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# Implementation of an Advance Directive Protocol in a Primary Care Setting

Gloria Dillman  
*Valparaiso University*

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# VALPO

**IMPLEMENTATION OF AN ADVANCE DIRECTIVE PROTOCOL IN A  
PRIMARY CARE SETTING**

by

**GLORIA DILLMAN MS, FNP-BC**

**EVIDENCE-BASED PRACTICE PROJECT REPORT**

Submitted to the College of Nursing

of Valparaiso University,

Valparaiso, Indiana

in partial fulfillment of the requirements

For the degree of

**DOCTOR OF NURSING PRACTICE**

2015

Gloria J. Dillman 4/29/15  
Student Date

[Signature] 4/20/15  
Advisor Date

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## **DEDICATION**

This project is dedicated to my family; my husband Kevin, daughter Paige and son Jacob. Thank you for your endless love, encouragement and support. I appreciate the sacrifices you have made so I could pursue my education.

## **ACKNOWLEDGMENTS**

I would like to thank my faculty advisor, Dr. Julie Koch. She provided me with much needed direction, encouragement, and guidance. Her persistence and support to her students sets her apart among nursing educators. To all of my friends and co-workers who have supported me throughout the years. I also want to acknowledge the patients, health care providers, and staff who inspired this project.

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## ABSTRACT

Despite the passage of the Patient Self-Determination Act in 1992, only 15% of the United States population has completed an advance directive (AD). This statistic will be exaggerated with the future growth of older adults in the year 2030, at which time this portion of the population is expected to double to 72.1 million people. Without an AD, patients lose their autonomy and may be subjected to costly, life prolonging treatments that they would never choose for themselves. The unnecessary costs and unwanted treatment are preventable with an AD, and primary care providers are in a prime position to initiate AD discussions when patients are in good health and capable of making these decisions. Evidence suggests that if primary care providers and office staff were trained in patient advance care planning (ACP) and provided an AD guideline to follow, then health care providers would engage in patient AD discussions. Thus, the purpose of this evidence based practice (EBP) project was to determine whether an AD Engagement Protocol which focused on patient's level of AD readiness, along with health care provider and office staff education, impacted staff attitudes and promoted engagement of AD discussion at the EBP target site. To guide this EBP project system change, the Stetler Model and the Transtheoretical Model were utilized. Patient demographic data were collected and the engaged patient's level of readiness was assessed per provider. Attitudes were measured using the tool, A Brief Survey About Staff Attitudes Related to Advanced Directives. Data analysis was completed using descriptive statistics, and paired *t*-tests identified the differences in provider and staff attitudes about ADs before and after project intervention. Attitudes about ADs improved to a statistically significant level post-intervention ( $p = .0004$ ). All health care providers positively engaged in ACP discussions with eligible patient participants at a rate exceeding 50%.

*Keywords:* advance care planning, advance directives, primary care, staff attitudes.

## CHAPTER 1

### INTRODUCTION

Within the ever-changing health care environment, there has been a shift towards improving quality of care by utilizing evidence-based practice (Melnik & Fineout-Overholt, 2011). Health care professionals have identified and embraced the positive results of evidence-based practice (EBP) for health care delivery for patients. EBP has become the gold standard for clinical practice guidelines and clinical practice change. Three components are essential for EBP practice change: (a) best available evidence, (b) clinical judgment, and (c) patient preferences (Schmidt & Brown, 2012). Practice change should be considered when one of these three components support a suggested or required practice change to yield a higher quality of health care and improve patient outcomes (Melnik & Fineout-Overholt, 2011). During the EBP practice change, the advance practice nurse (APN) can assume the role of EBP expert, acting as a change agent, as well as mentoring and leading within the clinical setting (Schmidt & Brown, 2012).

According to the National Institutes of Health (NIH, 2014), more than one out of four Americans will face questions about medical treatment near the end-of-life, although many will not be capable of making those health care decisions. To support patient choice and autonomy with end-of-life decisions, the National Institute of Aging (NIA, 2014), has suggested discussing end-of-life wishes with health care providers and family. In addition, it has been reported that advanced health care planning (ACP) discussions may increase patient satisfaction with health care professionals and their target organizations (Heiman, Bates, Fairchild, Shaykevich, & Lehmann, 2004). Health care providers in the office setting could work as a patient advocator and lead advanced care planning (ACP) discussions by following an advance directive (AD) protocol.

However, health care providers have identified the lack of a structured policy or protocol on AD for their office settings as a barrier to initiating ACP discussions (Westley & Briggs, 2004).

The lack of a structured protocol on AD was identified at the target organization for this EBP project. It was clear that a clinical practice change using the EBP process would be beneficial in this primary care setting. The proposed change for this organization was the implementation of an AD protocol which was developed based on the most current AD guidelines and EBP literature. This EBP project was developed to increase quality and outcomes for patients, their families, health care professionals, and the target organization.

### **Background**

The Patient Self-Determination Act (PSDA) was established in 1990 as a federal law, mandating that hospitals (a) determine whether patients have an advance directive (AD) and (b) make AD document resources available to patients (Teno, Gruneir, Schwartz, Nanda & Wetle, 2007). However, despite having legislation for AD, less than one-fifth of the general population has completed an AD since the act passed (Alano et al., 2010). The PSDA's intent was to promote awareness and discussion among patients and health care providers in preparation for medical decisions at the end-of-life (Koch, 1992). The purpose of AD documents have been to assign a health care representative and develop a living will. In addition, AD documents have been based on the premise of supporting patient choice by promoting patient autonomy and dignity for end-of-life decisions and have encouraged shared decision-making between patients and health care providers. Patients can accept or refuse medical or surgical treatment, and can have an AD and/or appoint a health care representative (NIH, 2014).

Within Indiana, there are multiple types of AD that have been recognized by the state. These AD formats include organ and tissue donation, psychiatric AD, out of hospital do-not-resuscitate declaration, physician order for scope of treatment, living will, and assignment of health care representative. This EBP project focused on an AD that included assigning a health care representative and completing a living will.

With the passing of the PSDA legislation, in order to receive funding from Medicare and Medicaid all health care organizations have been required to inform patients about their rights to participate in AD (Baker, 2002). Failure of health care organizations to participate in AD planning had the potential result of the organization losing reimbursements from these agencies. In November 2010, the Centers for Medicare and Medicaid Services (CMS) outlined health care providers 2011 pay rates for ACP which were to be implemented by January, 1, 2011 (Silva & Glendinning, 2011). However, for unclear reasons this decision was reversed by CMS on January, 5, 2011. Silva and Glendinning (2011) believed this reversal resulted from a “political battle” between the Democratic and Republican Parties. However, politicians have needed to remember that the goals for PSDA legislation were to (a) provide education and preserve patient rights under state laws on AD, (b) promote greater completion of AD and (c) reduce end-of-life costs by preventing unwanted and/or unnecessary care (Rushton, Kaylor, & Christopher, 2012). Health care organizations, i.e., the Joint Commission on Accreditation of Health care Organizations (JCAHO), revised hospital standards in 2002 to include hospitals with ambulatory clinics, such as same day surgery and heart failure clinics, to provide AD choices for patients (Heiman et al., 2004). These health care agencies, JCAHO, and CMS support patient choices and rights regarding AD, but to date there are no current laws or guidelines about how health care providers should assist patients with AD in the primary care setting. Furthermore, JCAHO and

CMS support the discussion of AD between health care providers and patients, but their support does not include reimbursement for the time to engage in ACP discussions (Silva & Glendinning, 2011). The lack of reimbursement for these services has resulted in the need for the target organization and the health care provider to “fit in” these discussions into routine care.

Encouraging ACP has demonstrated efficacy in allowing allow patients to have choices, supporting autonomy, and ultimately assisting in keeping health care costs down (Morhaim & Pollack, 2013), which has been of particular importance since there is a nationwide impetus to address issues that may impact health care costs. Undoubtedly, health care costs at end-of-life will be impacted by the aging U.S. population. In 2009, the U.S. population over the age of 65 years was estimated at 39.6 million people; as the baby boomers continue to age, by 2030, there will be 72.1 million older adults living in the United States (Morhaim & Pollack, 2013). With the advent of the Affordable Care Act and the availability of Medicare insurance for this population, many of these aging adults will access health care for the first time. Yet, it is anticipated that, because of advances in medical technology, aging adults will continue to utilize health care resources as their live longer lives with chronic disease and/or co-morbidities. And, the utilization of these resources has been shown to become more intense near the end-of-life. Currently, as the baby boomer generation continues to age and chronic disease increases, there will be more patients accessing health care for the first time (Morhaim & Pollack, 2013).

**Terms.** Advance directives (AD) are defined as instructions about the individual patient’s future medical care and treatment if the individual patient becomes incapacitated (Indiana State Department of Health [ISDH], 2014). ADs are written instructions based on the individual patient’s choices for end-of-life care. There are two

main types of AD: (a) a living will or (b) a health care representative (Weiner & Cole, 2004).

A living will is a written document that puts into words patients' wishes in the event that they become terminally ill and unable to communicate. A living will lists the specific care or treatment a patient wants or does not want during a terminal illness. Living wills often include directions with the patient's resuscitation, artificial nutrition, maintenance on a respirator, and blood transfusions (ISDH, 2014).

A health care representative is a predetermined person who would represent the patient and convey the health care choices or preferences of the individual patient to health care providers. This chosen representative would receive health care information and make health care decisions when the individual patient is unable to make these health care decisions. The choices that the health care provider makes are based on the patient's AD (ISDH, 2014).

Advanced care planning (ACP) is the discussion between the patient and their health care provider. This discussion should include life-extending treatments (i.e., such as resuscitation, dialysis, feeding tubes, and hospice care). Quality of life issues and concerns unique to each individual patient should also be discussed during this time (Weiner & Cole, 2004). In the ACP process, the patients may decide to include their family in this discussion with the health care provider. In fact, family involvement with ACP is encouraged, but patients ultimately decide whom to include in their ACP discussions (ISDH, 2014).

### **Statement of the problem**

This doctor of nursing practice (DNP) student identified a problem when conducting an ACP discussion with an office patient at the project's target organization; it became apparent (a) that there was no formal protocol for ACP, and (b) there was no

identified process for placing AD forms on patients' charts. This problem was discussed with the collaborating physician and the office manager, and it was determined that a practice change on ACP should be considered. However, the DNP student identified barriers to ACP that both the patient and health care provider within the targeted practice could encounter. These identified barriers were also found within the supportive evidence examined for this EBP and were determined to be the main obstacles for ACP engagement between health care providers and patients, not only within the practice site targeted for this EBP, but across the nation. Prior to participating in this EBP project, the target organization did have an AD/ACP protocol, but it only covered hospitalized patients.

Melnik and Fineout-Overholt (2011) have recommended considering a practice change when the evidence suggests an EBP protocol will improve patient quality and outcomes. This EBP project was developed to identify the barriers associated with AD/ACP and develop a solution. In this project, the evidence was convincing that an AD protocol would increase the quality of care and improve patient outcomes.

#### **Data from literature supporting the need for the project.**

There was significant data within the literature that supported the need for this EBP project. Three key factors were apparent. Patients have rights to make AD decisions based on their personal values and choices. Patient satisfaction with their health care providers has been linked to the provider initiating ACP discussions. Although a number of barriers to provider initiating ACP discussions exist, strategies to overcome these barriers have been identified within the literature.

According to Alano et al., (2009), all fifty states have legislation supporting AD. Although, these laws may vary by state, they all recognize patients' rights in end-of-life decisions. Not surprisingly, since quality of life, is a personal preference (Basile, 1998),



increased patient satisfaction has been reported when ACP discussions with their health care providers is undertaken (Rizzo et al., 2010). Yet, it is important to recognize that as health care providers engage in an ACP discussions, the providers must follow their professional code of ethics to support the ethical principles of patient autonomy. Thus, the key to supporting patient autonomy with ADs is when a health care provider engages in ACP discussions with the patient, and when the patients ADs are based on the patient's personal values and choices (DesRosiers & Navin, 1997).

Health care organizations' goals have been and continue to be improving patient care and outcomes. Heiman et al. (2004) identified an increase in patient satisfaction with their health care providers and target organizations when AD/ACP was discussed. According to Maxfield, Pohl, and Colling (2003), (a) most patients wanted to obtain AD information from their primary care provider while they are in good health and (b) patients were satisfied when their clinicians brought up ADs. Maxfield et al. (2003) also found AD completion rates were higher when clinicians initiated AD discussions and that age shouldn't matter when it came to ACP. DesRosiers and Navin (1997) found that patients looked to their health care providers for guidance on how to engage in AD discussions with their families. In addition, DesRosiers and Navin noted that patients did not want to cause their families any undue stress and looked to health professionals for assistance with ACP.

Health care providers identified multiple barriers to AD discussion, such as time constraints, lack of compensation, and lack of knowledge on the part of the health care providers and staff on how to effectively engage discussions with patients about AD (Alano et al., 2010). Ryan and Jezewski (2012) found that the AD discussion experiences of staff nurses were dependent on their past experience and confidence level. Meyers (2000) also identified that nurses felt a lack of knowledge and that they did

not fully understand their role in ADs; Meyers stressed the need for more education for health care professional on ADs. Spoelhof and Elliott (2012) examined the barrier of physicians discomfort with the topic of AD due to lack of interest or knowledge. Spoelhof and Elliott's findings supported the need for staff education for health care providers and ancillary staff who encounter patients. Silva and Glendinning (2011) found that barriers to effective AD discussions included lack of office time and compensation. The researchers reported that health care providers usually need to take 30 minutes or more to discuss AD with patients and their family members. Yet, Silva and Glendinning also noted that in the office setting ACP discussions are not billable, since there are no specific reimbursement codes for the discussions between patients and health care providers or ancillary staff. The lack of reimbursement has made it necessary for the provider to incorporate AD discussions into the patient's routine, sick, or annual health visits. In addition to the financial and time barriers, health care providers have reported that they often simply forget to engage in AD discussions with patients and need reminders to engage in ACP discussions on the chart (Wissow et al., 2007).

**Data from agency supporting the need for the project.** The target organization for this project was a primary care office, Office X in Northwest Indiana which is a branch of a larger health care system, XX Health Care System. The primary care office was located in an upper-middle-class community. The community's racial and ethnic makeup was 83% white, 9% Hispanic, 4% black, and 3% Asian, with most residents having access to health insurance (City Data, 2014). The average resident was reported to be 43 years old with an estimated median household income of \$76,261 (City Data, 2014).

The average patient age seen in this primary care office was 54 years old, and the majority of the patients was female. The practice providers consisted of three full-

time physicians and two full-time nurse practitioners. Two physicians saw only adult patients, while the third physician saw both adult and pediatric patients. All physicians were certified in internal medicine. One nurse practitioner was certified as an adult nurse practitioner, who saw only adult patients. The second nurse practitioner, the EBP project manager, was certified as a family nurse practitioner; she followed both adult and pediatric patients for health care. The average daily census varied per health care provider and ranged from 10 to 25 patients per provider per day. Sick visits were typically allotted 15-20 minutes, and annual health visits were scheduled for 20-45 minutes. At the time of project implementation, there was no statistical information on AD completion in this office setting. In addition, there was no ACP/AD protocol in place, and there was no known permanent location for ADs on the patient's chart.

Within a meeting established to identify a focus for the doctoral student's EBP project, the collaborative physician reported that the lack of initiation of AD/ACP conversation stemmed from, not only a lack of time to address the issue in the limited office visit, but also a decreased level of providers' comfort in addressing the issue, especially for those who were not considered to be terminally ill. With the lack of provider comfort, the lack of time for counseling, and the inability to bill for office visits focusing on AD/ACP, it was essential to develop a protocol that (a) fit seamlessly within the office schedule and routine and (b) was easy to use, (c) supported patients' autonomy and (d) encouraged AD engagement.

### **Purpose of the EBP project**

The purpose of this EBP project was (a) to increase the providers' and support staff member's level of comfort with AD/ACP discussions through the use of a protocol and (b) to enhance the initiation of a dialogue that focuses on AD/ACP. To accomplish this change, Melnyk and Fineout-Overholt (2011), have noted that the first step of the

EBP process is assessing the clinical problem. The next step is to then develop a clinical question using the PICOT format. The PICOT question identifies the patient population, intervention, comparison, outcome of interest, and time. The PICOT format is a formula to develop an effective clinical question that assists in changing behaviors and answering the clinical question. Utilizing the PICOT format for this EBP project was as follows: For adult primary care office patients age 50 years and older (P), does the implementation of an AD/ACP clinical protocol (I), as compared to current practice (C) enhance staff members' and health care providers' attitudes about AD/ACP and initiate provider engagement in ACP discussion with patients and families (O) over a 3-month period of time (T).

The EBP project incorporated strategies to (a) identify and develop an EBP protocol; (b) educate the office staff regarding best-practice interventions for completing ACP discussions and ADs in the office setting; (c) evaluate staff attitudes on AD pre-education and post AD protocol implementation; (d) implement an AD protocol based on patients' level of readiness; and (f) evaluate the effectiveness and feasibility of the AD protocol.

