process that occurs over time through a sequence of stages. Thus, health preventive programs should offer continuous help to patients as they progress over time. Second, the stages of change and chronic behaviors are comparable. They are both stable and open to change. Third, by facilitating the understanding of the pros and diminishing the numbers of the cons, people can be motivated to change. Fourth, action-oriented programs do not improve health outcomes because high-risk populations are, in general, not ready to take action. Providers should help patients set realistic goals for the behavior change and facilitate such desired change. Lastly, providers should match the specific stages of change of an individual patient with specific principles and interventions to facilitate change. These five assumptions are the core foundation of behavior change and its interventions.

The Stages of Change

The stages of change (SOC), *Figure 1*, is the key concept of the TTM, which is useful in explaining when changes in cognition, emotion, and behavior occur (Pro-change, n.d.). Prochaska and DiClemente (1982) stated that people go through a series of stages when a behavior change happens. The stages described in the SOC occur in the following order: pre-contemplation, contemplation, preparation, action, and maintenance (Glanz et al., 2011). Notice in figure one that the SOC is not a linear structure that allows the possibility for people to regress to the prior stage in the process of behavior change (Pro-change, n.d.).

People in the pre-contemplation stage have no intention of taking any actions in the near future, which Prochaska defined as a six-month period (Pro-change, n.d.). These individuals may be uninformed or misinformed about the preferred behavior. In contrast, people in the contemplation stage intend to change, usually within the next six-month period. These individuals are highly aware of what the pros and cons of the intended behavior are. People in the preparation stage intend to take action in the next 30 days, and they appear to have a concrete action plan. People in the action stage have already made an observable change in the intended behavior within the past 6 months. People in the maintenance stage have made lifestyle modifications to prevent relapse (Pro-change, n.d.).

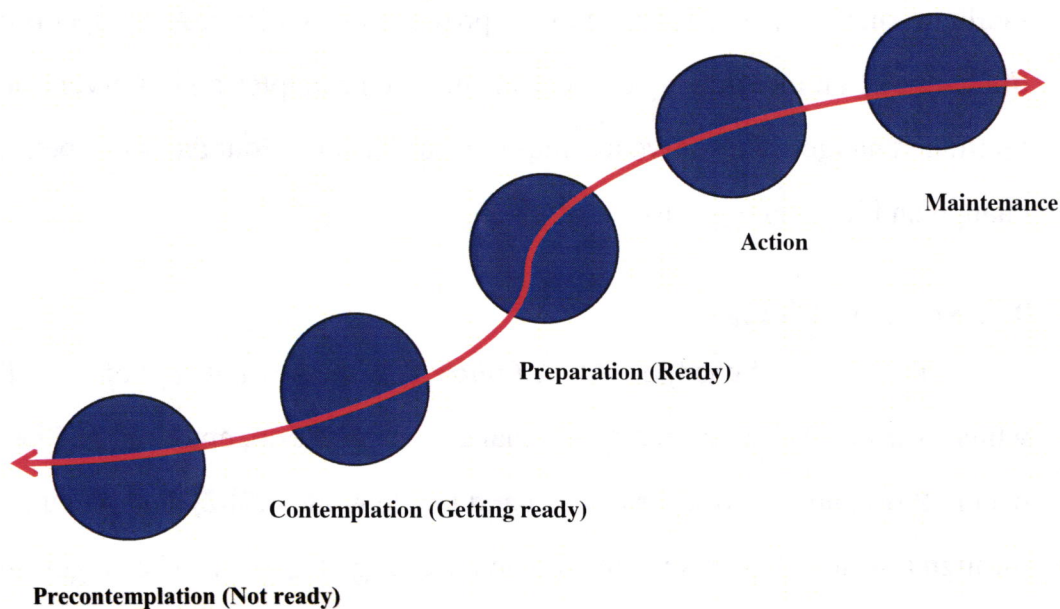


Figure 1. The Stages of Change. (Pro-change, n.d.)

Decisional Balance

Decisional balance (DB) is another key construct of the TTM. DB is described as the individual's weighing of the pros and the cons of the intended behavior change (Hall & Rossi, 2008; Pro-change, n.d.). In other words, if the benefits of the intended behavior change outweigh the costs of such change, people are likely to change. Although the pros and cons are the key components of DB, providers should be aware of the dynamic nature of the DB of patients at different stages of change. For instance, during the pre-contemplation stage, patients see the cons of the intended behavior outweighing the pros. Therefore, they may opt to maintain the existing behavior. While in the action and maintenance stages, the opposite occurs with the pros outweighing the cons, propelling patients to take action and maintain the intended behavior (Pro-change, n.d.).

Self-Efficacy

According to Prochaska & DiClemente (1982), the TTM integrates Bandura's concept of self-efficacy, which is a strong predictor of a relapse of the problem behavior in the process of change. Self-efficacy is a measurable construct that reflects the confidence level of an individual in maintaining the intended behavior, especially in the situations that may trigger relapse (Pro-change, n.d.).

Processes of Change

Prochaska & DiClemente (1982) stated the processes of change help patients understand how the different stages of change occur. Providers can utilize ten covert and overt processes to effectively assist patients to go through the stages of change. The ten processes can be further divided into two groups: cognitive

and affective experiential processes, and behavior processes. They are as follows (Pro-change, n.d.).

Cognitive and Affective Experiential Processes: 1. Consciousness Raising (Get the Facts); 2. Dramatic Relief (Pay Attention to Feelings); 3. Environmental Reevaluation (Notice Your Effect on Others); 4. Self-Reevaluation (Create a New Self-Image); 5. Social Liberation (Notice Public Support).

Behavioral Processes: 6. Self-Liberation (Make a Commitment); 7. Counter Conditioning (Use Substitutes); 8. Helping Relationships (Get Support); 9. Reinforcement Management (Use Rewards); 10. Stimulus Control (Manage Your Environment)” (Pro-change, n.d., para13).

The Relationships among the Concepts of the TTM

In the TTM, people move through a sequence of stages when working on behavior change. Although the time an individual spends on each stage can vary, the tasks required by each process of change that the individual needs to undergo to progress to the next stage do not (Pro-change, n.d.). According to Pro-change (n.d.) and Prochaska and DiClemente (1982), certain elements of DB, self-efficacy, and the processes of change are more effective at particular stages of change when it comes to decreasing resistance, enhancing progress, and preventing relapse. Therefore, matching appropriate interventions with the corresponding stages of change are important (*Figure 2*). For example, during the stage of pre-contemplation, the provider can facilitate the process of change via enhancing consciousness, such as offering relevant education of the intended behavior. Hence, the patient can be more aware of the pros rather than the cons of the intended behavior, enhancing one’s self-efficacy.

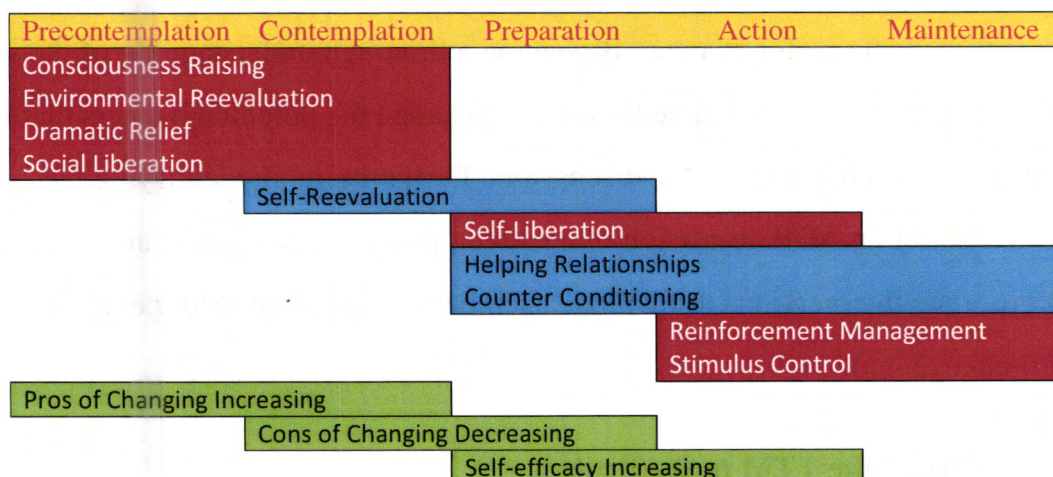


Figure 2. Relationships among the stages of the *Transtheoretical Model* by processes of change. (Pro-Change, n.d.)

Feasibility of the TTM to the Population of Interest

In recent years, there has been more evidence to support the clinical application of the TTM in EOL care to improve patient outcomes (Rizzo et al., 2010). As Prochaska pointed out, change is a process, not an event (Pro-change, n.d.). In this project, the discussion of ACP with the elderly patients was being conceptualized as the process of health behavior change, which meant the desired behavior of having an ACP conversation would evolve over time.

First, this process of behavior change may require multiple conversations among patients, families, and providers to motivate an individual patient along the continuum of behavior change. Evidence suggested that primary care is the preferred site for ACP discussions because primary providers have better patient-provider relationships, and they may have more opportunities to initiate an ACP conversation prior to any emerging health events of patients (Rizzo et al., 2010).