### **Significance of the project**

The goals of this EBP project were to (a) raise patient and health care provider awareness about AD, and (b) encourage patients and their health care providers to engage in ACP discussions. Ideally, these changes were expected to lead to a future increase in the number of patients who completed ADs within their electronic health care record (EHR). This goal was designed to be achieved by implementing an AD protocol that included both patients and staff in ACP in the office setting. Implementing this EBP protocol was intended to give the patients an active role in their end-of-life decisions and was determined to be an effective strategy in promoting patients' rights and personal

choice. Protecting patients' rights and choices has been rooted to the ethical principle of autonomy. It has been noted that patients can maintain autonomy during times of incapacitated to the end of their life by implementing an AD (Spoelhof & Elliott, 2012). Previously, although AD has not been mandated to the office setting, it has been highly encouraged throughout health care agencies and health care organizations.

When ACP and AD protocols have not been in place, the family have often been left trying to make decisions for the patient, based on what they believe the patient may want. Uncertainty of the patient's wishes has been shown to be emotionally draining and costly to the family (Alano et al., 2010). It has been reported that family members will look to the health care providers for answers, and the health care provider has been limited to making suggestions based on provider clinical judgments, not on patient preferences (Jeong, Higgins & McMillian, 2010). Thus, patients have lost autonomy and their fate has been dependent on others beliefs (Spoelhof & Elliott, 2012).

## CHAPTER 2

### FRAMEWORKS AND REVIEW OF LITERATURE

Chapter two elaborates on the EBP model and theoretical framework utilized to guide this project. This includes the discussion of how the Stetler Model of Research Utilization (Stetler, 2001) and the Transtheoretical Model (TTM) (Prochaska & DiClemente, 1983) related to and supported the PICOT question. The PICOT question for this EBP project was: Does the implementation of advance directive protocol positivity impact staff beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period?

#### **Evidence-Based Framework: Stetler Model**

The Stetler Model has assisted clinicians in implementing research findings at the bedside for a number of years (Stetler, 2001). This model originally named Stetler/Marram Model for Research Utilization was designed to apply the outcomes of research to practice at the provider level (Stetler & Marram, 1976). Revisions to the model began in 1994 and included a name change to the Stetler Model. With subsequent revisions, the Stetler Model has been modified and revised to support the current critical-thinking approach: evidence-based practice care. This leads to today's Stetler Model, which formulates a series of critical-thinking and decision-making steps for facilitating the use of research findings by practitioners. Ciliska et al. (2011) described the Stetler Model as a practitioner-oriented model due to this critical thinking aspect. The model divides EBP into five phases which include (a) preparation, (b) validation, (c) comparative evaluation/decision making, (d) translation/application, and (e) evaluation. In these five phases the practitioner or EBP project leader will be applying research findings by utilizing critical thinking to integrate the evidence into practice (Melnyk & Fineout-Overholt, 2011). The Stetler Model has followed six core assumptions, "(a) the

formal organization may or may not be involved in an individual's use of research or other evidence, (b) use may be instrumental, conceptual and/or symbolic/strategic, (c) the types of evidence and/or non-research-related information are likely to be combined with research findings to facilitate decision making or problem solving, (d) internal or external factors can influence an individual's or group's review and use of evidence, (e) research and evaluation provide probabilistic information, not absolutes, and (f) lack of knowledge and skills pertaining to research use and evidence-informed practice can inhibit appropriate and effective use” (Stetler, 2001, p. 274).

**Phase I: Preparation phase.** In the preparation phase, the EBP project leader identifies a clinical problem or an area for clinical improvement and develops a clinical practice question. Formulating the clinical question into a well-constructed PICOT format will direct the steps of the EBP process. The PICOT question will also guide the exploration of current evidence. In this phase, the EBP project leader clarifies the purpose of existing or potential internal and external factors that may affect the EBP process. Internal factors include the EBP project coordinator's personal objectivity or personal beliefs that can influence outcomes. By reviewing external factors, the clinician can identify areas that may influence the project outcomes. These factors include the goals of the organization, project deadlines, and organizational politics (Stetler, 2001). According to Stetler (2001), in this phase the EBP project leader needs to make conscious critical-thinking decisions on these internal and external factors for objectivity and integrity of the EBP project.

**Phase II: Validation phase.** In Phase II, critique and analysis of the evidence is completed. The project coordinator identifies and records key findings from the literature search. This is completed by rating the level and quality of evidence for inclusion of credible evidence or the elimination of non-credible evidence. Once the key evidence is

found, the project coordinator evaluates common threads and then decides to use for clinical practice or decides against usage in clinical practice. The project coordinator will stop at this phase if no evidence or insufficient evidence is found (Stetler, 2001).

**Phase III: Comparative evaluation/decision making.** In this phase, decision making about the identified evidence occurs. The EBP project leader validates, organizes, and sorts the credible evidence. In addition, during this phase a determination is made concerning applicability of the evidence and the feasibility of its use in a specific practice and health care setting (Stetler, 2001). The EBP project leader assesses the evidence following the four criteria that are the essence of this phase, which include (a) fit of setting; how similar the characteristics of the sample and the environment of the EBP project are to the target population and setting, (b) feasibility; the evaluation of risk factors, resources available, and readiness of others who are involved with the EBP project, (c) current practice; evaluating current practice to desired practice, and (d) substantiating the evidence; evaluating the evidence. At this time, the project coordinator is saturated with evidence and making decisions based on the evidence found. The EBP project leader makes one of four choices in phase III: (a) decide to use the research by putting the findings into appropriate instrumental, conceptual, or symbolic categories, (b) decide to gather additional internal information before applying the evidence, (c) delay using the research since more research is required or more review of the current evidence is necessary or (d) reject or not use the research findings (Stetler, 2001)

**Phase IV: Translation/application.** In this phase, the evidence is applied to a clinical practice setting. This can be a challenging phase since the evidence needs to be synthesized by the project coordinator for application. Once the results of the evidence



are translated, the information can then be applied to the clinical setting. Communication is the key to successful application of the translated evidence in the clinical setting.

**Phase V: Evaluation.** In this phase, the outcomes of the EBP intervention are evaluated. The EBP project leader determines whether the outcomes and goals are met for the EBP project. The EBP project leader must also decide whether they will continue to use or consider use of the evidence practice change for improving quality or outcomes in clinical practice. At this time, the EBP project leader may decide to perform a pilot test on the findings; this will support the feasibility of the results (Stetler, 2001). In this final phase, the EBP project leader also evaluates the costs and benefits of the change.

### **Application of Stetler Model**

According to Ciliska et al. (2011), components of the Stetler Model include research, critical thinking, clinician expertise, and patient preferences which are characteristics of this EBP project. These components made the Stetler Model a good fit for this project, and following the five phases of the Stetler Model guided this AD practice change into practice. This EBP project started with the first phase of the Stetler Model, the PICOT question.

**Preparation phase.** The developed PICOT question for this EBP project was: Does the implementation of advance directive protocol positivity impact staff beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period? Implementation of a protocol was thought to be needed in the target setting. In this phase, a search of the literature was conducted for the most current evidence on AD, and the EBP project leader evaluated any or potential internal and external factors that could influence the outcome for the project.

**Validation phase.** Databases examined for this EBP project included Cochrane Collaboration and Library, Cumulative Index to Nursing and Allied Health Literature

(CINAHL), Joanna Briggs Institute Clinical Online Network of Evidence for Care and Therapeutics (JBI ConNect), MEDLINE via EBSCO, National Guideline Clearinghouse, and ProQuest Nursing & Allied Health Source.

Evidence found was ranked using Melnyk and Fineout-Overholt's (2011) hierarchy of evidence. In addition, the systematic reviews were critiqued using the Critical Appraisal Skills Program (CASP, 2013a), the Joanna Briggs Institute Critical Appraisal Checklist for Descriptive series (Joanna Briggs Institute [JBI], 2011), the CASP: Making Sense of Evidence (CASP, 2013b), and expert opinion protocols/clinical practice guidelines were critiqued using the Joanna Briggs Institute Critical Appraisal on Expert Opinion (JBI, 2008).

**Comparative evaluation/decision making.** In phase three, the evidence was organized in a logical sequence and the decision was made regarding what evidence was most appropriate to use in this EBP project. The evidence was ranked according to strength with the most desirable being the highest-level, most credible, and most applicable. After the project leader validated, organized, and appraised the evidence from the validation phase, and she found the evidence applicable and feasible for the target site population of Office X. Then any potential risks to the patients and organization were reviewed, staff readiness were assessed, as well as resources available for this EBP project. It was agreed by the EBP project leader, office manager, collaborating physician, and the Clinical Director that a practice change was necessary and the EBP project was supported. Thus, the EBP project leader translated the evidence and developed an AD protocol for effective completion of AD for Office X.

**Translation/application.** During this phase, the EBP project leader determined the type, method, and level of use of an operational evidence-based change. Findings were converted into effective interventions for ADs and the process for application

through an office-based protocol was created. For primary care AD, the EBP project leader used an existing-practice policy recommendation and developed a protocol for office-based advance directives for the Office X's target population. The EBP project leader assessed all the steps of the AD protocol and translated it into practice: starting when the patient approaches the front desk for their annual health visits and continuing through when the AD document is scanned into the computer.

**Evaluation.** Within the final phase, the EBP project leader evaluated the outcome, goals, and cost of the EBP project. It was vital to determine whether the specific goals were accomplished and whether the change was effectively integrated into practice. For this EBP project, the staff was given the tool, A Brief Survey about Attitudes Related to ADs, and the results of the pretest and posttest were evaluated. In addition, the EBP project leader evaluated the degree of health care provider engagement in ACP discussions, comparing the percentage of patients who were engaged in ACP discussions to the total of office patients, who met inclusive criteria during the project's 3-month time period.

### **Strengths and Limitations of Model**

This project coordinator identified several strengths of the Stetler Model. A strength was the model's ability to use current clinical evidence in order to create a practice change within organizations (Stetler, 2001). Ciliska et al. (2011) described the Stetler Model as a "practitioner-oriented model" due to its critical-thinking aspect. This practitioner orientation supported the EBP project leader's flexibility in decision-making for the EBP, promoting autonomy and allowing the evidence to guide her through the EBP process.

Although the Stetler Model has been an appropriate tool for the APN to use evidence to create formal change within organizations, there are limitations to its use.

Novice practitioners may find the Stetler Model difficult to navigate, since the model appears to be targeted at those who are skilled in research utilization. Furthermore, the model requires critical thinking abilities and decision-making skills by the practitioner who is applying the relevant evidence to practice.

When comparing strengths and limitations, the DNP student, EBP project leader, found the model's aspects practitioner-oriented critical thinking and decision making to be the best fit for AD protocol.

### **Theoretical Framework: Transtheoretical Model of Behavioral Change**

The TTM is a "biopsychosocial model" that conceptualizes the process of intentional behavior change (Prochaska & DiClemente, 1983; University of Maryland Baltimore County, 2014). The TTM is a framework that can be used to determine patient readiness to change behaviors and can be applied to a variety of behaviors, populations, and settings. Prochaska and DiClemente (1983) originally developed the TTM as a self-change model in conjunction with smoking cessation (Abrams et al., 2000). However, the TTM has been used for a variety of health behavior conditions such as, obesity, alcoholism and drug use, that requiring behavioral changes. These behavioral changes can be modified through a cessation of high-risk behaviors while introducing healthier alternatives. According to Prochaska and DiClemente (1983), the TTM examines how people modified a problem behavior, smoking, and acquired a positive health behavior, not smoking, as they passed through a series of stages focusing on interventions. Interventions are specific to the patient's stage of change, and the patient makes decisions based on identified interventions to change the behavior.

According to Prochaska and Velicer (1997), to drive the TTM theory, research, and practice there are seven critical assumptions. These critical assumptions are (a) no single theory can account for all the complexities of behavior change, (b) behavior

change is a process that unfolds over time through a sequence of changes, (c) stages are both stable and open to change just as behavioral risk factors are both stable and open to change, (d) without planned interventions, individuals will remain stuck in the early stages, without inherent motivation to progress, (e) the majority of at-risk populations are not prepared for action and necessary to introducing individuals to change through action steps, (f) specific processes and principles of change need to be applied at specific stages if progress is to occur, and (g) chronic behavior patterns is usually a combination of biological, social and self-control, that requires stage-matched interventions to promote self-control.

The TTM also includes key constructs of (a) stages of change, (b) processes of change, (c) decisional balance, (d) self-efficacy, and (e) temptation. This model focuses on progression through five stages of change: pre-contemplation, contemplation, preparation, action, and maintenance. Each stage of the change process is related to specific tasks that the individual has to accomplish in order to progress to the next stage of the behavioral change (Stetler, 2001). An individual will go through cognitive and behavioral processes of change that have been identified as necessary for the movement through the stages. As an individual processes the change, they will make a decisional balance by weighting the pros and cons for their wanted change. This key construct of decisional balance is a critical time in the stages of change pathway. Since, self-efficacy/temptation reflects the amount of self-confidence an individual has to maintain his or her desired behavioral change in situations that can often trigger relapse (Stetler, 2001). It is critical to identify that patients do not always move through these stages of change in a linear manner, since they often recycle and repeat a certain stage. Their relapse of going back to an earlier stage may be dependent on their level of

motivation and self-efficacy. These changes occur over time and involve the multiple stages to change behavior.

According to Rizzo et al. (2010), health care providers tend to avoid ACP discussions with patients, and the TTM may be able to assist with this avoidance behavior. This avoidance behavior may stem from feeling unprepared to conduct these discussions based on the professionals' personal discomfort and/or lack of appropriate professional training. Patients may also want to avoid discussions about AD because of a lack understanding about their conditions/illnesses, an attempt to conceal their concerns, or a lack of readiness (Rizzo et al., 2010).

The TTM provides a useful framework for considering ACP as a process of behavior change (Fried et al., 2009). According to Westley and Briggs (2004), the TTM can be used to guide the ACP discussions by providing information and support depending on what TTM stage the patient is currently in. This EBP project will also utilize this concept of following behavioral stage identification to guide the provider in an AD discussion and base interventions on the patient's TTM stage.

**Pre-contemplation.** Individuals in the pre-contemplation stage are not thinking about or intending to change a problem behavior or initiate a healthy behavior in the near future, usually quantified as the next six months (Prochaska et al., 1997). According to Westley and Briggs (2004), the goal of this phase is for the patient to initially think about participating in ACP to the extent his/her culture allows, begin to ask questions, and/or identify a surrogate decision maker. In this stage, written information that includes resources for AD assistance including web sites can be provided for patient review (Westley & Briggs, 2004). The goal of this phase is for the health care provider to introduce the topic patients and provide the resources so that the patient can consider making a behavioral change.

**Contemplation.** Patients in this phase are considering changing their behavior within the next six months (Prochaska et al., 1997). In this stage, the patient has not participated in any discussions or planning for future AD, but he or she has thought about the topic. According to Westley and Briggs (2004), the patient will begin to examine the various aspects of AD and receive assistance with ACP. Westley and Briggs noted that within this phase the health care provider will clarify any misconceptions that may arise by answering questions and providing information. Westley and Briggs emphasized the need for the health care provider to explain to the patient the difference between a living will and a financial will, as well as the role of an agent with medical power of attorney. In addition, the provider can explore patients' concerns and fears about ADs. In this stage, the patient may be aware of both the pros and cons of ACP, but may have barriers to action that needed to explore these feelings (Westley & Briggs, 2004).

**Preparation.** Within the preparation stage of the TTM, the individual is actively considering changing his or her behavior in the immediate future, usually within the next thirty days (Prochaska et al., 1997). This stage was originally called the decision-making stage, in which the patient prepares for a plan of action, but may not be entirely committed to their plan (Fried et al, 2010). The person can engage in ACP discussion with a facilitator, loved ones, a chosen surrogate, and/or health care providers in this stage (Westley & Briggs, 2004). Westley and Briggs (2004) recommends that the patient should get a specific plan to take home to discuss with loved ones. According to Rizzo et al., (2010) in this phase the patient may assign a health care proxy, knowing that the health care proxy understands the patient's individual wishes for ACP.

**Action.** The individual has actually made the behavior change in the recent past, usually made six months or less in the past; however, the change is not well established

(Prochaska & Velicer, 1997). According to Westley and Briggs (2004), patients will complete plans that meet their individual goals in relationship to their values and beliefs. Rizzo et al. (2010) write that once a patient decides to proceed with ACP, there is a shared responsibility between clinicians and clients. Clinicians have to assess the client's anxiety or fear about these topics and be willing to discuss these fears. Patients should be reminded that they can open and close these discussions and have the control of their future on end-of-life decisions (Rizzo et al., 2010).