Second, the TTM assumes that patients are active participants in the behavior change (Glanz et al., 2011). This model steers providers to focus on the

patient's intentions for change. By having a thorough understanding of the stages of change, providers gain a better insight to gauge the potential barriers that may hinder the progress of an ACP discussion. Furthermore, in identifying the readiness for an ACP discussion of a patient, providers can match and implement appropriate interventions to facilitate such behavior change (Elder et al., 1999; Pro-change, n.d.).

Relevance of the TTM to the Project

This ACP project was built on the proper identification of readiness for an ACP discussion with elderly patients at a primary care center in Northern California. The interventions that the investigator used to facilitate the intended behavior change were based on each particular stage of behavior change along the continuum of change. In the pre-contemplation stage, an elderly patient has no intention of being involved in an ACP discussion. At this stage, enhancing awareness of the need for change and personalizing the benefits of change are important (Elder et al., 1999). Education is the key to increasing the awareness of patients and their families about the importance of having an ACP conversation to motivate the patients to the next stage.

In the contemplation stage, the elderly patients begin to think about change without engaging in any intended actions. Psychological support is an important strategy at this stage, as well as motivation to make plans for change. Individual patients will have plenty of time to review the ACP informational packet and to discuss any ACP concerns with their families or providers before completing any AD documents. Follow-up phone calls should be arranged to engage the individual patients in the process of ACP behavior change.

In the preparation stage, elderly patients are ready to change and to act upon the intended behavior. Providers should reschedule the member for a face-to-face visit with tangible assistance on planning for a meaningful ACP discussion. The preparation stage should include an in-depth exploration of the values and beliefs of the patients toward EOL care, plus an introduction of the AD documents in the ACP conversation.

The action stage is when the elderly patients have made actions toward the desired behavior, such as having an ACP discussion with the providers, appointing a proxy, and completing an AD form. During the action stage, reinforcement, feedback, and assistance from the providers are important.

In the maintenance stage, it is important for the patients to maintain the intended behavior without relapsing. The maintenance stage requires encouragement and reminders of the importance of the change. At the care clinic, providers will use the opportunity of an annual health visit to go over the ACP program with the elderly patients again.

While progressing through the stages of change can occur in a linear fashion, a nonlinear progression is not uncommon (Glanz et al., 2011). In the event of regression, providers should continue with encouragement and support to motivate the patients toward the intended behavior.

In summary, having the TTM framework in mind, the investigator could effectively identify and motivate elderly patients who were ready for an ACP discussion during clinic visits. In this way, the investigator anticipated that the ACP project would improve outcomes, such as enhancing the satisfaction of the patients, increasing the likelihood of having an ACP discussion, and increasing the completion rates of an AD document.

CHAPTER 2: LITERATURE REVIEW

Although the CDC (2014) recommended that advance care planning (ACP) discussions should take place throughout a disease trajectory, especially when there are any health condition changes of an individual patient, it appears that action-oriented programs remain the mainstream ACP intervention, which is to complete an advance directive (AD) document (Dillman, 2015). By identifying the readiness of the patients, providers conceptualize ACP as a process of behavior change to tailor interventions that are appropriate to each stage of change. In this chapter, the investigator reviewed current evidence on what was studied in the past and what needed further exploration to improve the ACP experience of elderly people in primary care settings.

Overview of Barriers

Prior literature can be categorized into two types: the identification of barriers of patients or providers to ACP discussions, and the impacts of action-oriented interventions versus process-oriented programs on the ACP outcomes (Aw et al., 2012; Brinkman-Stoppelenburg, Rietjens, & van der Heide, 2014; Bullock, 2011; CDC 2014; Musich, Wang, Hawkins, & Yeh, 2016; Teno et al., 2007). For the early studies, researchers focused on identifying barriers to the utilization of ACP programs. By correctly identifying and resolving such identified barriers, researchers believed that ACP utilization and patient experience could be improved. On the contrary, in the current trend of ACP studies, researchers shifted the focus to what kind of ACP programs or interventions could have higher efficacy of improving its clinical outcomes.

Patient Barriers

Prior literature indicated that patient characteristics had significant associations with the completion of an AD document. These characteristics included old age, being of Caucasian descent, having a history of chronic diseases, high disease burden, high socio-economic status, high educational level, and prior personal experience with ACP. However, current evidence suggested that having the presence of the patients and getting their involvement in the ACP discussion could have a positive impact on ACP outcomes, such as patient satisfaction and the likelihood of having a meaningful ACP conversation (Aw et al., 2012; Bullock, 2011; CDC 2014; Musich et al., 2016; Teno et al., 2007).

In a systematic review of the stability of having an AD over time, Auriemma et al. (2014) analyzed 17 qualified studies to show that over 70% of end-of-life (EOL) preferences of the participants were stable over time once the participants had the decisions made prior to any changes of a health condition. Auriemma et al. (2014) reported the AD preference stability was stronger among patients with life-threatening illnesses than among patients without serious illnesses ($p < .002$). Also, it appeared that patients who had higher education and prior ACP experience had a stronger preference stability, and were likely to forgo unnecessary treatments.

In a prospective study, Dev et al. (2103) examined whether the presence of the patient on a family meeting may affect the ability of the primary caregiver to freely express emotions and ask questions regarding EOL care. In the study, a total of 140 consecutive formal family meetings were recruited via convenience sampling at a cancer center in Texas. Data was collected by an experienced social worker using a standardized data sheet and the patient's medical record immediately after the completion of the family meetings.

In their study, Dev et al. (2013) reported patient demographics were 50% female, 64% white, and 91% with solid tumor. The median age was 59 years old ($N = 140$), while primary caretaker demographics ($N = 140$) were 66% female, 49% white, and 59% spouse or partner. The frequency of the patient verbalizing distress during the meeting was 73%, whereas the primary caregiver verbalizing distress was 82%.

The findings suggested that the presence of the patients was associated with a statistically significant increase in the EOL care discussions ($p = .009$) and a significant decrease on the discussion of the prognosis and the symptoms of dying ($p < .001$) (Dev et al., 2013). Although Dev et al. (2013) did not use validated tools for data collection in the study and having a single “experienced” social worker could have introduced biases during data collection, the study reinstated a fundamental concept: the ACP discussion was about an individual patient’s EOL wishes and preferences. Therefore, the patient should be included in the discussions whenever possible.

In a cross-sectional study, Ohr, Jeong, & Saul (2016) explored cultural and religious beliefs and values concerning death and dying, truth telling, and the preferences for EOL care among elderly participants ($N = 171$) with the participants who were culturally and linguistically diverse from 17 day centers. In the study, over 90% of the elderly participants stated that death and dying were part of life. Also, over 70% of them felt comfortable talking about their EOL care options. Although the CDC (2014) stated that minority ethnic groups or races appeared to have lower completion rates of an AD document, Ohr et al. (2016) recommended that engaging elderly individuals by clarifying and respecting their values, beliefs, and their preferred role in an ACP discussion may facilitate the elderly individuals to become more open to an EOL discussion.

Provider Barriers

Regarding provider barriers, the CDC (2014) stated time constraint and unfamiliarity of ACP discussions as the most common reasons for providers not to initiate ACP discussions with their patients. Ahluwalia et al. (2015) utilized a qualitative approach to explore provider barriers and strategies to improve ACP communication in the Veteran Affairs system (VA). The investigators recruited 20 healthcare participants from a single VA medical center ($n = 13$ physicians, $n = 3$ nurses, $n = 2$ social workers, $n = 2$ chaplains). Two scheduled focus groups for the healthcare participants ($N = 17$) were conducted by a trained facilitator. They used thematic analysis until the final coding scheme was developed.

In the study, Ahluwalia et al. (2015) identified three themes of provider barriers of ACP discussions: (1) Variation in definitions and approaches of ACP discussion by providers, (2) Lack of patient values to guide decision-making, and (3) Ineffective communication between providers across care settings. Two themes of provider opportunities for ACP discussions were identified as (1) Eliciting patient values rather than focusing on treatment options, and (2) Considering primary care settings as the initial ACP discussion site. Their study findings suggested ACP discussions were poorly communicated across the care continuum in the VA system. The transparency of the study design and methodologies enhanced the trustworthiness of the study. However, the transferability of the findings was limited due to small sample size.

Overview of Interventions to Improve ACP Experience

In recent years, the studies of ACP were shifting from a static task of the completion of an AD document to a dynamic process of ACP discussion (Auriemma et al., 2014; Fried et al., 2010). By focusing on the dynamic nature of

an ACP discussion in primary care settings, providers conceptualized an ACP discussion as a health behavior change that can happen over time. By identifying each stage of change, it is possible that providers could intervene accordingly to promote the desired health behavior of an individual patient.

In a qualitative cross-sectional study, Fried, Bullock, Iannone, and O'Leary (2009) explored whether the concepts of health behavior change could predict the ACP outcomes. Sixty-three elderly participants aged 65 years or older and 30 caregivers with prior experience as proxies from the community settings were recruited. Focus groups were conducted separately for the elderly group and the caregiver group. Participants were asked to discuss the plans for future health deterioration, and why or why not the participants considered any health-related plans. Grounded theory was used to yield four themes that were important to plan ACP interventions. These four themes included 1) Varied readiness of participants to engage in an ACP discussion, 2) Varied awareness of the wide range of benefits and barriers to an ACP discussion, 3) A variety of processes of change engaged by individual patients to progress through different stages of readiness, and 4) Prior experience of ACP for loved ones.

In another observational cohort study, Fried et al. (2010) developed a staging algorithm based on the *Stages of Change Model* to examine the relationships between the readiness of the participants to communicate with their loved ones about EOL care and the completion of a living will. The investigators recruited 304 participants from the community settings, including doctor's offices and a senior center via convenience sampling (Age: $M = 75$, $SD = 7.1$; 73% Female; 76% white). Participants who were under age 65, non-English speaking, hard of hearing, or cognitively impaired were excluded from the study. A trained research assistant interviewed all participants about their ACP experience and

knowledge. Grounded theory was applied to analyze and extract common themes from the transcripts.

In the study, Fried et al. (2010) measured stages of change for six ACP behaviors in terms of the completion of a living will, the assignment of proxies, communication with loved ones about life-sustaining treatments, communication with primary doctors about life-sustaining treatments, and quantity of life versus quality of life issues. The study's findings suggested that readiness of the participants for an ACP discussion varied across the studied behaviors. However, 50-60% of participants who were in the action or the maintenance stage communicated with their significant others and completed an AD document. On the contrary, participants who were in the stage of pre-contemplation did not engage in any desired ACP behaviors. In the pre-contemplation stage, 40% of participants did not discuss with their loved ones about quantity of life versus quality of life issues, while 70-75% of participants were not having any ACP discussions with their doctors. Although the readiness algorithm was specific to health behavior, it gave providers a clear guideline to identify the level of readiness of the participants and to intervene based on their level of readiness in community settings.

Au et al. (2012) utilized a cluster-randomized controlled trial to improve the communication on EOL care among patients with COPD. The investigators recruited a total of 376 qualified COPD participants from the outpatient clinics for veterans. The participants were randomly stratified into the interventional group ($n = 194$) and the control group ($n = 182$). Blinding of the random assignment was applied. Only 306 participants completed the study. Among 306 remaining participants, the control group consisted of 155 participants (50% male) while the interventional group consisted of 151 participants (44% male). Attrition was

addressed by the intention to treat (ITT). In the intervention group, the participants received a self-administered pre-visit instrument, including a questionnaire of communication (QOC) with scoring from 0 to 100. The higher the score, the better the EOL communication. The psychometric properties of the questionnaire were not reported. The providers would receive a feedback form to show the EOL preferences of each participant of the intervention group prior to seeing them. On the contrary, participants in the control group were only given a standard ACP information package at the office visits. The underlying social learning theory of the study assumed that the QOC and the feedback form could enhance the self-efficacy of both the providers and the study participants for an ACP discussion. All participants were surveyed two weeks after the clinic visit by a blinded survey staff. The effect of the intervention was analyzed by using a cross-sectional time-series of covariance regression. Again, ITT was utilized for any attrition.

Au et al. (2012) reported the primary outcome of the post-interventional QOC score in the intervention group to be statistically significant when compared to the control group (10.7 point increase vs. 6.3 point increase, $p = .03$; Cohen effect size = .21). The study's findings further indicated that the intervention participants had two significant differences when compared to the control group. These significant differences included having an EOL discussion at the last clinic visit ($p < .001$) and having discussions about treatment preferences with their providers ($p < .001$) and/or families ($p < .01$). This randomized controlled trial showed that a simple patient-specific feedback form increased the occurrence of an EOL discussion and enhanced the quality of communication among the patients, their families, and the providers. One limitation of the study was the use

of the QOC questionnaire, which may be confined to the context of COPD patients at the outpatient clinics for veterans only.

Synthesis of Clinical Evidence and Practice Recommendations

Aforementioned studies emphasized the clinical significance of involving patients and their families in an ACP discussion. Ahluwalia et al. (2015) recommended that ACP discussions should be considered a continuous process throughout the entire disease trajectory. The conventional action-oriented ACP programs emphasize the importance of completing an AD form only. Thus, conceptualizing an ACP discussion with the elderly as a health behavior change can be a possible way to effectively improve the ACP outcomes in primary care settings. Although Fried et al. (2010) stated the readiness for an ACP discussion varied across the continuum of health behavior change, the use of the staging algorithm to identify the readiness for an ACP discussion of an individual patient could potentially improve the efficiency and the effectiveness of the ACP program.

Au et al. (2012) recommended that a simple timely feedback form from a patient could indeed improve the self-efficacy of an ACP discussion for both the provider and the patient. In order to improve the utilization of ACP programs, this one step of giving patients or their families a simple ACP reminder or questionnaire before the scheduled ACP appointment appears to be necessary.

Dev et al. (2013) reported that the presence of an individual patient in an ACP discussion could improve the quality of the discussion in terms of identifying the EOL care options of the patient. Therefore, it is important for providers to include the patients in the ACP discussions whenever possible. Ohr et al. (2016)

stated that taking an individual patient's values into consideration, including one's cultural and religious beliefs, could enhance the patient's ACP experience.

In summary, it is important for providers to tailor an ACP discussion that meets the individual needs of a patient. Providers should consider an ACP discussion as part of the continuous process throughout the disease trajectory of patients. The providers can do this by conceptualizing the engagement of an ACP discussion as a behavior change that allows them to identify the elderly patients who are ready for an ACP discussion. In this way, the providers can offer appropriate interventions that match the stages of readiness of the patients to improve ACP outcomes.

CHAPTER 3: METHODOLOGY

The objective of this project was to enhance ACP experiences of elderly members at a primary care clinic in Northern California. This method section described the plan and tools for meeting the project objective and the study questions. The intent of the study was to identify elderly participants who were ready for an ACP. The goal was to examine whether this ACP project in terms of the readiness of the elderly members would improve the ACP outcomes of the elderly participants in a primary care clinic. The investigator examined whether or not identifying participants who were ready for an ACP discussion would enhance the likelihood of an ACP conversation after the visit, increase the completion rates of an advance directive (AD) form of the participants after the visit, and improve the satisfaction of the ACP experience for the participants.

Method

This method section includes project design, participant selection criteria, setting and recruitment procedure, randomization procedure, procedure for data collection and instruments of the project.

Project Design, Setting and Participant Characteristics

The project took place in a primary care clinic in Northern California, where the elderly members were 65 years of age or older. An initial convenience sampling method was employed. All elder members who were scheduled for an annual physical or a follow-up appointment in the electronic medical record system (EMR) from October 1 to December 31, 2017 were included. All potential participants who met the inclusion and the exclusion criteria were recruited during the project period.

Inclusion Criteria for Potential Participants

1. Members of the care center
2. Age 65 years or older
3. Able to give informed consent to the study
4. Mini-cog score ≥ 2 ; 3 indicated intact cognition

Exclusion Criteria

1. Age less than 65 years
2. Mini-cog score ≤ 2 ; less than 2 indicated moderate cognition impairment
3. Other impairments due to disease processes or medication effects that prevent a participant from taking part in the ACP discussion, including psychosis with hallucinations, or being under the influence of substances, such as pain medications or sedatives.
4. Unwillingness to give informed consent

Recruitment Procedure and Random Assignment of Participants

All qualified members with the scheduled appointments within the study period received an invitation letter in the mail (Appendix A). Under the current procedure at the clinic, the front desk secretary mailed a reminder to the participants a week prior to their scheduled annual wellness visits. On the wellness visit, the provider initiated an ACP discussion with the participants under the current ACP program at the care center. An informed consent from the participants was obtained by the front-desk secretary who confirmed the appointments for the selected participants. The recruitment continued until the data collection ended.

The participants and the project investigator were blinded in the process of random assignment of the participants. The annual wellness visits were by appointment to reduce contamination among participants. Both random assignment and blinding were utilized to reduce selection bias and the Hawthorn effect in order to enhance the overall validity of the project (Polit & Beck, 2012).

The consented participants were randomly assigned by the front desk secretary with a coin toss: heads was for the interventional group, and tails was for the control group. The secretary also blinded the back office medical assistants (MAs) and the investigator so they could not discern between the two groups. The investigator arranged an hour training session for the involved MAs and the front-desk secretary. The MAs and the secretary participated voluntarily in the project. Training included the introduction to the questionnaires being used in the project, how to elicit the participants' responses regarding the study questions without imposing personal values or leading the participants for responses, and how to record all responses of the participants to reduce bias. Role play was used in the training session. Training did not affect their routine office work and no extra or outside-office hours were needed for any additional compensation.

Procedure for Data Collection

Once the elderly participants were scheduled for the visits, they were randomly assigned to either the interventional group or the control group. It appeared that a randomized controlled trial was the most robust design to answer the project questions, which compared this ACP project with the current approach at the care clinic.

Polit and Beck (2012) suggested that the minimum number of expected participants for the project should be 64 or more in each group to obtain the

medium effects of the effect size (d) in a two-group test of mean differences. Thus, the recruitment for a minimum of 128 participants during the three-month project period was expected.