**Maintenance.** The maintenance stage is a continuation of the action stage for six or more months (Prochaska & Velicer, 1997). The patients have completed their AD and they feel comfortable with the ACP. The individuals have made their ACP clear by having discussions with all appropriate parties, and reviewing/updating the plan as needed (Westley & Briggs, 2004). Fried et al. (2010) indicated that as the patient moves through this stage, the patient's new behavior becomes more routine, and relapse potential is lower in this stage than in the previous stages. For the ACP, the TTM stages of change end with this stage.

### **Strengths and Weakness of the TTM**

The TTM provided a useful and practical way for the health care provider to organize individualized patient interventions based on the stages of change. Once the patient's stage of change or readiness is identified, the health care provider can guide the patient through planned interventions to facilitate change on AD documentation. Fried et al. (2010) developed a tool to assess stage of change for ACP based on the TTM for health care providers to utilize. When the health care provider follows this tool they are able to assess their patient's level of readiness for ACP discussions and provided ACP interventions based on their readiness. The TTM is that it has proven to be effective in implementing behavior change through education for over thirty years.



Evidence supports positive outcomes for AD with the incorporation of TTM. Limitations to the TTM may be observed with certain patients' cultural beliefs and the health care provider's lack of understanding of their beliefs (Searight & Gafford, 2005). These patients may progress slowly through the model and may need specific interventions based on their cultural beliefs.

### **Literature Search**

After the preparation phase, the next step of the Stetler Model (2001) is the validation phase. Within this validation phase, a process of assessing, critiquing, and summarizing evidence occurs. Therefore, a comprehensive search of the literature was performed to determine evidence relevant to effective interventions aimed at answering the PICOT project question.

**Search engines and key words.** Database sources examined included Cochrane Collaboration and Library, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Joanna Briggs Institute Clinical Online Network of Evidence for Care and Therapeutics (JBI ConNect), MEDLINE via EBSCO, National Guideline Clearinghouse, and ProQuest Nursing & Allied Health Source. All databases were searched using the MeSH (medical subject heading terms) system to narrow down appropriate keywords for searches. Key words in the search included "advance care planning", or "advance directive" and "office practice", or "primary care setting" and "staff attitudes", or "health care professionals attitudes" and "communication" and "stages". Search results included systematic reviews, meta-analyses, trial intervention studies, qualitative/descriptive studies, and expert opinions. Through citation chasing, a hand search of Scandinavian Journal of Primary Health Care identified one systematic review of qualitative and cross sectional studies. All searches were evaluated using the following inclusion and exclusion criteria.

**Inclusion and exclusion criteria.** References were included if they were (a) in the English language, (b) focused on an adult population of eighteen years or older, (c) peer-reviewed, and (d) published after 2004. References excluded were those that address advance directives for patients in the long-term setting or addressed specific disease patient populations. Ten articles were extracted using the inclusion and exclusion criteria (see Table 2.1, Summary of Search Terms).

Table 2.1 *Summary of Search Terms*

Keywords	CINAHL	Cochrane	JBI	MEDLINE	National Clearinghouse Guideline	ProQuest	Hand Search
"advance care planning" or "advance directive" and "office practice" or "primary care setting" and "staff attitudes" or "health care professionals attitudes" and "communication" and "stages".	17	2	1	146	2	1981	3
Inclusion Criteria a) in English language, (b) focused on adult population of eighteen years and older, (c) peer-reviewed, and (d) published after 2004. Exclusion Criteria a) patients in a long term setting b) addressed specific disease patient populations.	4	0	0	3	0	0	3
Total	4	0	0	3	0	0	3

A comprehensive search of the CINAHL database using a combination of search terms resulted in the location of four pieces of evidence to support this EBP project. A CINAHL search using the MeSH keywords "advance care planning", or "advance directive" and "office practice", or "primary care setting" yielded five references with two meeting the inclusion and exclusion criteria. One was an observational cohort study (Fried et al., 2010) and one was ranked as expert opinion (Spoelhof & Elloitt, 2012). A CINAHL search using the MeSH keywords "advance care planning", or "advance directive" and "staff attitudes", or "health care professionals' attitudes" yielded two articles; one article, a descriptive study (Bergman-Evans, Kuhnel, & Myers, 2008) met the inclusion and exclusion criteria and was selected for quality appraisal. Searching CINAHL using the keywords "advance care planning", or "advance directive" and "communication" and "stages" yielded 10 articles, but only one met inclusion and exclusion criteria, an expert opinion (Westley & Briggs, 2004).

A comprehensive search of the MEDLINE database using a combination of search terms resulted in the location of three pieces of evidence to support this EBP project. A MEDLINE search for "advance care planning", or "advance directive" and "staff attitudes", or "health care professional's attitudes" yielded five studies. One descriptive study was selected (Sudore et al., 2008). Using the MeSH keywords "advance care planning", or "advance directive" and "office practice", or "primary care setting" yielded 102 references, from which one systematic review using randomized studies was selected (Durbin, Fish, Bachman & Smith, 2010). Using the MeSH keywords "advance care planning", or "advance directive" and "systematic review" yielded 39 references with one random control trial systematic review selected (Tamayo-Velazquez et al., 2009). All of MEDLINE references met the inclusion and exclusion criteria prior to selection.

To ensure the search was exhausted additional keywords “do not resuscitate”, “staff feelings” and “outpatient”, were used without additional findings. Cochrane Collaboration and Library, JBI ConNect, National Guideline Clearinghouse, and Proquest did not yield any references that met the inclusion criteria; therefore, it was not possible to extract any references from these databases.

Conducting a hand search through citation chasing resulted in the obtainment of one systematic review of qualitative and cross-sectional studies that met the criteria (De Vleminck et al., 2013). A hand search of current Indiana state AD guidelines yielded one practice guideline, which fit into the hierarchy ranking of expert opinion (ISDH, 2014). In addition, an AD practice guideline, ranking as expert opinion, from the target organization was also identified (XX Health Care System, 2013). Ten references were selected to be included in the final review of literature.

**Levels of evidence.** The references identified for inclusion were rated based on Melnyk and Fineout-Overholt (2011) hierarchy of evidence. The rating system starts at Level I, considered the best evidence and goes down to Level VII. The Level I evidence is from systematic reviews or meta-analyses of appropriate RCT’s or from evidence-based practice guidelines. Level II evidence is generated from well-designed RCT’s, while Level III evidence is from controlled trials without randomization. Level IV evidence is from case control and cohort studies that are well-designed. Level V includes systematic reviews of qualitative and descriptive studies and Level VI evidence is generated from single qualitative or descriptive research. Finally, considered the weakest level of evidence, Level VII, comes from expert opinions or expert committees (Melnyk and Fineout-Overholt, 2011).

The first reference is an observational cohort design study Level IV (Fried et al., 2010). Following the hierarchy of evidence pyramid, there are three systematic reviews,

two are from RCT and nonrandomized control trials and one from qualitative and cross sectional studies was at Level V (De Vleminck et al., 2013; Durbin et al, 2010; Tamayo-Velazquez et al., 2008). There are two Level VI references that were extracted, one qualitative study and one descriptive study (Bergman-Evans et al., 2008; Sudore et al., 2008). Four expert opinion references Level VII were also selected from the search (ISDH, 2014; Spoelhof & Elliott, 2012; Westley & Briggs, 2004; and XX Health Care System. 2013). There were no Level I - Level III studies obtained to be used for this project. (see Table 2.2, Levels of Evidence).

**Appraise the Evidence.** Several appraisal tools were used to evaluate the evidence. The systematic reviews were evaluated using the Critical Appraisal Skills Programme (CASP, 2013a): Systematic Review Checklist (CASP:SRC). The CASP tool uses a ten-question questionnaire that focuses on three main areas: (a) the validity of the results, (b) what are the results, and (c) can the results help locally. The JBI Critical Appraisal: Checklist for Descriptive Studies (JBI:CDS) series (Joanna Briggs Institute, 2008) was used to appraise the descriptive studies. This nine question appraisal tool assesses the sample, time period, and reliable measurable outcomes. The CASP: Making Sense of Evidence (CASP: MSE) appraised the cohort reference and consisted of twelve questions that assessed the reference validity, results and if the results would be beneficial to a local setting (CASP, 2013b). The expert opinion was evaluated using the JBI Critical Appraisal: Expert Opinion (JBI: CAEO). It consists of a seven-item questionnaire on the expert's qualifications, sources and argument (JBI, 2008).

**Table 2.2**

## Levels of Evidence

<b>Author(s), Publication, Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
Bergman-Evans et al., (2008) Level VI	Convenience sample of 412 members of the "Improving End-of-life care Committee" in a large health care system in a Midwestern city.	Descriptive Design A total of 650 surveys were distributed with a return rate of 63.38%. Measured by, "A Brief Survey about Staff Attitudes Related to Advanced Directives".	<p>"A Brief Survey About Staff Attitudes Related to Advanced Directives" was a reliable way to measure staff attitudes and comfort with AD.</p> <p>72.57% rated AD as fairly useful to very useful while 4.8% rated them as of minimal usefulness.</p> <p>58% found AD were followed when making decisions about a patient's/client's care, 9.4% noted that AD was rarely used.</p> <p>Challenges to AD; lack of comfort on AD discussions and health care providers needed to find a way to improve AD engagement.</p> <p>Patient AD was not followed due to: 40% rated, AD existed but was not on the chart.</p> <p>25% rated, AD relevance was unclear to the current condition.</p> <p>63% rated, Participants found family conflict with <i>expressed</i> wishes was the leading reason that AD were not followed.</p> <p>50% of the staff believed the annual/routine checkup was the correct time to engage in AD.</p>

<b>Author(s), Publication. Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
De Vleminck et al. (2013). Level V	<p>Scandinavian authors evaluated primary qualitative and quantitative research from USA, UK, Netherlands, Australian, Belgium, Canadian, Singapore and Israeli references on factors reported by general practitioners that hindered or encouraged engagement.</p> <p>No participants were singled out or identified based on age, illness, or setting for article extraction but based on (a) primary research, (b) on barriers and facilitators, (c) on general practitioners, and (d) on patient involvement in ACP. This extraction followed inclusion criteria of (a) primary research of qualitative and quantitative research, (b) predisposing factors reported by general practitioner that hinder or encourage engagement as skills, beliefs and experiences, (c) reports from health care providers, (d) voluntary process of ACP made by patient prior from being incapable of decision.</p>	<p>Systematic review of 9 qualitative and 7 cross sectional studies from 1990-2011. A total of 16 references were selected that met initial inclusion criteria however; one reference was excluded due to a low quality rating.</p> <p>Of the 9 qualitative studies, 6 studies used semi-structured interviews and three studies used both interviews and focus groups. Data for the quantitative studies were collected through questionnaires.</p> <p>Evidence was rated as high quality, medium quality or low quality. No statistical analyses.</p>	<p>Strong evidence suggests health care providers perceived their own lack of skill in dealing with patients' vague requests with ACP. Strong evidence suggests health care providers have a difficult time defining the right moment for initiating discussion as barriers to engaging in ACP.</p> <p>In 7 of the studies reviewed, patients believed it was the physician's responsibility to initiate ACP.</p> <p>The lack of financing for ACP, contributes to the lack of success with AD completion rates.</p>



Author(s), Publication. Level of Evidence	Population, Setting	Design, Intervention(s), Comparisons	Outcomes and Effect Measures
<p>Durbin et al., (2010) Level V</p>	<p>Sample size in the randomized studies ranged from 137 to 912. Participants in these studies ranged in age from 26 to 93 years.</p> <p>One study was community based; other studies were inpatient or outpatient hospital based.</p>	<p>Systematic review of 12 randomized and 4 nonrandomized control trial studies 1991-2009, based on Cochrane review criteria.</p> <p>Focused on the effectiveness of interventions by (a) types of educational interventions versus controls, in which 8 references were extracted, and (b) combined educational interventions over single educational interventions, in which 4 references were identified.</p>	<p>Within RCTs, computer-based educational interventions alone, 1 study produced no increase in AD completion rates 0.9% vs. control 1.2%</p> <p>Combined written and verbal educational interventions were consistently higher in AD completion rates in 4 of 6 RCTs</p> <p>Combined written patient reminders and computer-based provider reminders were more effective 13.7% AD completion rate than no intervention 1.7% completion rate.</p> <p>In the 4 RCTs evaluating single vs. combined interventions, differences between single and multiple interventions varied from 13.9% to 36%, with <i>p</i> values ranging from &lt;.001 to .04.</p>

<b>Author(s), Publication. Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
Fried et al., (2010), Level IV	200 English speaking, cognitively intact participants' age $\geq$ 65 recruited from 2 primary care practices and 1 senior center.	<p>Observational Cohort Developed stages of change measures for ACP. Measured patient readiness to engage in ACP stages of change.</p> <p>Included measures of socio- demographic status, self- evaluation of health status, past ACP, and knowledge regarding AD.</p> <p>AD algorithm based on the TTM allowed health care providers to identify patient readiness.</p>	<p>Data supported the use of the TTM for ACP.</p> <p>26% were in the pre-contemplation stage, (b) 18% were in the contemplation stage, (c) 5% were in the preparation stage, and (d) 51% were in the action or maintenance phase of will preparation.</p> <p>36% were in the pre-contemplation stage, (b) 20% were in the contemplation stage, (c) 9% were in the preparation stage, and (d) 34% were in the action or maintenance phase for completing a health care proxy.</p>

Author(s), Publication. Level of Evidence	Population, Setting	Design, Intervention(s), Comparisons	Outcomes and Effect Measures
Indiana State Department of Health, (2014). Level VII	Indiana residents, 18 years and older	Expert opinion  AD guidelines for Indiana State residents for the development of their AD.	Current Indiana State care practice guidelines for completing AD.
Spoelhof & Elliott, (2012). Level VII	Examined references based on health care provider barriers and patient barriers	Expert opinion by G. David Spoelhof a physician at St. Luke's Hospital in Duluth, MN, who specializes in quality of life issues and an adjunct clinical associate professor and Barbara Elliott, is a PhD at the U of M Med School in Duluth, who teaches ethics, the health issues in health care.  The authors examined barriers to completion and implementation of ADs, provide suggested approaches for including AD in primary care.	The authors proposed initiating ACP discussions at between the ages 50-65 during the patient's routine checkup.  Readdressing discussion at subsequent health maintenance visits, when chronic progressive illnesses arise, and at the onset of frailty or need for long-term care was recommended.  Barriers for health care providers/health care organizations: <ul style="list-style-type: none"> <li>• Lack of time and reimbursement.</li> <li>• Uncomfortable with the topic and prefer to wait for the patient to raise the issue on AD.</li> </ul> Patient barriers: <ul style="list-style-type: none"> <li>• Patient lack of interest or knowledge on AD.</li> <li>• Patients fear burdening family or friends, even though an advance directive can relieve family of the uncertainty about care preferences.</li> </ul>

<b>Author(s), Publication. Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
<p>Sudore et al., (2008). Level VI</p>	<p>Convenience sample of 205 subjects that enrolled from the General Medicine Clinic at San Francisco General Hospital.</p> <p>Participants were offered twenty dollars for participation and met the inclusion criteria (a) aged 50 and older, (b) having a primary care physician, and (c) self-reporting fluency in English or Spanish.</p> <p>They were excluded if they met the exclusion criteria of (a) participants who were deaf, delirious, or diagnosed with dementia (as determined by subjects' clinicians) and whose measured visual acuity was less than 20/100 (as determined by study staff) were excluded.</p>	<p>Design, Intervention(s), Comparisons Descriptive Design</p> <p>Examined the behavior change model TTM for patients to identify, communicate, and document their wishes for end-of-life treatment and care or the ACP process.</p>	<p>ACP evolves steps and interventions that include the stages of change and found that most participants reported they were (a) contemplating ACP 61%, (b) discussing ACP with their family or friends 56%, (c) discussing ACP with their physicians 22%, and (d) documenting their ACP wishes in an advance directive was 13%.</p> <p>This is strong evidence to suggest that even in the contemplation phase AD education is useful and that supplying education both written and verbal will encourage the patient to engage in the ACP process, with 13% of the participants being in the action/maintenance phase and possibly more progressing to the preparation phase.</p> <p>The authors noted that this study suggests consideration should be given to shaping and expanding the paradigm of ACP in clinical practice, by following a policy to include all steps of the ACP process, would be beneficial to patients and health care providers.</p>

<b>Author(s), Publication. Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
<p>Tamayo-Velazquez et al., (2010). Level V</p>	<p>Inclusion Criteria: SRLs wherein at least one of the objectives was to review the effectiveness of interventions to promote the use of ADs.</p>	<p>Systematic review of RCT and nonrandomized control trials.</p>	<p>Evidence supported the use of interactive informative, such as ACP discussion along with written material to increased AD completion rates.</p> <p>The most effective method of educating patients is seen by multiple office visits with direct discuss between patients and health care providers.</p> <p>Systematic reviews that conducted meta-analysis provided statistical data significant to this EBP project.</p> <ul style="list-style-type: none"> <li>• Patel et al., (2004) concluded that AD completion rates increased when patients has interaction with direct counseling, significantly with <math>p = 0.005</math>.</li> <li>• Ramsaroop et al., (2007) found in one study when health care providers spent 3-5 minutes discussing AD with patients alone achieved a completion rate of 44% but concluded that direct verbal interaction with multiple visits increased AD completion rates.</li> </ul>

<b>Author(s), Publication. Level of Evidence</b>	<b>Population, Setting</b>	<b>Design, Intervention(s), Comparisons</b>	<b>Outcomes and Effect Measures</b>
Westley et al., Level VII (2004)	Behavior change of patients on ACP discussions for AD completion.	<p>In this expert opinion, the authors examined ACP and summarized the information from personnel experience, workshops and a literature review.</p> <p>The purpose of this article is to provide a rationale for health care providers to incorporate the principles of a behavior-change model to develop meaningful patient centered discussions for adult patients who are capable of making and communicating and making reasonable decision.</p>	<p>Authors used the TTM Model to enhance the ACP process between patients and health care providers, by developing workable interventions and provide strategies on how to approach the patient in the stages of change.</p> <p>When health care providers identified the stage in which the patient is at the patient will be able to engage in ACP process based on their level on readiness and the health care provider can provide interventions based on this readiness.</p> <p>Health care providers should engage in ACP discussions while patient were healthy.</p>
XX Health Care (2013), Level VII	Patients of target organization and their Health care providers	Expert opinion on target organization AD policy guidelines for staff to follow for patient AD.	Current target organization policy for advance directives.