A packet consisting of the invitation for the ACP study, a pre-visit questionnaire, an advance directive (AD) document used in the care center, and a written consent form was sent to the intervention participants by the trained front desk secretary who confirmed the appointment for the participants (Appendices B and C). The participants were instructed to complete the pre-printed questionnaire and to bring the packet back to the visit at the care center. All participants were asked to sign a consent form by the front desk secretary at the time they checked in for the visit.

For the intervention group, the investigator determined the readiness of the participants by using the readiness staging algorithm, exploring the values of EOL care with the participants who were ready for an ACP discussion, and offering a detailed explanation of the AD documents used in the care center (Appendices E and F).

The readiness of the participants and the related ACP planning were documented in the designated section in the EMR. In addition, the investigator was blinded until the date of the visit, when the participants of the intervention group showed up with the returned pre-printed ACP questionnaire. The investigator was given time to read the responses of the returned questionnaire before seeing the participants in the intervention group.

A week after the visit, the designated MA telephoned the intervention participants to schedule a follow-up visit at the care clinic with the investigator to address any concerns or questions they may have regarding ACP or its related AD documents. Also, the MA reminded the participants to bring the AD documents to

the care center to upload to the EMR when the participants completed the documents. The MA was trained to schedule the patients who had any ACP questions for a follow-up at the clinic or to refer them back to the investigator to answer the questions they may have.

For the control group, an ACP folder with the instructions on how to complete the AD documents was given by the investigator on the annual health visit per current practice at the care center. No telephonic follow-up or reminder was offered per current practice. A consent of the project for the control participants was obtained by the front desk secretary when the participants of this group were checking in for the annual wellness visit.

A post-visit questionnaire was given to all participants after the visit (Appendix F). The same secretary at the front desk handled all the pre- and the post-questionnaires to ensure 100% return rates from both the intervention and control participants, reducing the expectancy effect of participant responses from the investigator. All the questionnaires were made anonymously and were collected at the checkout counter in a drop box before the participants left the center.

In a month after the visit, a MA was assigned to call all participants from both the intervention and the control groups to see how many of them had discussed ACP with their families or significant others. This data was recorded in the EMR as a chart update. Also, the investigators surveyed the EMR to see how many AD documents had been uploaded to the designated template in the EMR a month after the visit.

Instruments

A pre- and a post-visit questionnaire were used in the project (Appendices C and D). The development of the content of the questionnaires was based on the literature review that the questionnaire items associated with ACP satisfaction, the likelihood of having an ACP discussion, and the completion of an AD form in primary care settings. Two expert advanced practice nurses in the field of hospice care and gerontologic care performed a face validation of the content of the questionnaires before the commencement of the project. All questionnaires in the study were designed at the fifth-grade level.

Readiness staging algorithms for ACP discussion at care center: A provider guide (Appendix F). This algorithm was modified from the staging algorithms for a living will completion and communication with loved ones about quality versus quantity of life by Fried et al. (2010). Permission from Fried et al. was sought to use and modify the original algorithms. The central premise of the algorithm was based on the stage of change model to guide providers with a “yes or no” indication to identify the readiness of the participants for an ACP discussion. There were recommended interventions based on the stage identified by the provider on the visit, namely the pre-contemplation, contemplation, preparation, action, and maintenance stages. This step-by-step staging algorithm facilitated the process of the ACP program at the provider-patient level.

Pre-visit questionnaire (Appendix C). The pre-visit questionnaire was a self-administered 15-item questionnaire. The questionnaire was designed to collect demographic data including age, race, marital status, language use at home, religious belief, and educational level. It consisted of a Likert-scale self-rated health status ranging from one to four, where four indicated excellent health; three

close-ended questions regarding prior ACP exposure and awareness, and whether or not they were hospitalized within the last 12 months; two follow-up open-ended narrative questions regarding prior ACP experience; and lastly, two more open-ended questions where participants could give other comments regarding prior ACP experience and ask questions they may have for the upcoming ACP discussion visit. This questionnaire was sent by mail a week before the scheduled visit at the care center so that the participants would have time to review and complete the questionnaire. The questionnaire took an estimated five to ten minutes to complete.

Post-visit questionnaire (Appendix D). This was a self-administered seven-item questionnaire. This questionnaire was designed to collect data, including a satisfaction Likert scale from one to four, where one was very unsatisfied and four indicated very satisfied; two questions regarding the likelihood of having an ACP conversation and completing the given AD documents in one month; two questions regarding the level of knowledge and comfortability of having an ACP discussion in terms of a four-point Likert scale from one to four, four being very comfortable and one being very uncomfortable; and two other questions regarding ACP follow-up appointments and any further comments about the current visit. The aim of this post-visit questionnaire was to collect data regarding the patient's satisfaction of the ACP experience during the visit and the potential ACP discussion initiated by the participants after the intervention in one month. The entire questionnaire took five to ten minutes to complete before the participants left the care center. All pre- and post-visit questionnaires were coded so that the patient's identifiers did not appear on the questionnaires for confidentiality.

Data Analysis Plan

For descriptive statistics, the investigator collected demographic data, such as age (continuous numeric number), gender (nominal), race in terms of white and non-Hispanic or non-white (nominal), educational level: high school and above, or below high school (categorical), religious belief: having religious beliefs, or not having any religious beliefs (categorical), and previous exposure to ACP experience: yes or no (categorical). The investigator reported the number of participants (N and the subgroups, n), age range, mean age (M), and the standard deviation (SD). For the nominal and categorical data, the investigator reported frequency counts or percentages, especially on the number of participants who were ready for ACP discussions.

To measure patient satisfaction of ACP experiences post-visit, a self-rating numeric scale from one (very unsatisfied) to four (very satisfied) was used. The investigator treated the numeric number as the continuous data. The investigator reported the mean satisfaction scores of both groups, respectively, as well as the SD of the satisfaction scores.

To answer the project questions about the likelihood of an ACP conversation and the completion of an AD document post-visit, the investigator reported the total number of participants who had an ACP discussion and AD completion in each group's post-visit in a month. The number of ACP conversations and the number of AD completions post-visit in each group were the primary outcomes for the effectiveness of the ACP intervention. The total number of ACP discussions and the number of AD completions were calculated in terms of the percentage in each group, which were considered the frequency counts.

For inferential statistics, to answer the project question of patient satisfaction, the investigator performed an independent t -test to examine if there

was a statistically significant difference in the patient satisfaction of ACP experiences between groups ($p \leq .05$). In a single-blind, randomized controlled trial, Green et al. (2015) used the same procedure: an independent t -test to support the hypothesis that the participants of the intervention group gained more statistically significant ACP satisfaction ($p < .01$) than the control group. In addition, since the patient satisfaction scale consisted of continuous numeric data in comparing two unrelated groups, the use of an independent t -test was deemed to be appropriate.

The investigator performed a two by two *Chi-Square* test of independence to examine whether there was a statistically significant association between the number of ACP discussions post-visit (frequency counts) and the participation in either one of the ACP groups ($p \leq .05$). For the AD document completion, a two by two *Chi-Square* was used to examine whether there was a statistically significant association between the number of AD completions (frequency counts) and the participation in either one of the ACP groups ($p \leq .05$). The application of *Chi-Squares* was similar to Rhondali et al. (2013) when they examined the significant differences in DNR choices of patients who were exposed to one of the two videos. The same statistic procedure was performed on the rates of AD completion.

In summary, this chapter described the plan for project design and data collection methods in details, including study design, the recruitment setting, sampling methods, data collection tools and instructions, procedures for data collection, and the data analysis methods should the reader replicate the project in the future.

CHAPTER 4: RESULTS

In this chapter, the investigator focused on the data analyses to support whether the advance care planning (ACP) project would improve the ACP satisfaction, enhance the likelihood of having an ACP conversation, and increase the completion rates of advance directive forms (AD) of the participants.

Participant Selection Summary

There were 60 potential participants who met the inclusion criteria to participate in the project from October 1, 2017 to December 31, 2017 at a primary care clinic in Northern California. During the recruitment process, 44 participants out of 60 potential participants were willing to participate in the study (*Figure 3*). There were 16 participants excluded from the study because they met the exclusion criteria, were no longer enrolled in membership, declined to be a study participant, or were a no-show for the appointment. Then, the remaining consented participants ($N = 44$) were randomly assigned to two groups, namely the intervention group, I, ($n = 22$) and the control group, C, ($n = 22$).