**Level IV.** Fried et al. (2010) performed an observational cohort study that examined the application of health behavior models to ACP process. The authors accomplished this by having trained research assistants' interview the study participants. The trained research assistants asked the participants, in person, a series of questions about their experiences and knowledge with ACP. The authors then analyzed these patient transcripts using grounded theory. In addition to the items measuring ACP behaviors, the interview included measures of socio-demographic status, self-evaluation of health status, past ACP, and knowledge regarding advance directives. The objective of this study was to develop stages of change measures for ACP and to provide new insights into how patients can be assisted to clarify and communicate their end-of-life wishes based on their readiness to engage in ACP. The participants were patients aged 65 years and older who were recruited from two primary care practices and one senior center. Participants were excluded if they were (a) non-English speaking, (b) hard of hearing, or (c) cognitive impairment. No inclusion criteria were noted by this reader, 200 participants were included within the demographic tables.

Fried et al. (2010) introduced an AD algorithm which developed a stage of change measure and explored ACP as a health behavior. Participants were asked if they had, or had thought about developing, a living will or assigned a health care proxy. The AD algorithm categorized the participants based on how they answered the questions on ACP. The authors found they could stage patients' readiness for participation and provide interventions that were most suitable for patients based on their level of change stage. The participants' stage of change varied regarding living will development: 26% were in the pre-contemplation stage, (b) 18% were in the contemplation stage, (c) 5% were in the preparation stage and (d) 51% were in the action or maintenance phase. Fried et al. also found that the participants were at various stages of change for

completing a health care proxy: (a) 36% were in the pre-contemplation stage, (b) 20% were in the contemplation stage, (c) 9% were in the preparation stage, and (d) 34% were in the action or maintenance phase. Using the stage of preparation information, the authors developed an effective AD algorithm that would allow health care providers to identify appropriate AD interventions based on the patients' identified level or stage of change. Fried et al.'s instrument development was particularly important for the designed EBP project. The tool allowed the target organization health care providers to identify their patient's level of readiness and proceed with interventions based on that level of readiness.

The CASP: Making Sense of Evidence (CASP, 2013b) was utilized to appraise this cohort study. Since the participants were followed over time, a cohort design was appropriate for this study. The authors clearly identified the population studied and a focus issue of identifying the participants' stage of change on an algorithm and correlated interventions based on their stage of change. Recruitment of participants occurred through an acceptable way from physician offices and senior centers, which followed exclusion criteria. No inclusion criterion was noted by this reviewer. The authors did not disclose the timeline over which they conducted this study over, and no confounding factors were noted since the participants behavior of ACP was based on the participant's stage of change. The results were displayed with a specific goal of identifying the participants' stage of change level. This reader found this reference to be of good quality and appropriate for use within this EBP project.

**Level V.** DeVleminick et al. (2013) conducted a systematic review of nine qualitative and seven quantitative references, which were of cross sectional design, exploring barriers that hinder general practitioners from initiating ACP and interventions which encouraged general practitioners to engage in AD with their patients. After



searching PubMed, CINAHL, Embase, and PsycINFO databases for studies published in English, French or Dutch, between the years of 1990 and 2011, a total of 16 articles were identified for inclusion however one reference was excluded due to a low quality rating. The inclusion criteria for the systematic review were “(a) primary research of qualitative and quantitative research, (b) predisposing factors reported by general practitioner that hinder or encourage engagement as skills, beliefs and experiences, (c) reports from health care providers, (d) voluntary process of ACP made by the patient prior from being incapable of making the decision” (DeVleminick et al., 2013, p. 215).

The authors displayed the results as either strong evidence, medium evidence, or low evidence. Focusing on the strong evidence found in this review the authors divided the results on barriers into categories; health care provider characteristics, patient characteristics and health care system characteristics. The authors found “that general practitioners perceive their own lack of skill in dealing with patients’ vague requests and their difficulties in defining the right moment for initiating discussion as barriers to engaging in ACP” (DeVleminick et al., 2013, p. 221). These findings suggested that ACP in primary care may be improved by targeting the health care provider’s skills, attitudes, and beliefs, since the authors also found that the attitude of health care providers’ on initiation of ACP was a barrier to engage in the AD discussions. The authors also found that in seven of the studies that they reviewed, patients believe it is the physician’s responsibility to initiate ACP. This suggests there is an incongruent perception between patients and health care providers, since the findings of this systematic review suggest that health care providers find difficulty in identifying the right moment for initiating patient ACP. Furthermore, a health care provider barrier to ACP discussions was the lack of financing for ACP, which has contributed to the lack of success with AD completion rates.

The CASP Systematic Review Checklist (CASP, 2013a) was used to critically appraise the DeVleminick et al. (2013) publication. DeVleminick et al. clearly addressed a focused question. The patient populations identified in the references were similar to this EBP population and can be duplicated within this EBP project, as well as most primary care settings. The authors made a thorough literature search and included appropriate qualitative and cross sectional references on AD interventions. The authors clearly displayed the results of each reference and their conclusions, and the strength of evidence provided. No benefits or harms were noted to this reviewer but, interestingly, no statistical data was provided for the cross sectional studies. Instead, the authors combined qualitative and quantitative data and the degree of evidence was listed as high, medium, or low.

A strength of this systematic review was that all the chosen articles related to the barriers on advance directives engagement. Weaknesses included the lack of inclusion of RCTs and the lack of transparency of the statistical data analyses used. Another potential weakness is that the authors received a grant from the Flemish government agency for Innovation by Science and Technology. This could be viewed as a potential bias. Based on these weaknesses, the reference was rated as fair quality, but still appropriate for this EBP project.

Durbin et al. (2010) performed a systematic review of literature based on Cochrane review criteria, and searched databases published from 1991 to 2009. The search utilized the key words “advance directive,” “health care decision making,” and “end-of-life.” The authors searched CINAHL, EBSCO, Medline, and Science Direct using the following inclusion criteria references: (a) all reference were in nursing, medicine, or social work, (b) written in English, (c) followed with educational intervention, (d) had an outcome variable,(e) all AD included were living wills and health care proxies, and (f)

subjects lived in the United States or Canada. This yielded twelve randomized studies and four nonrandomized studies that met the criteria. The purpose of this systematic review was to focus on the effectiveness of interventions, broken down into two groups (a) educational interventions versus controls, and (b) combined educational interventions as compared to single educational interventions.

The statistical results of single versus multiple interventions for completing AD results were displayed in the form of tables. Eleven studies included multiple interventions (i.e., written instruction, verbal discussion, watching a video tape on AD, and an intervention on computer) to remind physicians to discuss AD with their patients prior to the patient visit. Five studies used a single intervention which included written, verbal, or video educational intervention. Durbin et al. (2010) found that (a) computer-based educational interventions alone produced no increase in AD completion rates (0.9% vs. control 1.2%); (b) combined written and verbal educational interventions were consistently higher in AD completion rates in 4 of 6 RCTs; and (c) combined written patient reminders and computer-based provider reminders were more effective (13.7% AD completion rate) than no intervention (1.7% completion rate). In the 4 RCTs evaluating single vs. combined interventions, differences between single and multiple interventions varied from 13.9% to 36%, with *p* values ranging from <.001 to .04. The authors noted there was some inconsistency regarding all types of educational interventions implemented versus controls in the nonrandomized control group, which could account for the reported minimal results in that group. Interestingly, the evidence supported the use of interactive informative, such as ACP discussion along with written material to increased AD completion rates. The most effective method of educating patients was seen with multiple office visits with direct discussion between patients and health care providers. Overall, the authors found that combined written, verbal, and

video educational interventions were significantly ( $p < .05$ ) more effective than a single written intervention for completing AD in the office setting. Durbin et al.'s (2010) findings supported the multifaceted approach utilized in this EBP project.

The CASP Systematic Review Checklist (CASP, 2013a) was used to evaluate Durbin et al.'s (2010) systematic review. The authors clearly addressed a focused question of whether systematically analysis of the evidence about the outcome and percent of newly completed AD was affected by the types of educational interventions, and if one educational intervention versus multiple inventions made a difference with AD outcomes. The patient populations included in this reference were similar to the EBP project population, and the conclusions could be applied to most primary care settings. The authors completed a systematic search and included appropriate references on AD intervention by authors who had written multiple articles on AD. The authors clearly displayed the intervention of each reference and their conclusions through statistical data. No benefits or harms were apparent to this reviewer.

A strength of this systematic review was that the review of literature was based on Cochrane review criteria. Another strength was statistical data were provided in an easily readable table; the data provided the results of multiple interventions. A potential weakness to this reference was the inconsistencies between the RCT results and the nonrandomized control trials results. Nonetheless, this reference was determined to be of good quality and appropriate for this EBP project. Of particular importance was the researchers' findings of the effectiveness of combined educational interventions.

Tamayo-Velazquez et al. (2010) performed a narrative review of systematic reviews examining interventions to improve AD completion. Search strategies were taken in two steps employing Cochrane methodology. Multiple data bases were searched included nine databases in English; three non-English, multilingual databases;

and three grey literature databases. An initial search of these databases was conducted using the search terms while following strict inclusion criteria. No exclusion criteria were noted in the reference. The authors accessed English, Spanish, Latin America, and Caribbean databases, while searching for published and non-published studies. Five systematic reviews followed both the inclusion and exclusion criteria. However, two additional systematic reviews were found by checking the reference lists. These reviews met the inclusion and exclusion criteria; thus, a total of seven references were selected. The selection of data was extracted by two review authors independently assessing the search results to identify relevant studies. Once this data was extracted and retrieved, it was reviewed by two additional authors. Discrepancies on the data were handled through discussion, and then a consensus was reached based on the objective of this systematic review, examining the effectiveness of interventions designed to increase the completion rates of ADs.

Results of each systematic review were displayed in the form of tables. These findings included interventions and conclusion of the results, with the statistical data provided only for those systematic reviews that conducted a meta-analysis. Two of these systematic reviews provided statistical data consistent with Tamayo-Velazquez et al, (2010), and were significant for this EBP project. Patel et al. (2004) concluded that AD completion rates significantly increased when patients had interaction with direct counseling ( $p = 0.005$ ). Ramsaroop et al. (2007) found that health care providers who spent 3-5 minutes discussing AD with patients achieved a completion rate of 44%. But the researchers also concluded that direct verbal interaction with multiple visits increased AD completion rates. Tamayo-Velazquez et al. (2010) presented the results of their review as a bottom line description: the evidence suggested use of “passive leave educational information” such as, posters, leaflets or videos alone, did not significantly

increase AD completion rates (p. 1122). However, Tamayo-Velazquez et al. opined that when interactive educational interventions were utilized, patient AD completion rate increased. Additionally, the authors determined that the majority of studies reviewed found that multiple educational sessions for AD were the most effective method for direct AD discussion between patients and health care providers. Tamayo-Velazquez et al. concluded that the effectiveness of AD completion strategies interactions is increased when patients were (a) provided the opportunity to interact with an individual they identified as an expert and (b) afforded access to an individual who would answer questions and offer assistance in completing the AD.

Using the CASP Systematic Review Checklist (CASP, 2013a), it was noted that the authors clearly addressed a focused question. The patient populations seen in the references were similar to the EBP population and findings could be generalized to the EBP project, as well to most primary care settings. The authors made a thorough search of the data and appropriate references on AD interventions that included several systematic reviews of the literature and RCTs, as well as interventional, observational, and prospective studies. Results were similar between the studies reviewed; the researchers followed a path of multiple educational interventions (e.g., written material and one-on-one discussion aided in positive outcomes on completion rates in the primary care office setting). This enhanced the rigor of this systematic review. As noted, the authors clearly displayed the results of each reference and their conclusions, although statistical data were limited to reporting results from individual meta-analyses and no additional statistical analyses were conducted by the authors. No benefits or harms were noted by the authors, and none were apparent to this reviewer.

A strength of this reference was that the studies included within the literature for this review were systematic reviews, primarily of RCTs. The selected references

supported the interventions and suggested that the most positive results were found when written and verbal discussions for AD completion were conducted over more than one visit. Another strength of this reference was the currency of evidence; six of the seven systematic reviews were published less than 4 years ago. A weakness for this reference would be that the authors were not able to conduct their own statistical analysis of the data reviewed. Still, this reference was determined to be of good quality and appropriate for this EBP project. The multiple educational sessions supported the intervention designed for this EBP project.

**Level VI.** Bergman-Evans et al. (2008) conducted a descriptive study was to explore staff attitudes related to advance directives. Study participants were members of the “Improving End-of-life care Committee” in a large Midwestern health care system and included nurses, physicians, pastoral care, social work, respiratory/occupational/physical therapy, and dietary workers. The authors obtained IRB permission prior to the start of the project and distributed a survey entitled “Brief Survey about Staff Attitudes Related to Advanced Directives” (BSAS). A total of 650 surveys were distributed with a return rate of 63.3% (412 surveys). Ten survey questions explored perceptions, knowledge, and experience with end-of-life issues and AD. Data was collected over a 3-month time period from January to March 2007.

The BSAS brief survey was found to be an effective way to measure staff attitudes and comfort with AD. Nearly three-quarters of the staff felt that an AD guideline would be useful for their patients. Although staff members believed that the AD algorithm was an important tool, they found challenges to following the algorithm. These challenges were primarily noted to be a lack of comfort on AD discussions. The staff members also identified a need for improving the AD process for engaging and completing ADs and 50% of the staff felt the annual/routine checkup was the correct

time to engage in AD. The majority of participants (58%) found AD was followed when making decisions about a patient's care, while only 9.4% noted that an AD was rarely used. The participants found that, in their experience, a patient's AD was not followed for a number of reasons: (a) 40% of participants noted that AD existed but was not on the chart, (b) 25% had encountered instances when AD relevance was unclear to the current condition, and (c) 63% of participants found family conflict with expressed wishes of AD was the leading reason that AD were not followed. Bergman-Evans et al. (2008) noted that the sample selected had a significant degree of positive past experience with end-of-life procedures and questions. The researchers further noted that the population studied probably skewed the results, since all participants were from an end-of-life committee who worked with AD issues daily.

This reference was appraised using the JBI (2008) critical appraisal tool for descriptive/case series, and the findings of this appraisal were as follows. The study sample was selected by convenience. The authors clearly defined inclusion criteria and identified that the chosen participants were part of an end-of-life committee. Data collection occurred over a 3-month which was appropriate for this type of study. Outcomes were measured using appropriate statistical analyses; this strengthened the results. It was agreed that that the selected sample, with previous experience and comfort with AD, undoubtedly skewed the results. It would be more beneficial to use this survey to examine the feelings and comfort of staff members who are not routinely involved with AD on a daily basis; this would allow for findings to be generalized to primary care office settings. Following JBI evaluation criteria, it was determined that this reference was of good quality and appropriate for inclusion within the evidence base for this project.



Sudore et al. (2008) correlated participation in the ACP planning process six months after exposure to an advance directive with stages of change within their Conceptual Model of the Process of Advance Care Planning. The processes followed steps that were based on the patient's readiness and consistent with Prochaska's Stages of Change. "The steps include pre-contemplation stage in which the individual lacks awareness of or has no desire to engage in ACP planning), contemplation of one's values and future treatment wishes (a stage in which individuals understand the relevance of ACP to their own lives and begin to form intentions to engage in ACP), preparation and values clarification (a transitory stage that links contemplation to the action stages but can also link many of the action phases to one another), actions such as discussions with family, friends, and clinicians, and documentation (a stage in which individuals overtly engage in behaviors that make their ACP wishes known), and maintenance or reflection on one's choices (a stage in which individuals have made end-of-life choices and are in a position to reflect on)" (Sudore et al., 2008, p. 1006).

The survey was conducted via a telephone interview between February and July 2005. The participants were a convenience sample enrolled from general medicine clinic. Twenty dollars was offered to participants. Inclusion criteria were (a) being of age 50 years and older, (b) having a primary care physician, and (c) self-reporting fluency in English or Spanish. Six months after exposure to the advance directives, bilingual research assistants assessed participants' report of ACP engagement. The research assistants asked, "Since the day you finished the study, have you (1) thought; (2) talked to your family; or (3) talked to your doctor about the type of medical care you might want if you were sick or near the end of your life?, and (4) Have you filled out an advance directive form for yourself?" (Sudore et al., 2008, p.1008).

Of the 173 participants interviewed six months after exposure to ADs, Sudore et al. (2008) found that (a) 61% were contemplating ACP, (b) 56% had discussed ACP with their family or friends, (c) 22% discussed ACP with their physicians, and (d) 13% had documented their end-of-life wishes in an AD document. The researchers provided a bottom line opinion: even in the contemplation phase, AD education was useful when both written and verbal education was provided and would encourage the patient to engage in the ACP process. But, the researchers suggested that all stages of change should be given consideration when shaping and expanding the discussion of ACP in clinical practice by following a policy that includes all steps of the ACP process. The researchers opined that following a policy would be beneficial for both patients and health care providers. Sudore et al. displayed the participant demographics using multivariable analysis. Their findings demonstrated that even those younger than 65 were appropriate targets for ACP. "Participants age was not associated with engagement in the ACP steps, except that older patients were less likely than younger patients to engage in discussions with family and friends" (Sudore et al., 2008, p. 1008).

The Sudore et al. (2008) research study was appraised following the JBI Critical Appraisal Checklist for Descriptive/Case Series, (JBI, 2008) and the findings of that appraisal were as follows. Participants were selected pseudorandom style, recruited by convenience sampling. There was no comparison group to strengthen the results of this reference, but the researchers clearly defined the participant's inclusion and exclusion criteria. The authors did not perform any follow up on the participants over a time period longer than 6 months. A longer follow up would have been beneficial to see how the participant progressed through the stages of change after six months. The researchers had 205 initial participants, with 32 participants lost to follow-up, for a total of 173 participants. A dropout rate of 16% within a study of this nature this could be considered

normal. Outcomes were measured in a reliable way using bivariate and multivariate analyses. These statistical analyses strengthened the evidence provided since they were appropriate measurement tools for this type of research. This reference was determined to be of good quality and appropriate for this EBP project, especially relevant was the evidence supporting initiating discussion of ACP to those younger than age 65.

**Level VII.** XX Health Care (2013) has an established advance directive policy for patients that are considered to be equivalent to expert opinion. This practice guideline was approved by the hospitals ethics committee, the hospital administration department, Medical Executive Committee, Medical Staff Affairs/Quality Improvement Committee, and Northern Indiana Region Board of directors. The policy included website links to the ISDH, MEDLINE, and the NIH for additional information. The AD policy was developed in 2004 and revised several times over the last 10 years. The latest revision was in 2013. The policy clearly defined the relevant professional group being health care providers; and although these guidelines were developed for hospitalized patients, they can be generalized to the outpatient primary care setting. This policy included the documents (a) ISDH brochure, (b) XX Health AD brochure (see Appendix A), and (c) Medical Dilemma and Moral Decision Making.

The XX Health Care AD Policy was appraised using the JBI Critical Appraisal Checklist for Narrative, Expert Opinion (JBI, 2008). The AD hospital policy utilized appropriate well respected information sites from the ISDH, MEDLINE, the U.S. National Library of Medicine, and the National Institutes of Health. The wellbeing of the adult population for hospitalized patients was the central focus for this AD policy. The logic of the policy was clear and suggested patients have choices with end-of-life decisions. The AD policy gave key recommendations for patient discussion with their health care provider and family, so their end-of-life wishes can be honored. The policy also clearly

identified that if patients choose to discontinue their AD, all they need to do is speak to their health care provider and their health care provider will remove the AD from their chart. The clear implication of this policy was that patients' wishes will be followed until their end-of-life. This policy was congruent with medical and nursing codes of ethics, supporting the patient autonomy with end-of-life decisions. The policy provided significant support for this EBP project. Of particular importance was the fact that the policy had been created by the target organization.

The Indiana State Department of Health (ISDH, 2014) created a brochure titled "Advance Directive: Your Right to Decide", that was considered expert opinion. The brochure provided information specific to Indiana advance directive laws and acts as a guideline for Indiana adult citizens 18 years and older to follow for developing advance directives. The brochure clearly identified the AD terms and Indiana State Laws on AD, as well as, how to proceed with developing an AD. Within the brochure, the ISDH gave key recommendations and encouraged individuals to discuss ACP with their health care provider and family. The brochure provided links to ISDH, MEDLINE, and the National Institutes of Health for additional information. ISDH board approval was noted on the AD and ACP brochures that were originally developed in 1999 and revised in 2004. The aims of the brochure were to (a) define AD, (b) inform Indiana citizens that ADs are not required, (c) inform Indiana residents what may happen if they do not have an AD, and (d) describe the different types of AD available to citizens in the state of Indiana.

The ISDH (2014) brochure was appraised using the JBI Critical Appraisal Checklist for Narrative, Expert Opinion (Joanna Briggs Institute, 2008). The ISDH was determined to be a well-respected source for this expert opinion on AD and ACP for Indiana residents. The well-being of the adult population in the State of Indiana was the central focus for the health brochure guidelines on AD. The brochure afforded the

resident the opportunity to view the specific AD material in more in detail and provided the reader a choice in development on AD. The brochure guidelines noted that if residents did not complete an AD and if they became incapacitated or unable to choose their medical care or treatment, that Indiana state would identify who can do this for them. The brochure noted that the reader's health care choices would be made by the family member whom the health care provider was able to contact. The brochure also suggested contacting an attorney if the reader had multiple complex legal documents that needed to be prepared. This brochure followed the state law for Indiana and was supported by the State of Indiana government and legal authorities. Given that the target population was primarily Indiana residents, it was determined that this expert opinion provided additional support for this EBP project intervention.

Spoelhof and Elliott (2012) reviewed seven scientific articles and (a) identified the primary care setting key clinical barriers for AD completion, (b) reviewed the current AD resources, and (c) provided suggestions on creating solutions to these barriers, which the authors believed was the key to engaging in ACP discussions. The authors found two barriers that health care providers encountered on completing advance directives in the office setting. These barriers included lack of time in the scheduled appointment visit and lack of reimbursement related to ACP. The authors proposed initiating ACP discussions at the age of 50 years old, during the patient's routine office visit. This timing was suggested to preserve patients' autonomy at the end-of-life by initiating ACP when patients were in good health.

The authors also reviewed patient barriers on AD completion, which included lack of knowledge on topic, being unclear on the language in AD documents, and fear of burdening family. The authors noted that patients have expressed interests or desires to have AD discussions initiated by their primary care providers and identified that the

language used in the documents provided to patients can be unclear or overwhelming. Spoelhof and Elliott (2012) opined that involving the patient's family and proxy decision maker early and over time was a strategy that could lead to more successful completion of an advance directive. The authors provided supportive solutions to barriers and cited web-based resources that substantiated their opinions. Spoelhof and Elliott also opined that overcoming barriers depends on effective communication at multiple visits, including allowing the patient the opportunity to ask questions. Spoelhof and Elliott suggested that health care providers "initiate the discussion at certain stages of the patient life and health and involving the family or a proxy early for effective completion of AD" (p. 234).

Spoelhof and Elliott's (2012) expert opinion was appraised using the JBI Critical Appraisal Checklist for Narrative, Expert Opinion (Joanna Briggs Institute, 2008). The authors' opinions were clearly identified in this reference. The first author was a physician specializing in quality of life issues. The second author was a professor in family medicine, who taught ethics in health care. The purpose of this reference was clear (examining barriers to AD), and the authors provided web-based resources for AD. The authors offered a clear and logical argument on physician/patient barriers and provided supportive documentation by referencing and rating research on AD. Spoelhof and Elliott disclosed they had no relevant financial affiliations. This expert opinion was found to be of good quality. Thus, this relevant reference was included within the evidence base for this project.

Westley and Briggs (2004) discussed the relationship between patients and health care providers related to end-of-life discussions. In this expert opinion, the authors summarized information from personnel experience, workshops, and current literature. The purpose of this publication was to provide an expert opinion on the appropriate use of the TTM Model to enhance the ACP process between patients and

health care providers. The two authors were noted to both be advance nurse practitioners (APN) and had experience with ACP. It was noted that the lead author was an APN working with family education who was involved with issues related to culture, communication, discharge, the transitions of older adults, and advance care planning. The second author was an APN who was noted to be the assistant director for advance care planning for a Midwest hospital. The target audience for this information was physicians, patient representatives, nurses, and social workers who had either a personnel interest with AD or were part of an organizational system that used ADs for their patients. The authors suggested AD discussions should take place with health care professionals who are specially trained to discuss ACP while people are still healthy or early in the disease stage. The authors noted that the TTM behavioral change model was one approach that could be used to guide ACP discussions, allowing the health care provider to identify what the patient stage is in and to provide patient educational information based on the patient's level of readiness. The authors focused on the work of Prochaska (1997), whose empirical analysis describing six stages of change, or phases, individuals go through when making changes in behavior. The authors stated these six TTM stages were "(a) pre-contemplation: no intention to take action within the next 6 month, (b) contemplation: plans to take action within the next 6 months, (c) preparation: plans to take action within the next 30 days and has taken some steps in this direction, (d) action: made a change, (e) maintenance: continued the change over time, and (f) termination: confidence in the person's ability to self-maintain the change" (Westley & Briggs, 2004, p. 7). This focus does give strength to the reference validity. However, the authors found that the stage of termination is seldom used due to the fact that patients never fully terminate the behavior; they are continuously working on maintaining the behavior. The authors provided a decision algorithm to help remind staff

of possible ACP interventions. In addition, the authors stated that institutional policies and procedures should be written and followed to ensure that AD documentation is available for patients. The authors also noted that these ACP discussions may improve the quality of and satisfaction with patient care. This reader sees the benefit for interventions that focus on the stage of change the patient is in.

The reference was appraised using the JBI Critical Appraisal: Expert Opinion (JBI, 2008). The authors, two nurses with advanced degrees, clearly labeled that sources utilized were the author's personal experience, workshops, and literature review. The authors' interests appear clear: to encourage successful AD completion using the behavior stage model. Their interest was supported by the work of Prochaska in 1997, which strengthens the reference since Prochaska is known to be a pioneer in the TTM behavior change. The use of a decision algorithm and the recommendation for the development and use of institutional policies and procedures were appropriate. These interventions should be able to be duplicated within other primary care offices for ACP. The authors stated that this opinion has been successful at Gundersen Luthran Medical to improve the AD completion rates. Unfortunately, the authors did not provide statistical information on the degree of improvement of AD completion rates. The recommendations within this article link the TTM to successful AD patient completion; the recommendation for policies and procedures, along with a decision algorithm, was consistent with the intervention planned for this EBP project. This reader would rate this reference as appropriate and applicable for use in the EBP project.

### **Construct Evidence-Based Practice**

Applying the appraised literature as the foundation for this EBP project, the EBP project leader constructed best practice recommendations that were applicable to the targeted organization. The goal of advance care planning has been noted to focus on



avoiding a crisis during active dying, honoring patient wishes, and allowing grieving while making good memories of last moments together (Henderson, 2004). The review and synthesis of the best available evidence provided a solid foundation necessary to answer the clinical question: Does the implementation of advance directive protocol positivity impact staff beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period?

**Synthesis of critically appraised literature.** The literature revealed that AD current standards from the State of Indiana and XX Health Care were of good quality (ISDH, 2014; XX Health Care, 2013), however, there was a lack of an office setting AD protocol for health care providers to follow at the target organization. Evidence suggested there were identified barriers to office setting AD discussions that if replaced with solutions would support successful office setting AD discussions and yield positive AD completion (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Spoelhof & Elliott, 2012; Westley & Briggs, 2004). Identified patient barriers included lack of knowledge on topic and fear of burdening their family members (DeVleminick et al., 2013; Spoelhof & Elliott, 2012). However, evidence suggested family stress levels were lower when family members were aware of the patient's wishes on AD (Bergman-Evans et al., 2008; DeVleminick et al., 2013).

The literature reviewed revealed that patients want to engage in ACP, but are hoping their health care providers bring up the topic (DeVleminick et al., 2013; Spoelhof & Elliott, 2012). Yet, the evidence also suggested that health care providers and health care are reluctant to engage in ACP and address the topic of AD (DeVleminick et al., 2013; Spoelhof & Elliott, 2012). It was noted that health care professionals feel inadequately trained to discuss ACP planning with patients and have feelings or attitude of discomfort due to this inadequacy (Bergman-Evans et al., 2008; DeVleminick et al.,

2013; Spoelhof & Elliott, 2012). The literature reviewed also revealed that health care professionals believe there is lack of time in the schedule appointment to discuss AD (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Spoelhof & Elliott, 2012). In addition, it was noted that there are no billing codes for AD/ACP to support time for these discussions (Spoelhof & Elliott, 2012). Due to this lack of reimbursement, health care staff believe the way to overcome these barriers is to engage in AD conversations within their annual/routine checkup (Bergman-Evans et al., 2008; Spoelhof & Elliott, 2012). Bergman-Evans et al. (2008) have developed a health care professional survey for staff to assess their feelings, beliefs, and describe their comfort level on engagement in AD discussions with patients. It has been suggested that this survey will aid health care organizations to assess staff comfort on AD engagement and to identify where staff training is needed (Bergman-Evans et al., 2008). The evidence reviewed for this EBP project also suggested that health care providers and health care workers recognize the benefit of office setting AD engagement, but feel that they would have benefitted from having been trained in effective communication techniques prior to the engagement of ACP discussions or being able to follow a guideline for AD engagement (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Fried et al., 2010; Spoelhof & Elliott, 2012; Sudore et al., 2008; Westley & Briggs, 2004). Furthermore, it was determined that developing institutional policies and procedures would provide the health care professional with guidelines to follow and ensure that ADs were available for patients (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Fried et al., 2010; Spoelhof & Elliott, 2012; Sudore et al., 2008; Westley & Briggs, 2004).

The evidence also supported the premise that when a combination of written, verbal, and/or video educational interventions was used there was a significantly improved outcome with AD patient completion rates (Durbin et al., 2010; Tamayo-

Velazquez et al., 2010). When the combination of educational occurred over multiple sessions or over the course of a specific time period, this strengthened AD completion rates (Tamayo-Velazquez et al., 2010). Putting this additional evidence into a protocol would give the health care professional a template on how to initiate AD discussions and provide the patient with educational literature and resources available for continued engagement and AD completion (Bergman-Evans et al., 2008; Spoelhof & Elliott, 2012; Sudore et al., 2008; Westley & Briggs, 2004).

To further assist the health care professional with ACP process, the literature reviewed identified that a TTM algorithm had been developed to allow the health care provider to identify the patient's readiness for engagement in the ACP process (Fried et al., 2010; Sudore et al., 2008). This TTM AD algorithm was noted to be appropriate for living will completion and communication with loved ones about quality versus quantity of life, and would allow health care providers a guideline for ease of application and implementation of an ACP discussion (Fried et al., 2010). The ACP process through the behavior change model was noted to have the benefit of following steps that were based on the patient's readiness and providing interventions based on the readiness. The TTM has given shape to and expand the paradigm of ACP in clinical practice by supporting policies that include all steps of the ACP process (Sudore et al., 2008; Westley & Briggs, 2004). Combining these best practice recommendations into an office setting AD Engagement Protocol was determined to be an appropriate intervention in the attempt to ultimately increase quality of care and improve patient outcomes.

**Best practice recommendation.** Although, AD and ACP planning was not new, the rates of completed AD at Office X on the EMR had been low. Following the synthesized evidence, a new practice protocol was developed in support of best-practice recommendations found in the literature (Bergman-Evans et al., 2008; DeVleminick et

al., 2013; Durbin et al., 2010; Fried et al., 2010; ISDH, 2014; Spoelhof & Elliott, 2012; Sudore et al., 2008; Tamayo-Velazquez et al., 2010; Westley & Briggs, 2004; and XX Health Care System, 2013). The purpose of this EBP project was to provide health care providers and health care workers with a guide for successfully implementing of an AD protocol in the office setting, as well as preserving patient autonomy and allowing patients a choice with their end-of-life care decisions.