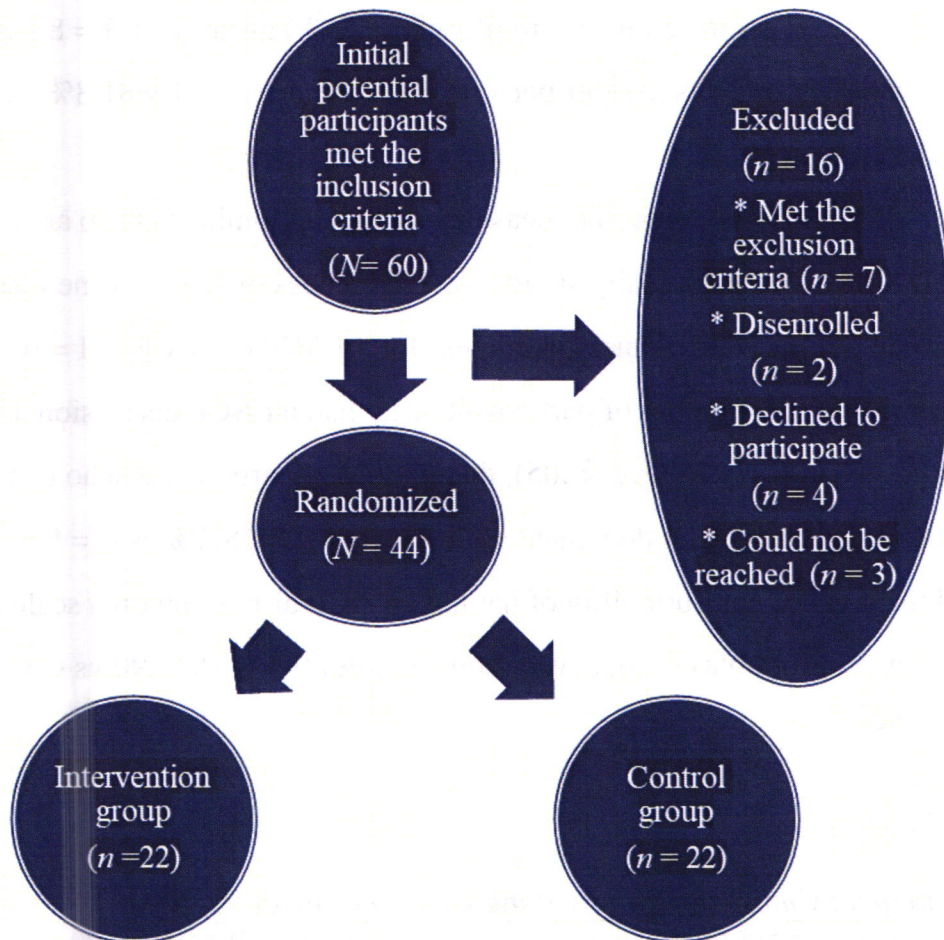


Figure 3. The consort diagram of study participants

Demographic Characteristics

Among the consented participants, there were 16 males and 28 females ($N = 44$). The age of the participants ranged from 65 to 89 years old ($M = 72.89$ years; $SD = 7.31$). The pre-visit demographic data of the participants in each group are reported in Table One. There was no missing data in this project. There were some statistically significant demographic differences between the groups. These demographic differences were reported in terms of race: white and non-Hispanic ($I = 72.7\%$ versus, vs, $C = 36\%$, $p = .03$), English being the primary

language used at home (I = 100% vs C = 59.1%, $p = .001$), self-rated health on a scale from one (poor) to four (excellent health) (I = 2.73 ± 0.77 vs C = 3.23 ± 0.61 , $p = .02$), yes to advance care planning (ACP) awareness (I = 86.4% vs C = 50%, $p = .01$), and yes to prior personal ACP experience (I = 81.8% vs C = 50%, $p = .03$).

The post-visit outcome measures by the randomized group are reported in Table Two. The statistically significant differences of the outcome measures between groups were, namely, readiness for an ACP discussion (I = 68% vs C = 9%, $p = .00$), the number of participants who had an ACP discussion after the visit (I = 72.7% vs C = 27.3%, $p < .05$), the number of participants who completed an advance directive (AD) document after the visit (I = 68.2% vs C = 9.%, $p = .00$), and the level of comfortability of having an ACP discussion on a scale of one (very uncomfortable) to four (very comfortable) (I = $3.36 \pm .90$ vs C = $2.68 \pm .96$, $p = .02$).

Table 1

Participant Characteristics by Randomized Group at Pre-Visit

Characteristic	<i>M ± SD or % (n)</i>		<i>p</i> -value
	Intervention (I) <i>n</i> = 22	Control (C) <i>n</i> = 22	
Age (years)	74.23 ± 8.67	71.55 ± 5.53	.23
Female	59.09% (13)	68.18% (15)	.53
Married	59.1% (13)	72.7% (16)	.34
White (non-Hispanic)	72.7% (16)	36% (8)	.02*
English at home (Primary)	100% (22)	59.1% (13)	.001*
Religious belief	86.4% (19)	95.5% (21)	.61
High School or higher	63.4% (14)	68.2% (15)	.75
Self-rated health [#]	2.73 ± 0.77	3.23 ± 0.61	.02*
Hospitalization in the last 12 months	18.2% (4)	0% (0)	.11
ACP awareness	86.4% (19)	50% (11)	.01*
Prior Personal ACP experience	81.8% (18)	50% (11)	.03*

Note. ACP = Advance Care Planning; *M* = Mean; *SD* = Standard Deviation; % = Percentage; *n* = The Number of Participants.

[#]Self-rated health ranges from 1 (Poor) to 4 (Excellent).

**p*-value < 0.05, using either *t*-test or *Chi-Square* test.

Table 2

Post-Visit Participant Outcomes by Randomized Group

Characteristic	<i>M ± SD or % (n)</i>		
	Intervention <i>n</i> =22	Control <i>n</i> =22	<i>p</i> -value
Readiness for an ACP Discussion ^a	68% (15)	9% (2)	.00*
Post-Visit ACP Satisfaction	3.86 ± .47	3.64 ± .58	.16
Likelihood of saying “Yes” to an ACP Discussion in 1 month	90.9% (20)	68.2% (15)	.06
Likelihood of saying “Yes” to the completion of ACP documents after 1 month	90.9% (20)	68.2% (15)	.06
Increased ACP understanding	3.86 ± .47	3.55 ± .80	.12
Level of comfortability of ACP discussion	3.36 ± .90	2.68 ± .96	.02*
Need of an ACP follow-up	13.6% (3)	9.1% (2)	.64
The number of participants who had an ACP discussion post-visit	72.7% (16)	27.3% (6)	<.05*
The number of participants who completed an AD post-visit ^a	68.2% (15)	9.1% (2)	.00*

Note. ACP = Advance Care Planning; *M* = Mean; *SD* = Standard Deviation; % = Percentage; *n* = The Number of Participants; Post-visit ACP Satisfaction from 1 (Very Unsatisfied) to 4 (Very Satisfied); Increased ACP Understanding from 1 (No understanding) to 4 (Understanding greatly increased); Level of Comfortability of ACP Discussion from 1 (Very Uncomfortable) to 4 (Very Comfortable).

**p*-value < 0.05, using either *t*-test or *Chi-Square* test of independence.

^a Adjusted residual of *Chi-Square* test of independence.

Outcome Analysis

Since there were statistically significant differences on the aforementioned outcomes, such as ACP readiness, post-visit ACP discussions, and the completion of an AD form, a *Chi-Square* test of independence was utilized to examine how strong the associations of the outcomes between groups were. For the level of comfortability between groups, due to the interval nature of the data, an independent sample *t*-test was used to examine the effect of the intervention on the ACP comfortability level between groups.

First, a *Chi-Square* test of independence revealed that among the 44 participants who participated in either the intervention group or the control group for an ACP visit at a primary care clinic, there was a statistically significant association between their readiness for an ACP discussion and the ACP visit ($\chi^2_{(1)} = 16.20, p = .00$) (Table 3). In accordance with the findings, the participants who were in the intervention group were more ready to have an ACP discussion when compared to the control group participants.

Second, the *Chi-Square* test of independence on the same study participants revealed that there was a statistically significant association between the ACP visit and the occurrence of a post-visit ACP discussion ($\chi^2_{(1)} = 9.09, p < .05$) (Table 4). The participants who were in the intervention group were likely to have an ACP discussion after the visit in accordance with the findings, whereas the participants who were in the control group were less likely to have an ACP conversation post-visit.

Furthermore, among the same 44 study participants, the *Chi-Square* test of independence also revealed that there was a statistically significant association between the ACP visit and the completion of an AD document ($\chi^2_{(1)} = 16.20, p = .00$) (Table 5). Based on the findings, the participants who were in the

intervention group were more likely to have an AD document completed after the visit.

Lastly, an independent samples *t*-test revealed, among the sample of 44 participants, that there was a statistically significant difference in the level of comfortability of an ACP discussion by the intervention group ($M = 3.36$) and by the control group ($M = 2.68$) ($t_{(42)} = 2.382$, $p = .02$) (Table 6). In other words, there was a statistically significant impact with the proposed ACP intervention to enhance the level of comfortability of an ACP discussion among the intervention participants.

Table 3

Crosstabulation of Readiness by Participant Group

Participant Groups		ACP Readiness			
		Not Ready	Ready	χ^2 (df)	<i>p</i> -value
Intervention	Count (%)	7 (31.8%)	15 (68.2%)	16.2 (1)	= .00*
	Adjusted Residual	- 4.0	4.0		
Control	Count (%)	20 (90.9%)	2 (9.1%)		
	Adjusted Residual	4.0	- 4.0		

Note. ACP = Advance Care Planning; χ^2 = Pearson *Chi-Square* coefficient; *df* = Degree of Freedom.

* $p < .05$ (2-tailed), using *Chi-Square* test of independence

Table 4

Crosstabulation of ACP Discussion by Participant Group Post-Visit

Participant Groups		ACP Discussion			
		No	Yes	χ^2 (df)	p-value
Intervention	Count (%)	6 (27.3%)	16 (72.7 %)	9.09 (1)	< .05*
	Standardized Residual	- 1.5	1.5		
Control	Count (%)	16 (72.7%)	6 (27.3%)		
	Standardized Residual	1.5	- 1.5		

Note. ACP= Advance Care Planning; χ^2 = Pearson *Chi-Square* Coefficient; df = Degree of Freedom.