**Answering the clinical question.** The goal of this EBP project was to answer the clinical question: Does the implementation of advance directive protocol positivity impact staff beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period? Implementation of an AD protocol allowed the EBP project leader to assess whether current practice recommendations answered the clinical question. The implementation of the AD protocol assessed staff feelings and beliefs on AD by a pretest, provide staff education on AD terms, review AD educational material, and initiation of an AD protocol, as well as measure staff feelings and beliefs post education and AD protocol implementation. However, most importantly an AD protocol would support patient autonomy and increase completed AD rates.

## CHAPTER 3

### IMPLEMENTATION OF PRACTICE CHANGE

An advance directive protocol was noted to have the potential to (a) positively impact staff beliefs on advance care planning, (b) encourage health care providers to engage in advance care planning with patients, and (c) support patient choice and autonomy with end-of-life decisions. This chapter details the implementation of the EBP project. The process of selecting participants and setting, recruiting participants, and planning, collecting, and managing data will be described.

#### **Participants and Setting**

Office X was the organization in which this EBP project was implemented. Office X was part of a larger health care organization; the XX Health Care System, a 13-hospital health system including clinics, home health services, and doctors serving Indiana and Illinois. XX Health Care System included a group of primary care offices in Northwest Indiana; the EBP took place within one office within the XX Health Care System, a family practice/internal medicine practice located in Northwest Indiana. The AD Engagement Protocol (see Appendix B) time period, was from October 14, 2014 through January 15, 2015.

The staff participants within this EBP project included health care providers, their medical assistants, front desk staff, and the office manager from the target organization. The target organization is Office X was under the health organization, XX Health Care System. The health care providers were two physicians and two certified nurse practitioners. The health care providers were responsible for engaging in the ACP discussion. The health care providers were (a) physician A, certified in internal medicine, who had been practicing medicine for 30 years and had been employed by Office X for 15 years; (b) physician B, certified in internal medicine, who had been practicing

medicine for 25 years, and had been employed by Office X for 16 years; (c) nurse practitioner A, who had been in nursing for 32 years, working as a nurse practitioner for 15 years and had been employed by Office X for the past eight years; and (d) nurse practitioner B, the project coordinator, who had been in nursing for 30 years, working as a nurse practitioner for five years and employed by Office X for the past three years.

Within the practice, there were two medical assistants (MA) for each provider, a total of eight. Each MA was assigned to a specific provider, although the MAs were cross trained to be with all providers. The MA's daily responsibilities included bringing patients back to the exam room, taking vital signs, reviewing current medications, and asking about the chief complaint. In addition, there were three front office staff members who scheduled the patients' "annual health examination" or "wellness exams" and other appointments for all providers. The front office staff greeted all patients as they enter the office suite. Additionally, the office manager participated in the EBP project by assisting with staff participation and supplying of forms when necessary. The office manager had been with the target organization as a medical assistant for 15 years. She was promoted to the office manager position last year.

**Recruiting participants.** Participants were the staff members of the target organization, XX Health Care System. Participants were introduced to the project via the recruiting letter: Introductory Letter for Staff on Advance Directive Engagement Protocol (see Appendix C). This brief letter informed staff of the AD Engagement Protocol and briefly explained their participation in the AD Engagement Protocol and AD Algorithm. The introductory letter informed all staff member of the required staff meetings that were required for this quality improvement EBP practice project, with the first meeting providing further education about their required participation for the AD EBP project.

**Protection of human subjects.** To ensure the protection of human subjects, the EBP project leader completed the National Institute of Health's "Protecting Human Research Participants" training course. This course provided guidelines for the EBP project leader to follow to ensure the safety of human subjects. The safety and rights of the participants in this EBP project a primary focus throughout the entire EBP project.

The IRB committee at Valparaiso University reviewed and approved the EBP project. Approval from the President of Office X and Risk Management for XX Health Care System was also obtained. No patient consent form was required since patients were informed of the quality improvement project via a written introductory letter (Appendix D), which was distributed upon checking in for their scheduled appointment. Patients were given the opportunity to decline participation in the AD discussion.

Staff members were asked to complete a brief survey prior to education and implementation of the AD Engagement Protocol, as well as a post-intervention survey. No staff consent form was obtained. Since the EBP project was designed as a quality improvement project for the office, and not a research project, consent from the staff for participating in the AD Engagement Protocol was not necessary. All staff received an introductory letter detailing the project (see Appendix C) and staff members could elect to not participate in the attitude survey component of the project.

Procedures for ensuring privacy/anonymity of data collected were established. All participants' AD Engagement Protocol results were locked in filing cabinet at the EBP project coordinator's desk. When the health care provider completed patient AD Engagement Protocol, the health care provider put the completed form into a large manila envelope at the health care provider's work station. The completed AD engagement forms were picked up daily by the EBP project leader and transported to the locked desk of the EBP project coordinator.

To ensure anonymity for the staff, the individual pre- and post-intervention results and participants' surveys were coded with a unique identifier randomly assigned by the EBP project coordinator. A coding sheet (see Appendix E) containing the unique identifier and the participants' name were kept in a locked drawer within the project coordinator's desk. Upon completion of the survey, the health care providers folded the survey in half and placed them in a large manila envelope. The envelope with the coded surveys was kept in a locked drawer at EBP project coordinator's desk. This drawer was in a separate location from the coding sheet.

### **Outcomes**

The outcome of enhancing staff members' and health care providers' attitudes about AD/ACP was measured by the tool, Brief Survey about Staff Attitudes Related to Advanced Directives (see Appendix F) (Bergman-Evans et al., 2012). Additionally, the project assessed if an AD Engagement Protocol (Appendix B), which utilized an AD Algorithm (see Appendix G) increased provider/patient engagement in ACP discussion. For this EBP project to be successful, each provider should have engaged in ACP discussion for at least 50% of all patients who qualified to participate for AD engagement. This projection was consistent with the success rates found within the supportive literature (Fried et al. 2010).

### **Practice Change Implementation/Intervention**

The intervention process started with staff education consisting of one 20-minute session for the health care providers and another 20-minute session for the remainder of the staff. The educational in-service meetings which addressed the AD Engagement Protocol were scheduled by the office manager and conducted by the EBP project coordinator. Each meeting started at the beginning of the staff lunch hour; this time was



found to be ideal since all providers and staff members were present during this time frame. Lunch was provided by the EBP project coordinator.

The 20-minute educational in service included time for staff to complete a ten-item questionnaire, A Brief Survey about Staff Attitudes Related to Advanced Directives (see Appendix F). Following completion of the brief survey, the EBP project leader conducted a power point presentation (see Appendix H) to inform staff on their roles in the AD Engagement Protocol and define AD/ACP terms and review all forms used in this EBP project (see Appendices B & G). The staff attended a follow up meeting on Wednesday October 22, 2014 for all staff to evaluate, trouble shoot, and answer questions on the AD Engagement Protocol. Finally, on January 15, 2015 reviewed the EBP project progress, addressed additional barriers for continuation of the protocol, review data collection, and surveyed the staff as part of the post-intervention evaluation.

Following the initial educational meeting, the AD Engagement Protocol was instituted and data collection began. Upon arrival in the office, adult primary care office patients age 50 years and older, who had an annual/wellness visit scheduled with one of the four health care providers were eligible for ACP discussions thru the AD Engagement Protocol.

The population age of patients 50 years and older was selected and supported by the evidence reviewed for this project (Sudore et al., 2008). This was congruent with the average age of patients within the primary care office: 54 years. Since there were no payment codes for AD/ACP, it was necessary to "fit in" and incorporate these discussions during patient annual health exams. For patients to be eligible for the AD Engagement Protocol they had to be able to legally make self-decisions. Therefore, patients having documented history of dementia or decreased mental capacity were excluded from this AD Engagement Protocol.

Patients were greeted by the front office staff upon signing in and received the introductory letter (Appendix D). The front desk staff reinforced that the AD engagement would be discussed between the health care provider and patient during his or her appointment and the health care provider would answer any questions. On the average, patients had approximately 15 minutes to review the documents prior to being called back to the examination room for their appointment.

The medical assistant responsibilities included obtaining the billing sheet with the AD Algorithm attached from the front desk and bringing the patient back to the examination room. In addition to the routine duties associated with the office visit, the MA briefly reviewed and completed the demographic section of the AD Algorithm. Then, the MA placed the completed form, facing toward the wall, within the chart folder of the individual examination room.

Upon entering the examination room, the health care provider briefly described the EBP project and patients were given the option not to participate in the AD discussion. For those who elected not to participate, a check was made on the bottom of the AD Algorithm demographic information page. For those who elected to participate, the provider followed the algorithmic steps which included AD discussion as part of the plan of care during that visit. The AD Engagement Protocol and AD Algorithm were based on individual interventions targeting the patient's stage within the TTM staging algorithm (see Appendix G). The health care provider circled the appropriate intervention on the AD Algorithm and, based on the patient's response to questions, documented appropriately within the patient's electronic health care record. For this project, copyright permission was obtained from the primary author for use of the Fried et al. (2010) AD Algorithm.

Following completion of the visit, the health care provider folded the algorithm worksheet in half and placed the completed AD algorithm in a large manila envelope located at the each health care provider's work area. At the end of each business day, the project coordinator removed the completed worksheets from the envelope and secured each day's worksheets with a large paperclip. The EBP project leader compared the number of worksheets returned to the number of patients for whom the algorithm should have been used for the day. A hand notation was made on the top of the first folded sheet so that the project coordinator kept track of provider participation. This aided the project coordinator within the translation phase of the Stetler model and allowed the project coordinator to stay updated on all eligible patients' engagement for data analysis. These worksheets were placed in a locked drawer of the project coordinator's office desk.

### **Data Management and Analysis**

Data analysis of staff attitudes was compared pre- and post-intervention using a paired *t*-test analysis. This comparison measured the difference of the pre- and post-test scores using the tool, BSAS (Bergman-Evans et al., 2008). Copyright permission was obtained from author Bergman-Evans et al. (2008) for use of the brief survey tool. Demographic data of the health care providers and office staff (i.e., age, professional group, gender, ethnicity and highest education level) was analyzed by descriptive analysis.

The percentage comparison of patients who were engaged in ACP discussions was compared to the total of office patients who met the AD Engagement Protocol eligibility during the 3-month time period. The patients' demographic data was analyzed by descriptive analysis, based on patient age, gender, race, education level, and diagnosis. These analyses allowed for a clear comparison of patient engagement based

on the patient demographics. Copyright permission was obtained from Fried et al. (2010) for the use of TTM algorithm for this EBP project.

## CHAPTER 4

### FINDINGS

The PICOT question for this EBP project was as follows: Does the implementation of an advance directive protocol positively impact staff's beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period? The purpose of this EBP project was (a) to increase the health care providers' and support staff members' level of comfort with AD/ACP discussions through the use of a protocol, and (b) to enhance the initiation of a dialogue that focused on AD/ACP between health care providers and patients. In this chapter, the findings of the EBP project will be addressed; participant characteristics, changes in outcome, statistical testing, and significance will be discussed.

#### **Sample Size and Characteristics**

**Office staff.** Descriptive statistics were used to summarize population data of the participants. Of the 17 office staff members eligible to participate in this EBP project, all 17 agreed to participate, yielding a participation rate of 100%. Descriptive analysis was performed on demographic data for the sample ( $N = 17$ ) (see Table 4.1). All of the staff were of female gender. Most participants, 11 of 17 (65%), were "45 years of age or younger". The self-reported ethnical background of the 17 was fairly equally distributed: Caucasian 6 participants, African American 6 participants, and Latino 4 participants; one staff member did not respond to this question. The most frequently reported level of educational background was "some college/technical school" 10 of 17 (59%).

**Intervention participants.** Eligible office patients were 50 years old and older, who had their annual/wellness appointment with one of the participating health care providers at office X. Sixty-eight patients elected to participate in the project; only one patient opted out of participating after receiving information from the front office staff: a Caucasian

male 56 years old with past medical history of hypertension. The patient participation rate was 98%. Descriptive analysis was performed on demographic data for the sample ( $N = 68$ ) (see Table 4.3). Patient participants engaged were 70% female ( $n = 57$ ) and 69% male ( $n = 11$ ). A significant portion of engaged, 76% ( $n = 25$ ), were '60-69 years of age', and the self-reported ethnical background was distributed: Caucasian 68% ( $n = 55$ ) participants were engaged, African American 73% ( $n = 11$ ) participants were engaged, Latino 100% ( $n = 2$ ) participants were engaged, and Asian 100% ( $n = 1$ ) participants were engaged. The co-morbidities of patients who were engaged in the project included hypertension 69% ( $n = 40$ ), diabetes mellitus 71% ( $n = 12$ ), COPD 89% ( $n = 16$ ), coronary artery disease 89% ( $n = 8$ ), heart failure 100% ( $n = 6$ ), cancer 100% ( $n = 7$ ) CVA/stroke 100% ( $n = 4$ ), and other 52% ( $n = 25$ ). Patient participants who were engaged were identified by their level of readiness per provider for (a) living will (see Table 4.4), and quality of life (see Table 4.5). The largest proportion of the patient participants 28% ( $n = 19$ ) were in the pre-contemplation for living will discussions; but for the quality of life discussion, the largest proportion of patient participants 40% ( $n = 27$ ) were in maintenance phase.

### **Changes in Outcomes**

**Statistical testing for office staff participants.** To determine the effectiveness of the intervention, statistical analyses using IBM SPSS 21.0 statistics software were performed. Statistical testing analyzed two measures: (a) staff attitudes and (b) percent of engagement. Paired *t*-tests were used to compare staff attitudes by comparing mean pre- and post-intervention scores on the total of the survey, Brief Survey about Staff Attitudes Related to Advanced Directives (BSAS) and pre- and post-intervention scores on individual items within the BSAS. Statistical significance for these analyses was established as  $p < .05$ .

**Statistical testing for patient participants.** Descriptive analysis was performed on demographic data to identify the patient participants' characteristics: age group, gender, ethnicity, and diagnoses. Descriptive statistics compared percentage of engaged patients to the percentage of non-engaged by patient age, gender, ethnicity and diagnosis. The engaged patient level of readiness was assessed per health care provider visited; each readiness level was based on the TTM and analyzed by descriptive statistics.

**Changes in outcome for office staff participants.** The EBP project goal was to enhance staff members' and health care providers' comfort and attitudes about AD/ACP engagement with patients in the primary care setting. This enhancement was measured by the BSAS. The reliability of the BSAS within the population of this EBP was established and the internal consistency ranged from .817 to .939. This goal was achieved, as seen by the scoring of the mean pre- and post-intervention results (see Table 4.2), with an overall increase for the pre-intervention  $M = 17.22$ , post-intervention  $M = 23.24$ , for a total increase of 6.02 which is statistically significant ( $p = .0004$ ) for improved staff comfort with AD. The statistically significant increases from pre-intervention to post-intervention were achieved within the first six items of the BSAS (see Figure 4.1). There was a mean increase on BSAS Item 1, which focused staff comfort with general communication with patients on end-of-life care issues, of 1.00 points ( $p = .001$ ). There was a mean increase on BSAS Item 2, staff rating of their understanding of AD, of 0.647 points  $p = .029$ . Mean increases were also noted on BSAS Item 3 (1.12 points,  $p = .002$ ), in which staff rated usefulness of AD in health care decision making, and BSAS Item 4 (.941 points,  $p = .001$ ), in which staff rated their comfort level with talking about AD to patients. There was a mean increase on BSAS Item 5, in which staff reported if ADs were followed when making decisions about a patient, of 1.50 points ( $p =$

.000), and there was a mean increase on BSAS Item 6 (0.824 points,  $p = .006$ ), in which staff reported if ADs were routinely reviewed in practice.

The last four items within the BSAS evaluated perception of why ADs were not followed, and included a checklist in which participants could select more than one answer; thus, these data are reported in frequencies. In BSAS Item 7, which focused on the perception of why ADs were not followed, the most frequent response 59% was that “there was a disagreement between the family members and the patient wishes”. The next most frequent response 47% was that an “AD was not on the chart”. For BSAS Item 8, which focused on why the staff believed AD should be followed, 76% responded that ADs should be followed “when the care team, physicians and patient are in agreement with the course of care”. For BSAS Item 9, which focused on when conversations on AD should happen, 76% of respondents selected “during annual or routine checkups”, BSAS Item 10 was a yes or no question, with follow up. The initial question asked whether staff members had completed their own AD. Only two participants answered yes; both of these participants were over 50 years old and were in the maintenance phase of the TTM. However, one participant who was in the 56-65 age range and two participants were in the 46-55 age range, checked that “they would like to complete an AD within the next year”. These findings suggest that the older participants were in the contemplation phase or preparation phase of the TTM, while all of the younger participants were in the pre-contemplation phase.

**Changes in outcomes for patient participants.** An additional EBP project goal was for the health care providers to engage in AD/ACP discussions with patients who were 50 years of age and older during the patient’s scheduled annual/wellness exam with one of the participating health care providers. The target was to have each health care provider engage in AD/ACP discussions with at least 50% of the eligible patients.



Demographic data focused on age, gender, ethnicity, and diagnosis for engaged and non-engaged patients. The majority of eligible patients seen during the intervention were females ( $n = 82$ ). Providers engaged 57 women; an engagement rate of 69%. A smaller number of eligible male patients were seen during the intervention ( $n = 16$ ). Providers engaged 11 of the 16 men; an engagement rate of 69%. Caucasians 68% and African Americans 73% were engaged at similar rates, and all of those of Latin and Asian ethnicity were engaged at a rate of 100% for both ethnicity. Interestingly, engagement rates were linked somewhat to patient age. Only 15 of the 32 participants (47%) age 50-59 years were engaged, while 76% of those age 60-69 years, 90% of those age 70-79 years, 63% of those age 80-89 years, and 100% of those age 90-99 years were engaged. All patients with heart failure, cancer, and CVA/stroke were engaged; and at least 80% of those with DM, COPD, and CAD were engaged. To summarize those who were not engaged, most of these 30 patients were male 45%, 32% were of Caucasian ethnicity, and 53% were in the 50-59 age group.

Engagement data was also reviewed for each individual provider using Fried et al. (2010) TTM algorithm for ACP (see Figure 4.2). Fried et al. (2012) demonstrated construct validity for TTM with ACP concepts to have an internal consistency ranging from .76 to .93, supporting the reliability of using TTM scales to guide AD discussion. Provider 001 (see Figure 4.2) engaged in AD/ACP discussions with 57% ( $n = 8$ ) of the 14 eligible patients. Provider 002 engaged 75% ( $n = 30$ ) of the 40 patients eligible for participation with AD Engagement Protocol. Provider 003 engaged 68% ( $n = 30$ ) of the 44 patients eligible for participation with the AD Engagement Protocol. These data for individual providers reflect achievement of the project goal of having health care providers engaged in TTM level appropriate ACP discussions with eligible patients at a rate of greater than 50%.

Table 4.1

*Office Staff Demographics*

Trait	Frequency ( <i>n</i> ) results
Gender	100% female ( <i>N</i> = 17)
Job Type	Front Desk Staff 24% ( <i>n</i> = 4) Medical Assistant 59% ( <i>n</i> = 10) Health care providers 18% ( <i>n</i> = 3)
Ethnicity	Caucasian 35% ( <i>n</i> = 6) African American 35% ( <i>n</i> = 6) Latino 24% ( <i>n</i> = 4) No Answer 6% ( <i>n</i> = 1)
Education Level	High school/GED 12% ( <i>n</i> = 2) Some College/Technical School 59% ( <i>n</i> = 10) College Degree 12% ( <i>n</i> = 2) Master's Degree 6% ( <i>n</i> = 1) PhD/MD 12% ( <i>n</i> = 2)
Age	26-35 29% ( <i>n</i> = 5) 36-45 35% ( <i>n</i> = 6) 46-55 18% ( <i>n</i> = 3) 56-65 18% ( <i>n</i> = 3)

Table 4.2

*Pre-Intervention and Post-Intervention Office Staff Attitude Surveys*


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Brief Survey about Staff Attitudes Related to Advanced Directives (BSAS)

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	Pre-Intervention	Post-Intervention	Significance
Total BSAS score	17.22	23.24	( $p = .0004$ )
BSAS Items			
Item 1	2.76	3.76	( $p = .001$ )
Item 2	3.18	3.82	( $p = .029$ )
Item 3	3.59	4.71	( $p = .002$ )
Item 4	2.88	3.82	( $p = .001$ )
Item 5	2.69	4.19	( $p = .000$ )
Item 6	2.12	2.94	( $p = .006$ )
		Total Mean Improvement	6.02

Table 4.3

## Demographics for Engaged and Non-Engaged Patients

Trait	Engaged ( <i>N</i> = 68)	Non-Engaged ( <i>N</i> = 30)
Gender	Female 70% ( <i>n</i> = 57)	30% ( <i>n</i> = 25)
	Male 69% ( <i>n</i> = 11)	31% ( <i>n</i> = 5)
Ethnicity	Caucasian 68% ( <i>n</i> = 55)	32% ( <i>n</i> = 26)
	African American 73% ( <i>n</i> = 11)	27% ( <i>n</i> = 4)
	Latino 100% ( <i>n</i> = 2)	0% ( <i>n</i> = 0)
	Asían 100% ( <i>n</i> = 1)	0% ( <i>n</i> = 0)
Age	50-59 47% ( <i>n</i> = 15)	53% ( <i>n</i> = 17)
	60-69 76% ( <i>n</i> = 25)	24% ( <i>n</i> = 8)
	70-79 90% ( <i>n</i> = 19)	10% ( <i>n</i> = 2)
	80-89 63% ( <i>n</i> = 5)	38% ( <i>n</i> = 3)
	90-99 100% ( <i>n</i> = 4)	0% ( <i>n</i> = 0)
Diagnosis	Hypertension 69% ( <i>n</i> = 40)	31% ( <i>n</i> = 18)
	DM 71% ( <i>n</i> = 12)	29% ( <i>n</i> = 5)
	COPD 89% ( <i>n</i> = 16)	11% ( <i>n</i> = 2)
	CAD 89% ( <i>n</i> = 8)	11% ( <i>n</i> = 1)
	Heart Failure 100% ( <i>n</i> = 6)	0% ( <i>n</i> = 0)
	Cancer 100% ( <i>n</i> = 7)	0% ( <i>n</i> = 0)
	CVA/Stroke 100% ( <i>n</i> = 4)	0% ( <i>n</i> = 0)
	Other 52% ( <i>n</i> = 25)	48% ( <i>n</i> = 23)

Table 4.4

*Patient Participant Level of Readiness: Living Will*

Engagement Level Per Provider		Frequency (n) results		
Participants	Provider 001 N = 8	Provider 002 N = 30	Provider 003 N = 30	Total N = 68
Pre-contemplation	7% (n = 5)	6% (n = 4)	15% (n = 10)	28% (n = 19)
Contemplation	0% (n = 0)	12% (n = 8)	12% (n = 8)	24% (n = 16)
Preparation	0% (n = 0)	4% (n = 3)	4% (n = 3)	9% (n = 6)
Action	1% (n = 1)	7% (n = 5)	4% (n = 3)	13% (n = 9)
Maintenance	3% (n = 2)	15% (n = 10)	9% (n = 6)	26% (n = 18)

Table 4.5

*Patient Participant Level of Readiness: Quality of Life*

Engagement Level Per Provider		Frequency (n) results		
Participants	Provider 001 N = 8	Provider 002 N = 30	Provider 003 N = 30	Total N = 68
Pre-contemplation	6% (n = 4)	6% (n = 4)	6% (n = 4)	18% (n = 12)
Contemplation	1% (n = 1)	6% (n = 4)	9% (n = 6)	16% (n = 11)
Preparation	0% (n = 0)	4% (n = 3)	9% (n = 6)	13% (n = 9)
Action	1% (n = 1)	6% (n = 4)	6% (n = 4)	13% (n = 9)
Maintenance	3% (n = 2)	22% (n = 15)	15% (n = 10)	40% (n = 27)

Figure 4.1

*Increase Mean Scores Between Pre and Post-Intervention (BSAS)*

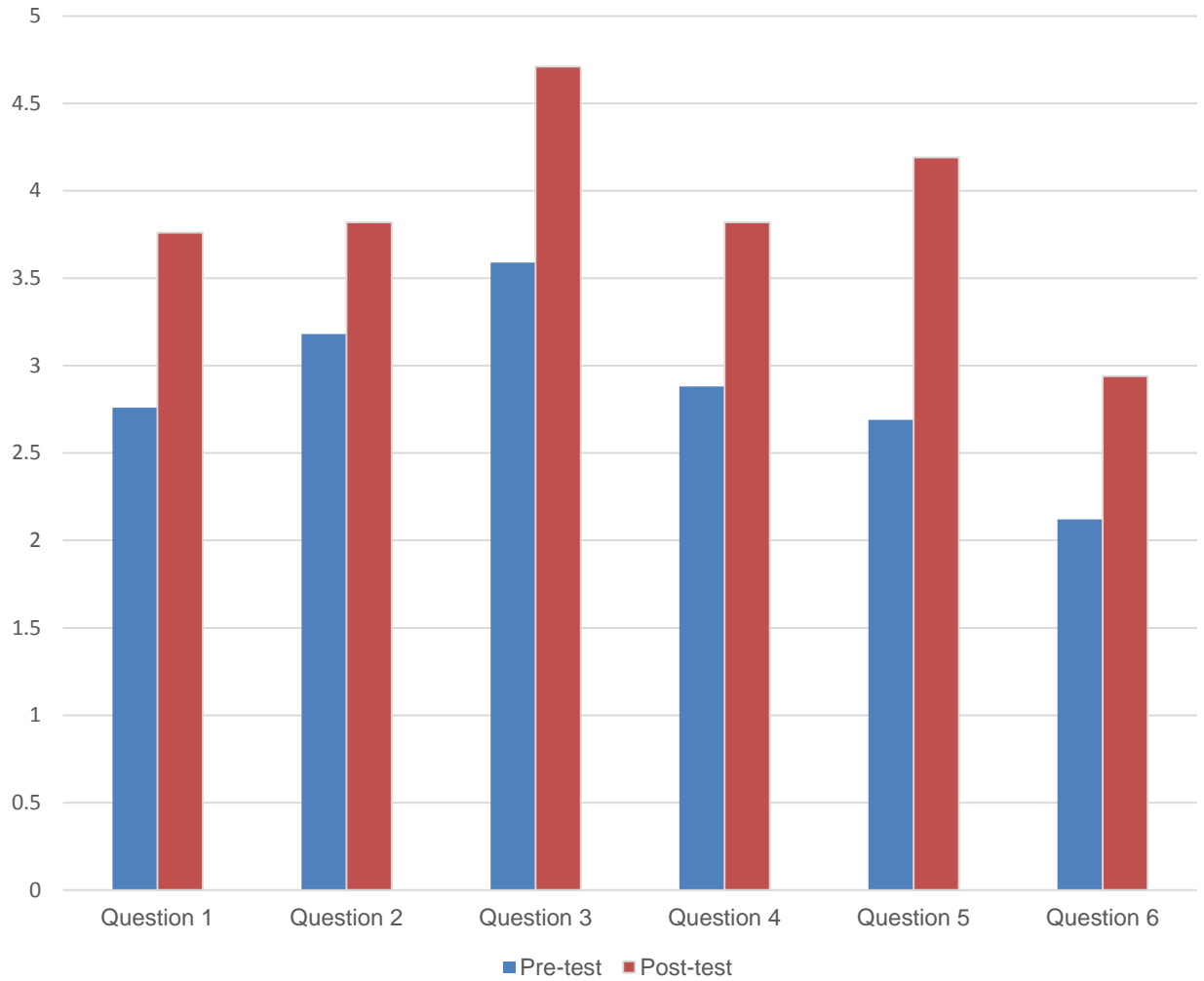
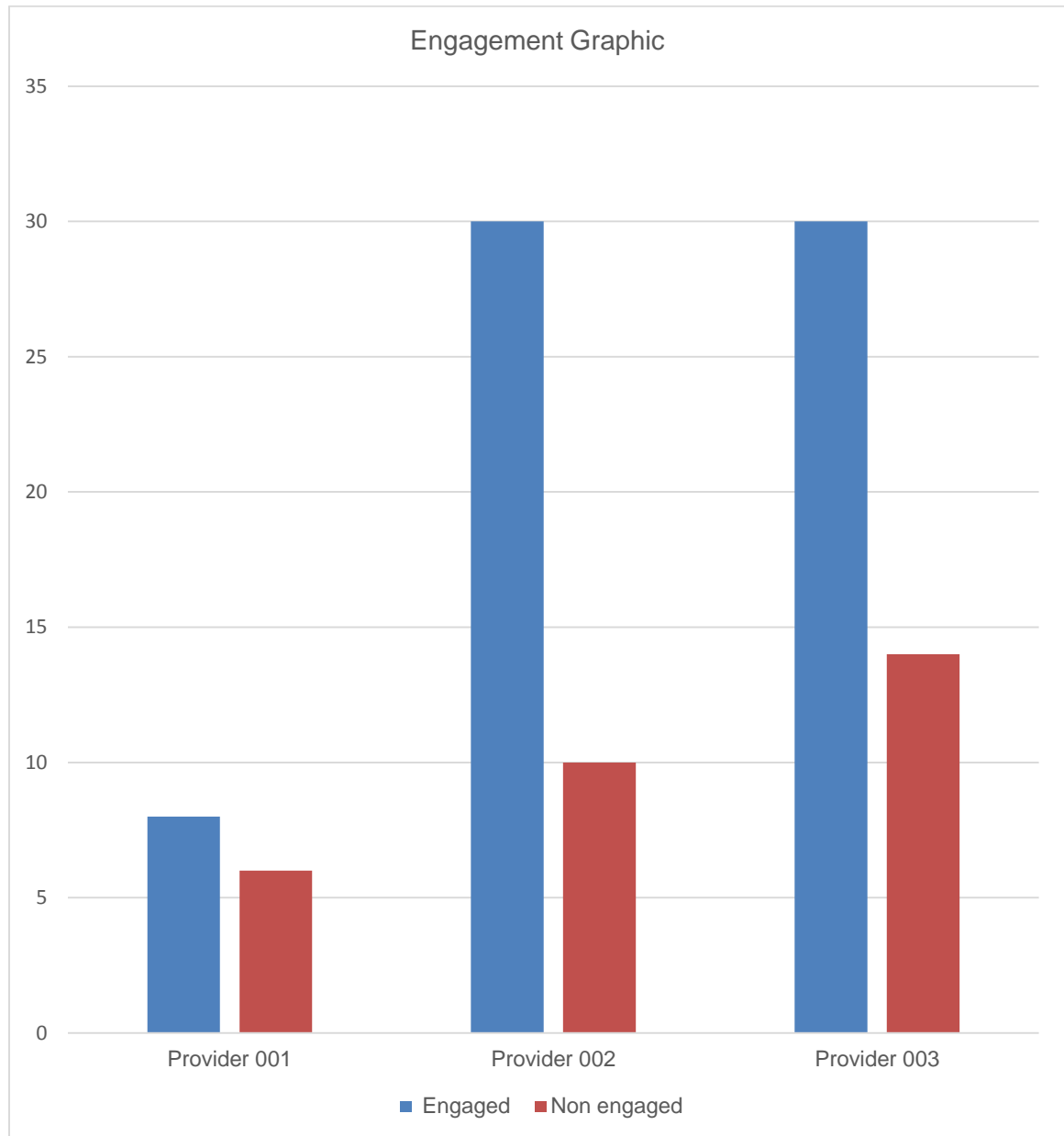


Figure 4.2

*Graphic on Health Care Provider AD Engagement*

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## CHAPTER 5

### DISCUSSION

This evidence based practice project examined the effects of initiating an AD engagement protocol in the primary care setting and answered the following PICOT question: Does the implementation of advance directive protocol positivity impact staff beliefs on advance directives and initiate engagement on ACP discussions, over a 3-month time period? Within this chapter the following will be discussed: explanation of findings, applicability of the theoretical framework and EBP model, strengths and weaknesses of this EBP project, and discussion of implications for the future.

#### **Explanation of Findings**

Implementation of a primary care setting educational program on AD discussions was supported within the literature reviewed (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Durbin et al., 2010; Fried et al., 2010; Spoelhof & Elliott, 2012; Sudore et al., 2008; Tamayo-Velazquez et al., 2010; and Westley & Briggs, 2004). The researchers suggested that combining education to both office staff and patients would provide the best outcome for this EBP project (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Durbin et al., 2010; Fried et al., 2010; Spoelhof & Elliott, 2012; Sudore et al., 2008; Tamayo-Velazquez et al., 2010; and Westley & Briggs, 2004). The BSAS questionnaire (Bergman-Evans et al., 2008), focuses on staff attitudes, comfort, and beliefs on AD discussions, evaluated baseline and post-educational intervention knowledge. Baseline BSAS findings supported the need for an education program to increase the office staff's comfort and knowledge on patient AD discussions. The questionnaire had well established reliability and validity. After reviewing the evidence, it was determined that the BSAS questionnaire was the appropriate tool for this project. Office staff education was conducted at the target site prior to AD engagement protocol initiation and a written

protocol was made available for the health care providers to follow. The AD Engagement Protocol provided a clear identification of the patient's level of readiness for AD discussions and supported the health care providers as they positively engaged in these AD discussions.

Data were collected using a pre-test/post-test design to establish baseline knowledge; then, office staff attended a 20-minute educational program, and the target site instituted the AD Engagement Protocol. The 20-minutes was determined to be the time required to provide the needed staff education based on an analysis of the required content. The pre-test/post-test design used for this EBP project was consistent with previously published literature focusing on staff attitudes. After reviewing and evaluating the current literature, it was also determined that the BSAS was a well-accepted tool with established reliability and validity by the authors who are content experts in the field of end-of-life/ advance directives, and demonstrated reliable use in clinical practice for assessing staff attitudes towards end-of-life discussions (Bergman-Evans et al., 2008). Then, note the internal consistency within this population for this project ranged from .817 to .939.