* $p < .05$ (2-tailed), using *Chi-Square* test of independence

Table 5

Crosstabulation of the Completion of an AD Document by Participant Group Post-Visit

Participant Groups		The Completion of an AD document			
		No	Yes	χ^2 (df)	p-value
Intervention	Count (%)	7 (31.8%)	15 (68.2%)	16.20 (1)	= .00*
	Adjusted Residual	- 4.0	4.0		
Control	Count (%)	20 (90.9%)	2 (9.1%)		
	Adjusted Residual	4.0	- 4.0		

Note. AD= Advance Directive; χ^2 = Pearson *Chi-Square* Coefficient; df = Degree of Freedom.

* $p < .05$ (2-tailed), using *Chi-Square* test of independence

Table 6

Post-Visit Participant Outcomes by Randomized Group

Outcome	<i>M ± SD</i>		<i>t (df)</i>	<i>p-value</i>
	Intervention <i>n = 22</i>	Control <i>n = 22</i>		
Level of comfortability of ACP discussion	3.36 ± .90	2.68 ± .96	2.38 (42)	.02*

Note. ACP = Advance Care Planning; *M* = Mean; *SD* = Standard Deviation; % = Percentage; *n* = The Number of Participants; *t* = Independent Samples *t*-test; *df* = Degree of Freedom.

**p* < .05, using independent samples *t*-test

Summary of Data Analysis

In summary, the findings of this ACP project are as follows. Firstly, statistics were gathered about how to identify participants who were ready for an ACP discussion. Secondly, the likelihood of ACP conversations in the intervention group appeared to be statistically significantly higher than the likelihood of conversations in the control group one month after the visit. Thirdly, the completion rates of an advance directive (AD) in the intervention group appeared to be statistically significantly higher than the completion rates of an AD in the control group in one month after the visit. However, there was no statistically significant difference on the satisfaction of ACP visits between the control group and the intervention group in accordance with the findings in Table Two.

CHAPTER 5: DISCUSSION

Findings of this advance care planning (ACP) project indicated that the identification of readiness for an ACP discussion of the elderly participants could improve clinical outcomes in terms of the likelihood of ACP discussions after the visit, and the completion rates of an advance directive (AD) form. The result did not support that the ACP project could improve patient satisfaction. In this chapter, the investigator discussed project findings, the strengths of the project, the limitations of the project and recommendations, the contributions to nursing, and its implications and conclusion.

Discussion of Findings

Project findings supported that the identification of readiness for an ACP discussion could enhance the likelihood of ACP discussions and increase the completion rates of an AD document; however, it did not improve patient satisfaction. The investigator attempted to examine what other variables, particularly the significant differences of some demographic data between the two groups, may have confounded the project outcomes.

Confounding Demographic Variables

In the project, there were some demographic variables that were statistically significantly different between the intervention group, I, and the control group, C. These demographic variables were white and non-Hispanic (I = 72.7% versus, vs, C = 36%, $p = .03$), English being the primary language used at home (I = 100% vs C = 59.1%, $p = .001$), self-rated health on a scale from one (poor) to four (excellent health) (I = 2.73 ± 0.77 vs C = 3.23 ± 0.61 , $p = .02$), yes to advance care planning (ACP) awareness (I = 86.4% vs C = 50%, $p = .01$), and yes to prior ACP

experience (I = 81.8% vs C = 50%, $p = .03$). It is important that the reader should be aware of these differences of the characteristics between the two groups, which may have introduced confounding effects to the outcomes of the project to a certain degree.

Race. Firstly, the intervention group consisted of significantly more white and non-Hispanic participants than the control group ($p = .03$). Lee and Cagle (2017) studied attitudes and opinions about end-of-life (EOL) care among the elderly population by using survey data from the American Association of Retired Persons, AARP ($N = 2,714$). Their findings supported that white and non-Hispanic participants were more likely to have positive attitudes toward EOL care. White and non-Hispanic participants appeared to embrace their medical decision making of EOL care more than participants from other races. This could possibly lead them to be more ready for an ACP discussion (Lee & Cagle, 2017). In the project, findings stated that 72.7% of participants were white and non-Hispanic in the intervention group, which could potentially be a contributing factor to the outcomes of the study.

Language. Secondly, English being the primary language at home was reported as being more prominent in the intervention group than the control group (I = 100% vs C = 59.1%, $p = .001$). Although all elderly participants in the project stated they were comfortable using English during the clinic visits with the provider, Sudore et al. (2016) stated that it created communication barriers because English was not their primary language. An ACP discussion could easily be skewed by the connotations of the language and the subtexts of the conversations. Sudore et al. (2016) further elaborated that patients' limited language proficiency could result in low self-efficacy of communicating EOL care

preferences to their providers, as well as low satisfaction of the provider-patient relationships in the decision-making process. Therefore, in the project, the significant difference of the primary language use between the groups could be another contributing factor to the outcomes between groups.

Self-rated health. Thirdly, findings of the project indicated that the control group had higher self-rated health than the intervention group, meaning the control participants perceived themselves to have better overall health than the intervention participants ($p = .02$). Ko, Lee, and Hong (2016) reported that in a cross-sectional study of the willingness to complete an AD document, among 255 elderly participants in the community settings ($M = 70.8$ years of age), participants who rated poor health status were more likely to complete an AD document (OR = 1.43, 95% CI = 1.07-1.90). In this project, the self-rated health mean score of the intervention group was 2.73, whereas the control participants scored 3.23 on a scale of one to four, four being excellent health ($p = .02$). Thus, the higher completion rates of an AD document in the intervention group post-visit could potentially be confounded by the relatively poor self-rated health of the intervention group.

ACP awareness. Fourthly, there was a significant difference of ACP awareness between groups. Eighty-four percent of the intervention participants indicated that they were aware of ACP, compared to only fifty percent of the control participants who were aware of it ($p = .01$). The concept of ACP awareness and the readiness for an ACP discussion were closely related (Lum, Sudore & Bekelman, 2015). Lum et al. (2015) stated change in health status may lead to heighten one's awareness of the need and readiness for an ACP discussion. When elderly individuals experience health changes, they begin to relate ACP to

their own lives and to engage in ACP-related activities. On the contrary, elderly individuals who lack awareness of or have no interest in ACP are not ready for any ACP-related activities. Thus, it is reasonable to doubt that the significant differences between the awareness of ACP between groups may have, in fact, confounded the outcome findings of the project.

Prior ACP experience. Lastly, prior ACP experience was found to be significantly different between groups ($p < .05$). In an observational study, Amjad, Towle, and Fried (2014) examined whether prior experiences with EOL care issues were associated with increased readiness for engaging more in ACP activities or displaying ACP behaviors. In the study, 305 elderly participants who had prior ACP experiences for others, including their loved ones, appeared to be more ready to engage in an ACP discussion and to complete an AD document than those who did not have any prior ACP experiences ($M = 74.9$ years of age, $n = 223$). Study findings supported that prior exposure to EOL issues, such as knowing someone who died because of having too much EOL care, and decision making for others, especially their loved ones who died, were positively associated with an increased participation in the aforementioned ACP-related activities ($p < .005$). Thus, the intervention participants who had higher awareness and more prior exposure to ACP may be confounding the outcomes of the project.

Post-visit outcome findings. In this project, the investigator examined whether the identification of readiness of the participants for an ACP discussion would improve the participants' satisfaction of ACP experience, enhance the likelihood of a post-visit ACP discussion, and increase the completion rates of an AD document.

Patient satisfaction. There was no statistically significant difference in post-visit patient satisfaction between groups ($p = .16$). The satisfaction score was rated on a scale of one to four, four being very satisfied. The investigator speculated that all the participants were being agreeable out of respect to the provider. It is known in the literature that being respectful to the provider could be a barrier to ACP (CDC, 2014; the U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-term Care Policy, 2008). In addition, since the ACP program was part of the annual wellness visit, all the participants came in for other health services in a combined health visit. The investigator speculated that the post-visit satisfaction score may be the reflection of the overall impression of the wellness visit of the participants.

Readiness for an ACP discussion. Project findings indicated that 68% of the intervention participants were ready for an ACP discussion post-visit whereas only 9% of the control participants indicated their readiness for a discussion. The difference of readiness between groups was statistically significant ($p = .00$). In the project, the intervention participants were 16 times more likely to be ready to engage in an ACP discussion than the control participants post-visit after one month ($\chi^2_{(1)} = 16.20, p = .00$). Although the reader should be skeptical of the statistical significance of this readiness finding, the fact is that when a majority of the intervention participants stated they were ready, they indeed self-initiated the ACP discussions and completed an AD form for submission after the visit in comparison to the control participants. This finding is clinically significant.

Likelihood of post-visit ACP discussion. There was a statistically significant difference in the post-visit ACP discussion between groups ($p < .05$).

About 72% of the intervention participants engaged one or more times in self-initiated ACP conversations post-visit with their loved ones, emergency contacts, or providers. Contrarily, only about 27% of the control participants reported to have self-initiated ACP discussions post-visit after a month. Based on the findings, the intervention participants were nine times more likely to have an ACP discussion than the control participants post-visit in a month ($\chi^2_{(1)} = 9.09, p < .05$). The reader should be skeptical of this significant finding, and yet the investigator would like to bring to the reader's attention that a majority of the participants were not new members of this primary care center. The majority of these participants had prior ACP experience from the annual wellness visits at the same care center in the past, but they did not display observable ACP-related behaviors or engage in meaningful ACP-related activities. It would be reasonable and fair to state that the statistically significant association between the occurrences of ACP discussions among the participants could partially be explained by the introduction of this ACP project.

The completion rates of an AD document. There was a statistically significant difference of the completion rates of an AD document between the two groups ($p = .00$). The investigator confirmed the number of completed AD documents which was successfully uploaded to the electronic medical record (EMR). About 68% of the intervention participants had completed an AD document post-visit, whereas about 9% of the control participants had completed an AD document after one month of the visit. The association between the completion rates of an AD document and the participants of the two groups was statistically significant ($\chi^2_{(1)} = 16.20, p = .00$). Project findings suggested that the

intervention participants were 16 times more likely to complete an AD document than the control participants post-visit.

Again, although the reader should be skeptical about the project findings, the investigator noted that the AD completion rates of the control group were 9%, compared to the current AD completion rates of the clinic, which were below 10%. The project findings of the control group were comparable with the current census of the clinic to confirm the ineffectiveness of the current ACP program. On the contrary, the completion rates of the intervention group were 68% after one month of the visit. In addition, the completion rates of the intervention group (68.2%) were higher than the national benchmarks of elderly people aged 65 years or older (51.2%), which were published in the U.S. Current Population Surveys in 2009 and 2010 (Rao et al., 2014). Findings supported that the ACP project effectively increased the completion rates of an AD among elderly participants when compared to the national benchmarks.

The level of comfortability of an ACP discussion. There was a statistically significant difference of the level of comfortability between groups of an ACP discussion ($p = .02$). The comfortability score was rated on a scale from one to four, four being very comfortable. The mean score of the intervention group was 3.36, whereas the mean score of the control group was 2.68. There was a statistically significant impact on the ACP project to enhance the level of comfortability of an ACP discussion for the intervention participants ($t_{(42)} = 2.382, p = .02$). Prior studies indicated distress could be one of the barriers to make patients defer from taking part in a meaningful ACP discussion (Dev et al., 2013). On the contrary, the more one feels comfortable with the idea of ACP, the more likely that person will be ready to engage in an ACP discussion. Again, the

reader should be aware that this statistically significant finding might be contaminated by the aforementioned characteristics of the participants.

In summary, findings indicated that the ACP project enhanced the number of ACP discussions after a month of the visit and increased the completion rates of an AD document in the intervention group. Findings did not show evidence of any differences of the ACP satisfaction between groups in this project. The reader should keep in mind that the plausibility of the project findings may be compromised by homogeneity issues, as there were statistically significant demographic differences between groups. Although the questionable statistical significance of the project was one of the major flaws, the investigator believed that the clinical significance of this project was as important as the statistical endeavor. This project achieved the purpose of promoting ACP in a primary care setting for the intended elderly participants. The strengths and the limitations of the project are as follows.

Discussion of Strengths and Limitations of the Project

Strengths

The project was built on current evidence of ACP in community settings for elderly populations from design to execution. The purpose of the project was to examine whether the identification of readiness in elderly participants for an ACP discussion would improve ACP outcomes in a primary care clinic. This process of readiness identification and the application of the readiness algorithm were based on an established theory, *Transtheoretical Model* (TTM), also known as *Stages of Change* (SOC) by Prochaska (Pro-change, n.d.). Having incorporated the TTM in practice, the investigator was able to approach ACP as a process of behavior

change than consider it as a task of completion of an AD document. It signified a paradigm shift from the conventional action-oriented ACP programs to a dynamic process-oriented ACP era.

By utilizing the readiness algorithm by Fried et al. (2010), the investigator was able to enhance the efficacy of identifying participants who were ready for an ACP discussion. Yet, the investigator was also able to deliver effective interventions to facilitate and promote the desired ACP behaviors of the participants based on the underpinning theory of the algorithm.

Limitations and Recommendations

Some limitations of this project include the small sample size ($N = 44$). Even though the project design was a randomized trial with the control arm and the intervention arm, small sample size could introduce type I error in the project. Polit and Beck (2012) suggested that the minimum number of expected participants for the project should be 64 or more in each group to obtain the medium effects of the effect size (d) in a two-group test of mean differences. Thus, the minimum number of participants for the project should be 128. In this project, one of the major flaws was the heterogeneity of the participants between groups. By recruiting an adequate number of participants for randomization, the issue of heterogeneity could likely be reduced. The confounding variables between groups would likely be reduced even though they might not completely be eradicated.

Secondly, this project was conducted in one single primary care center for private elderly members in Northern California. The project results and the recommendations could probably be applicable to this limited population of the care center. In order to create significant impacts, future recruitment and sampling

should preferably be arranged in multiple locations for stratification. This could enhance the potential of generalizing future study findings to a larger population of interest (Polit & Beck, 2012).

Thirdly, due to time constraints, this project was conducted in a three-month time limit. According to the TTM, it is stated that an individual takes six months to progress from one stage to another on the continuum of behavior change, especially for a participant in the stage of contemplation to progress to the next stage of preparation (Pro-change, n.d.). Future investigators should take time factors into consideration if they intend to observe and examine the full impacts of the interventions on the intended behavior change.

Fourthly, in this project, there existed a role ambiguity issue. The investigator had a dual role as the project investigator and the provider, which may have likely introduced biases to the project. It was challenging to remain objective and be blinded from the project details as a provider and principle investigator at the same time. To reduce bias created by this dual role ambiguity, the investigator recommends having a separate individual whose sole role as a provider is to discuss ACP with the participants.

Lastly, in this project, the post-visit outcome of patients' ACP satisfaction was not fully understood. It was partially because the ACP project was a part of the wellness visit. The impact of the ACP project on the participants could not be observed independently without the influence of other working parts of the wellness visit. Therefore, the investigator suggests that in the future, ACP programs should be arranged as a separate visit than a combined visit with other health programs.

Contributions to Nursing, Its Implications and Conclusion

The investigator observed that this ACP project did create clinically significant impacts on the participants who were ready for an ACP discussion. According to the Assembly Bill, AB 637, advanced practice nurses and physician assistants have been authorized to sign the Physician Orders for Life-Sustaining Treatment (POLST) document since year 2016 (Coalition for Compassionate Care of California, 2015). To create change in the nursing profession and make more of an impact to improve population health, the investigator plans to disseminate project findings and share clinical significances of the project via educating healthcare providers; particularly informing primary care providers about the importance of readiness identification for an ACP discussion.

By incorporating the concepts of readiness with the support of current scientific evidence, the investigator believes that providers can effectively identify patients who are ready for an ACP discussion, and to facilitate their patients to achieve the desired ACP outcome behaviors with appropriate interventions based on the TTM. The contributions of this project were to discern the likelihood of an ACP discussion by participants, increase completion rates of an AD document after the clinic visit, and ensure that the values and beliefs of EOL care of the participants were heard, discussed, and respected.

To conclude, primary care providers should participate in and facilitate ACP discussions, document the conversations, and complete an AD document when the elderly individuals clearly state that they are ready for an ACP discussion.

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APPENDICES

APPENDIX A: LETTER OF INVITATION

Letter of Invitation

Fall, 2017

Dear Member,

You are receiving this letter because you have scheduled annual preventive health visit at the White Road care center coming up from September to December 2017.

Currently, I am conducting a new workflow improvement project at the aforementioned care center to discuss the advance care planning with all our members. At the same time, this is a doctoral project in partial fulfillment of the Doctor of Nursing Practice degree at the California State University, Northern Consortium Doctor of Nursing Practice Program.

The goal is to improve your satisfaction of ACP discussion(s) and the effectiveness of the ACP program at the care center through a proper in-person education and follow-up sessions if needed. The participation is on a voluntary basis. You may withdraw from this project at any time, which will not affect the service you receive as our member at the care center.

Attached you will find the ACP packet including the Five Wishes, the Physician Orders for Life-Sustaining Treatment (POLST) form, a pre-questionnaire, and a consent form. Please take time to read them, discuss with your loved ones, write down questions that you may have on space provided in the pre-questionnaire, and complete the consent form. Bring the packet and forms with you on the appointment date so that we can have an in-depth discussion with you about your individual future healthcare needs.

If you have already completed these documents before, please bring them with you on the next office visit. We will scan the documents into your electronic medical record.

I appreciate your time in assisting me with completing this workflow improvement project. Any questions regarding this invitation and the project, feel free to call the care center at 408-503-7600. I look forward to seeing you at the care center.

Sincerely,

Oi Shan (Frank) Wong, RN, DNPc, AGPCNP-BC

Lead Nurse Practitioner/Doctor of Nursing Practice Candidate

APPENDIX B: CONSENT FORM

Consent Form

You are invited to participate in a study conducted by Oi Shan (Frank) Wong. We hope to learn to enhance the satisfaction of the advance care planning (ACP) experience and improve the workflow of the ACP program at the care center. You were selected as a possible participant in this study because you are a member of the care center and the annual preventive health visit is about due.

If you decide to participate, we will have you scheduled for the annual preventive health visit by a front desk secretary. A week before the appointment, you will receive an information packet, including a Five Wishes booklet, a Physician Orders for Life-Sustaining Treatment (POLST) form, a pre-questionnaire, and a consent form. This information package intends to help you think about your individual healthcare needs in the event of an emergency or the changes of the health condition. You will have a week to review the information and forms in the packet and to write down all the questions you may ask when you are at the clinic. After the visit, you will be asked to complete a post-survey at the clinic before you leave. In a month, you will receive a call for a follow up on the ACP conversations or decisions that you may have made with your loved ones or primary doctors. We are more than happy if you would like to schedule another face-to-face appointment for the ACP discussion at the care clinic. The potential risk of the participation in this ACP project is low to minimal, especially it is a revamping of the current ACP program at the care clinic.

For benefits, we will walk you through the entire process of ACP at the clinic so that you can fully realize the importance of the ACP to your future healthcare needs. Your family can potentially benefit from this process to reduce their care burdens in the event of any changes of your health condition. Your current benefits as a member of the care center will not be withheld if you cannot participate in this project. There will be no additional costs to participate in this project.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. If you give us your permission by signing this document, we plan to disclose the information strictly related to the study we collect with the California State University, Northern Consortium Doctoral Nursing Practice Program. No personal identifiers will be released or shared in any parts of the study.

Your decision whether or not to participate will not prejudice your future relations with the California State University, Northern Consortium Doctoral Nursing Practice Program. Again, if you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty. The Committee on the Protection of Human Subjects at California State University, Fresno has reviewed and approved the present research.

If you have any questions, do not hesitate to ask us in the office, or call 408-503-7600

and I will be happy to answer you.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE, HAVING READ THE INFORMATION PROVIDED ABOVE.

Signature of Participant _____ Date _____

Signature of Investigator _____ Date _____

APPENDIX C: PRE-VISIT QUESTIONNAIRE

Pre-Visit Questionnaire

Code: _____

This self-administrated questionnaire is designed to collect demographic data from the participants and elicit thoughts of advance care planning (ACP) experience or potential questions that the participants may have regarding the ACP discussion or related documents before the visit. All information will be kept strictly confidential.

Participant Demographics: Circle or Print the response below				
1.Age	(Print the exact age here)			
2.Gender	Male Female			
3.Race	White, non-Hispanic Hispanic Asian African American Other (Please specify)			
4.Marital status	Single Married Divorced Widowed Other (Please specify)			
5.Primary language at home	English Spanish Other (please specify)			
6.Religious belief	Please print the religion here			
7.Educational level	Please print the educational level here			
8.Self-rated health status	1 Poor	2 Fair	3 Good	4 Excellent
9.Did you stay in the hospital or use ER in the past 12 months?	Yes (Please Specify in the space here why) No			
10.Have you heard of ACP before this visit?	Yes No			
11.Did you have any personal experience of ACP discussion in the past?	Yes No (No prior experience)			
12.If yes to the above question,	For myself			

was it for yourself or for other people	For other (Please specify)
13.If you circle "For Myself" in the above question, what motivated you to complete all the ACP documents or what deferred you from doing so (Print your answer in the space)?	
14.Do you have any comments of prior ACP experience (Print in the space provided)?	
15.Do you have any questions that you may have for the ACP discussion before the visit (Print in the space provided)?	<p>The End- Thank You. Remember to bring this form back on the visit.</p>

APPENDIX D: POST-VISIT QUESTIONNAIRE

Post-Visit Questionnaire

Code: _____

This self-administrated questionnaire is designed to collect data from the participants and elicit thoughts of advance care planning (ACP) experience or potential questions that the participants may have regarding the ACP discussion or related documents after the visit. All information will be kept strictly confidential.

Participant Demographics: Circle or Print the response below				
1. Are you satisfied with the outcome of this ACP experience	1 Very Unsatisfied	2 Unsatisfied	3 Satisfied	4 Very satisfied
2. Will you discuss with your family or significant others about ACP in 1 month after this visit?	Yes NO (If no, specify why not in the space)			
3. Do you plan to complete an advance directive document offered on this visit in 1 month?	Yes NO (If no, specify why not in the space)			
4. Has your understanding of the importance of having an ACP discussion increased regarding the end of life care options after this visit?	1 No Understanding	2 Little Understanding	3 Understanding Increased Somewhat	4 Understanding Greatly Increased
5. How comfortable are you of talking about End of Life care you desire to your	1 Very Uncomfortable	2 Uncomfortable	3 Comfortable	4 Very Comfortable

families or significant others after this visit?				
6. Do you need to schedule another ACP after this visit?	Yes (Please specify why in the space)			
	No (Please specify why)			
7. Do you have any comments about the session of ACP on this visit (Please print on the space)?				

The End—Thank You. Please return this form to the front desk.

APPENDIX E: ACP SCRIPT FOR PROVIDERS

ACP Script for Providers at The Care Clinic

I am here to discuss something important with you today in regard to end-of-life care options. We at the care clinic want you to live a long healthy life. By informing you of these options, you can take charge of your own care.

As you know, accidents can happen or your health can change anytime. When events change the course of our lives, we may not have the time to review and complete all the important documents in regards to end-of-life decisions.

This is why we encourage all our members to complete or revise these important documents at least once a year or when your health condition has changed.

Before we start reviewing these documents in this folder, let's discuss your thoughts regarding end-of-life care. Tell me what you think and how you feel about your end-of-life plan?

(Provider focuses on the readiness of the member for end-of-life discussion and the end-of-life values of the member regarding end-of-life discussion)

XX
XX

(After the discussion of end-of-life values and readiness of the member, provider may proceed to introduce the Five Wishes and a POLST form in the ACP packet)

In this folder, there are two important documents. Together they are part of what is called advance care planning. The blue booklet is called "Five Wishes" and the pink form is called the "POLST."

Let me briefly introduce these two documents to you and their roles as part of advance care planning discussion.

The purpose of the Five Wishes is to help our members discuss with their loved ones about their end-of-life care options. This discussion allows them to designate spoke person(s), aka power of attorney to speak for them regarding their treatment options when the member no longer has the ability to speak up for themselves.

Read the Five Wishes booklet, discuss with your loved ones or designated spoke person. Then, complete this booklet. You can call us to schedule a time to go over all the advance care planning information and documents. Or even bring your loved one in so that they can understand better what your end-of-life wishes are.

You have homework to do tonight. On the last page of this Five Wishes booklet, there is a small card. Please cut it out. Write down your primary care doctor's name and an emergency contact's name on this card. Put this card in your wallet. In case of emergency that occurs away from your home, police know who to call when they see it in your wallet.

On the contrary, this pink form, the "POLST," is the exact initial orders of what you would like to have in the hospital or in the event of an emergency. For example, if your heart stopped, do you want efforts made to try and start your heart again, such as chest compressions, or would you want to have a tube put down your throat and attached to a breathing machine to help you breath? Perhaps, you have decided that you want only to be comfortable or be free of pain. There are A, B, and C care options on this pink form that you must complete.

It is important to know that you keep this pink form with you after it is completed and signed as an order. Do not leave this form in the doctor's office. Bring this POLST form home when it is completed. Stick it on the door of the refrigerator or somewhere people can find it easily. It is because in case that someone needed to call an ambulance for you, the ambulance personnel are trained to look for this important document to bring it with you to the hospital. That is why this form is in bright pink. Many members do not know, and they leave this important document in the drawer. It loses the purpose of this pink form.

In addition, many members have a misconception to think that it will be set in stone, once they have this pink form completed. The answer is no. You can change the care options at any time and how you want it. Just come here to pick up another new form to reinitiate the entire process again with us or your personal doctor(s).

Now, as I have mentioned it to you that care options are not just limited to A, B, and C like the one in the POLST form, there are many gray areas in care options. For example, people may indicate to have full treatment in the POLST form when an emergency occurs. However, how long do they want to be on a life-sustaining machine such as a ventilator though? To cover the gray areas, we urge all our members to designate a spoke person with using the Five Wishes. It is especially important when the person can no longer make choices for themselves because of their advancing illnesses.

Do not assume your family members or loved ones will know what you really want. In the case of an emergency, everybody is likely to panic and it will be very difficult for them to make such end-of-life care decisions for you. Therefore, we encourage all our members to think about what they really want for their end-of-life care. You can make important decisions for yourself when you are well.

Again, all these documents, the POLST and the Five Wishes are very important documents. Most importantly, these documents let you start the conversations with your loved ones and doctors so that they understand what you really want for end-of-life care.

Are you ready to initiate the advance care planning process by completing these documents today? Or would you like us to schedule you another time so that you can talk with your loved ones, or perhaps, to come back with your loved ones on another time?

**APPENDIX F: READINESS STAGING ALGORITHM FOR ACP
DISCUSSION**

Appendix F

Readiness Staging Algorithms for ACP Discussion at Care Center: A Provider Guide (Adopted and Modified with Permission from Fried et al., 2010)