Upon conclusion of the 3-month AD Engagement Protocol, the office staff participants were administered a post-test to measure comfort and knowledge obtained from the education and implementation of the AD Engagement Protocol. The 3-month time period was selected based on previously published research (Bergman-Evans, 2008). Data analysis revealed that baseline scores did improve after the office staff had the educational program and with the implementation of AD Engagement Protocol. The BSAS mean baseline score was 17.22 and the mean post educational intervention/AD Engagement Protocol score was 23.24. The intervention of office staff education and implementation of an AD written protocol resulted in a mean improvement of 6.02, which

is a statistically significant improvement of staff knowledge, comfort, and attitudes on AD ( $p = .0004$ ). The BSAS survey focused on staff knowledge and comfort. As seen in item 1, staffs comfort with general communication about end-of-life, improved significantly ( $p = .001$ ), Item 4, which focused on staff comfort specifically with AD discussions, was found to be an significant improvement ( $p = .001$ ). Focusing on knowledge, was item 2 staff understanding and knowledge of AD, had an improved of ( $p = .029$ ). Focusing on attitudes about AD was item 3 what staff though on the usefulness of AD/algorithm, there was a significant improvement of ( $p = .002$ ). Item 5 asked if staff thought ADs were followed, this was found to be significantly improved ( $p = .000$ ). Item 6, ask if ADs are reviewed and there was a significant improvement of ( $p = .006$ ). The findings from this EBP project are similar to the reviewed literature which supported promoting primary care office staff comfort and knowledge with AD discussions by providing the office staff with (a) education, (b) repetition/time to incorporate change in comfort, and (c) a written protocol on AD discussions (Bergman-Evans et al., 2008; DeVleminick et al., 2013; Durbin et al., 2010; Fried et al., 2010; Spoelhof & Elliott, 2012; Sudore et al., 2008; Tamayo-Velazquez et al., 2010; and Westley and Briggs, 2004).

Statistical analyses of project data revealed the 20-minute education program and implementation of an AD Engagement Protocol did increase the overall comfort and knowledge of the office staff participants. Of particular importance for generalizability of these findings is that the office population is similar to many primary care settings, a diverse group consisting of 35% Caucasian, 35% African American and 24% Latino ethnicity, with 35% of participant in the 36-45 age group. Also that the office staff had a mode age range of 36-45 of age or 35% of the participants were in this age range, with 29% being younger and 36% being older. This is consistent with Bergman-Evans et al. (2008), in which the mode age group was 36-45 years old range. Since the majority of

participants (59%) were MAs it was expected to see the mode educational level as “some college/technical school”, and the health care providers who comprised of 18% of the participants correspondingly had the next most commonly reported educational preparation: “master degree or higher degree”. Although these results were anticipated given the known demographics within this office setting, the diversity of age, ethnicity, and educational preparation supports the premise that this EBP project can be replicated within other primary care office settings and its applicability is not dependent on age, job type, educational level, or ethnicity.

Following a review of the literature, a target for the percent of eligible patients to be engaged was established. This target, at least 50%, was based primarily on DeVleminick et al.'s (2013) work in which it was determined that less than 50% of terminally ill patients had an AD in their electronic medical records. As an aggregate, the health care providers engaged more than 69.3% of the eligible patient participants in AD discussions, with one of the health care providers engaging in advance directives at the rate of 75% of the eligible patient participants. One factor impacting the outcomes of this EBP project was noted during a review of the patients who were not engaged. It was determined that patients who would have met the eligibility criteria were inappropriately scheduled by the front desk for a “routine appointment”, rather than a “wellness/annual health appointment” that prompted recruitment for participating in the AD Engagement Protocol. It was estimated that an additional 15 patients could have been engaged, but were not eligible to participate in the protocol due to inappropriate scheduling. This finding identified the need for additional education and potential quality improvement projects at the target site.

A review of patient demographics revealed that female and male participants were engaged equally by the all-female health care provider team, revealing that the

group was comfortable following the protocol and entering AD discussions with both genders. Of particular interest was that the percent of patients engaged did vary remarkably by age. The providers engaged 100% of those over the age of 90 years, but only 46.8% of those in the 50-59 year age category. The last demographic finding was whether the diagnosis encouraged AD engagement, and the finding support that patients with comorbidities of heart failure, cancer and CVA/stroke were engaged at 100% and those patients with DM, COPD and CAD were engaged 80%, compared to those patients with other comorbidities of hypothyroid, osteoarthritis, rheumatoid arthritis, osteoporosis, and GERD. This supports that despite the focus of healthy adults age 50 and older, the education and protocol was most effective for older adults and/or those with significant co-morbidities. Sudore et al. (2008) found that patients who stated they were in poor health had a higher level of completed AD. However, it is believed by the DNP project coordinator that once health care providers developed an enhanced comfort level with AD discussions for the younger, healthier populations once this change has become engrained within the practice.

Finally, the data provided information on patient participant level of readiness. Thirty-three percent of engaged participants were in the pre-contemplation stage for living will readiness. This finding was consistent with findings from Fried et al. (2008) study in which 26% of participants were in the pre-contemplation phase of living will development. The literature supports the premise that patients want their health care provider to introduce AD discussions (De Vleminck et al., 2013), and individuals in the pre-contemplation phase are the ideal population to be targeted for AD discussions. Interestingly, 40% of patients within this EBP project were in the maintenance phase of readiness for quality of life, meaning that they had discussed their end-of-life wishes with family or loved ones; yet, not all of these individuals had completed an AD, and it must

be stressed that the experts noted that patients' AD decisions were often not followed when they were not documented in written form (Bergman-Evans et al., 2008).

Additionally, 26% of patients were in the maintenance phase for having a living will. This statistic was of interest because it was higher than the national average of less than one-fifth of the population having a living will (Alamo et al., 2010), yet still indicative of a need for improvement.

It was identified in the analysis of the BSAS tool that staff participant level of readiness was related to age. BSAS Item 10 was a yes or no question, with follow up. The initial question asked whether staff members had completed their own AD. Only two participants answered yes; both of these participants were over 50 years old (2 of 3 for this age group) and were in the maintenance phase of the TTM. However, one participant (the 3 of 3) who was in the 56-65 age range and two participants were in the 46-55 age range (2 of 3 for this age group), checked that "they would like to complete an AD within the next year". These findings suggest that the older participants were in the contemplation phase, preparation phase, or maintenance phase of the TTM, while all of the younger participants were in the pre-contemplation phase. The remainder of the office staff members was younger than 45 and also in the pre-contemplation phase. This supports the EBP project recommendations that initiation of AD engagement should happen at 50 years old and older group, that patients at this age are ready to engage in AD discussions.

### **Evaluation of the applicability of the theoretical and EBP framework**

**Stetler Model.** The Stetler Model has assisted clinicians in implementing research findings in the clinical setting for a number of years and is a practitioner-oriented model (Stetler, 2001). The model's practitioner focus was of prime importance for this EBP, since the health practitioner was the change agent. The model's five

phases provided guidance on the research for EBP focusing on primary care setting AD discussions and allowed for the development and implementation of this EBP project. Leadership, nursing, medicine and office management supported this EBP project. Following the core assumptions of the Stetler Model, this support can be considered a key component, since management can be an external factor that can influence outcomes for this EBP project. This support also assisted in the positive success of this EBP project. In the discussion with other internal medicine health care providers, many have asked if we can replicate this AD Engagement Protocol in their primary care settings. This project does seem to be adaptable to all primary care settings, as well as, to all health care specialties for patient ACP discussions. In fact, since completion this EBP project, the project coordinator has been asked by her employer to present her EBP findings to her peers to initiate replication in other primary care settings within the health care organization.

**Transtheoretical Model.** Research has supported the use of the TTM of behavior change as an effective model to guide health care providers on ACP discussions, for identification of patient readiness, and for provision of effective interventions based on patient readiness (Spoelhof & Elliott, 2012). The AD protocol utilized for this EBP project incorporated the TTM and gave the health care providers support and direction for initiation of ACP discussions. The TTM framework easily guided determination of patient readiness with clear questions and, based on the patient answers, identified the patient level of readiness. The Fried et al. (2010) AD engagement protocol also clearly provided suggestions on interventions based on the patient level of readiness for AD engagement. Thus, the TTM level of readiness provided the health care providers with a clear direction for how to direct the AD discussions in a manner that was consistent with

the individual patient's living will readiness (see Table 4.4) and patient's quality of life readiness (see Table 4.5).

### **Strengths and limitations of the EBP project**

**Strength of EBP project.** A strength of this EBP project was apparent within the success of implementing the AD protocol, and the positive impact the EBP had for both for staff and patients. The educational component with the initiation of AD written protocol provided staff comfort and guidance on ACP discussions, thereby, decreasing their insecurities with ACP discussions and encouraging AD engagement. An additional strength of this EBP project was the high level of acceptance within the diverse office staff. The successful implementation in this setting, with diverse office staff, increases the transferability of this EBP project to other office settings. The support of the health care providers was essential to project success, as the providers needed to follow the protocol and engage in patient AD discussions within their busy office schedule. Thus, the health care providers' buy-in was also considered a strength of this EBP project. As an added benefit, this project was helpful in identifying individuals who had an AD, but whose AD was not in the chart, and a mechanism for updating the patient's EMR was ultimately developed as a result of this EBP project. Another important strength was the BSAS tool, which has a positive reliability and validity for use. Using the BSAS tool supported weight and credence to the findings of this EBP project. The TTM algorithm also added significant strength to this EBP project, since; the TTM has a positive reliability and validity in ACP discussions.

**Limitations of this EBP project.** Unfortunately, the literature reviewed for this EBP project did not address how cultural factors may play into office setting patient AD completion, and this EBP project did not provide additional insight. Latinos comprised only 2% ( $n = 2$ ) of patient participants, and Asians accounted for only 1% additional ( $n =$



1), The limited data on these ethnic groups may be crucial for future AD development, since Hispanic and Asian patients usually rely on family members for AD decisions (Westley et al., 2004). Another limitation was that the front desk staff had not previously scheduled all eligible patient participants correctly; scheduling patients for the appropriate reason and with the appropriate number of minutes for the visit would have expanded the number of patients eligible to participate in the EBP project and could have provided a more positive outcome in the number of patients engaged by the health care providers.

### **Implications for the future**

**Practice (APN role or professional nurse).** The PSDA has allowed hospitalized patients the opportunity to express their wishes for medical treatment before incapacitating injury or illness occurs. Nurses are proven patient advocates and have communication skills that are ideal for AD education. Thus, staff nurses have been champions for AD discussions, providing the needed patient education during hospitalization and encouraging patients who defer AD during hospitalization to speak to their health care provider at their next office appointment.

APNs can play a major role with AD for non-hospitalized patients, since it is the APN who often sees patients in the office setting. During an office wellness or periodic visit, the APN can promote AD as part of the patient's wellness care. The APN can also provide the patient further direction based on state requirements of AD and inform the patient of the cost-effective resources that are available to assist them with developing an AD.

**Health Care Practice.** Providing quality, cost-effective care is the goal for all health care providers and health organizations. Quality care assessments include valuable input from patients. When health care providers engage in AD with their

patients they provide quality care and give their patients the opportunity to voice their end-of-life decisions. When health care providers engage in AD discussions they also are promoting cost-effective future care, as expensive therapies that the patient does not want can be avoided.

### **Theory**

The TTM framework was key to the success of this EBP project. Research has demonstrated that the TTM can be applied to and guide any behavior change. Once a change had been identified as need or a requested for change, the TTM can be the process to implement the change, and measure the change based on the readiness phase. This project demonstrated the usefulness and applicability of the TTM to assist with AD engagement discussions and provide patients with a choice of their end-of-life decisions. Yet, the positive findings from this EBP project support the need for additional education programs, focusing on AD engagement, for health care providers and office staff. Personnel resources can be used appropriately as the health care providers follow the AD algorithm. Patients who are not ready to engage in AD discussions can be provided educational brochures, while those in the active or planning phase can be provided additional information.

### **Research and Education**

The findings from this EBP project add to the growing body of evidence within the literature that support the effectiveness of educational programs to increase staff members' comfort with AD discussion and enhance the initiation of an AD algorithm. Findings may also be generalized to other outpatient primary care and specialty settings. Disseminating findings from this EBP project through publication in academic journals and health care practice and research conferences can motivate additional health care providers to engage in AD with their patients. However, despite the positive impact of

this EBP project, additional research could further identify challenges to AD discussion engagement and strategies to overcome these barriers.

### **Conclusion**

The primary purpose of this EBP project was to determine if staff education and the initiation of an AD protocol based on the TTM would increase AD discussion engagement rates. Overall, the project was considered a success. Results from this project are consistent within the previously published literature and demonstrate that using an AD protocol is an effective strategy for increasing AD engagement rates.

The DNP student was armed with the knowledge and leadership skills to be an effective change agent within the organization. The Stetler Model was an appropriate guide for identifying and reviewing supportive literature and planning the project, but the TTM provided the guidance for AD discussions within the coordinating protocol that focused on the patient's level of readiness. The protocol was accepted by the health care providers within the target organization, and additional leadership expressed an interest in expanding its use to other primary care and internal medicine practice practices. Lessons learned from this project (i.e., the need for appropriate scheduling of office appointments) will undoubtedly provide an impetus for further change within these additional practices and the organization as a whole. Ultimately, this EBP project will continue to enhance patients' autonomy and keep health care costs down as health care providers support patients' decision regarding end-of-life.

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## **BIOGRAPHICAL MATERIAL**

### **Gloria J. Dillman**

Ms. Dillman graduated from Rush University with a baccalaureate degree in nursing in 1987. Her past experiences include working in a community hospital setting in the areas of cardiology, critical care, nursing recruitment, and nursing management. She returned to school in 2007, and graduated from Purdue University's Family Nurse Practitioner program with a master in science in 2010. While attending Purdue, she was inducted as a member of Sigma Theta Tau International Nursing Society, Mu Omega chapter and was asked by her employer's education department to assist with undergraduate nursing students assigned to the hospital by becoming an adjunct clinical instructor for Purdue University. Upon graduation from Purdue University, she became certified as a family nurse practitioner through American Nurses Credentialing Center, and started her career as a family nurse practitioner in nephrology. She is a member of the American Nurses Association, American Association of Nurse Practitioners, American Legion Auxiliary, and the Society of Nurses in Advance Practice. Ms. Dillman, fulfilling her desire to work as a patient advocate and nursing mentor, took a position where she was able to transition into internal medicine and pediatrics nurse practitioner as a primary care provider. She works with patients of all ages for their primary health care needs in the office setting and has hospital privileges where she assists her Internal Medicine practice group for adult patient hospital rounds. In addition, she is an adjunct clinical instructor for Valparaiso University undergraduate nursing students, and mentors APN students as a clinical site instructor. Ms. Dillman's past and current critical care experience included observing how patients and their families were unprepared to discuss and formulate end-of-life decisions; these experiences influenced the direction of her evidence-based practice project. Seeing the need to promote patient autonomy and

support patient choice for patient end-of-life decisions, as well as identifying the lack of office staff education and comfort with advance directive discussions, Ms. Dillman conducted an evidence-based practice project that addresses these concerns through the implementation of an advance directive protocol in the primary care setting.

**ACRONYM LIST**

ACP: Advanced care planning

AD: Advance directive

APN: Advance Practice Nurse

BSAS: Brief Survey About Staff Attitudes Related to Advance Directives

CASP: Critical Appraisal Skills Program

CMS: Centers for Medicare and Medicaid Services

DNP: doctor of nursing practice

EBP: evidence based practice

ISDH: Indiana State Department of Health

IRB: Institutional Review Board

JBI: Joanna Briggs Institute

JCAHO: Joint Commission on Accreditation of Health care Organizations

MA: Medical Assistant

NIA: National Institute of Aging

NIH: National Institute of Health

PICOT: population, intervention, control, outcome, time

PSDA: Patient Self-Determination Act

RCT: Randomized Controlled Trial

TTM: Transtheoretical Model

APPENDICES

Appendix A



ADVANCE DIRECTIVES

Your right to decide and put it in writing

ADVANCE DIRECTIVES • Franciscan Alliance Northern Indiana Region

**Dear Friend,**  
*In this brochure you will find the information on advance directives. Please read it very carefully before deciding whether or not you want to complete the forms. Please note the following:*

- *If you are to be admitted to a hospital, bring your advance directive with you;*
- *Family members, anyone directly financially responsible for your medical care or anyone entitled to your estate cannot be witnesses. Also, the witness must actually see you sign the document.*

*For assistance ask your nurse/operator to page a Spiritual Care representative.*

Each time you visit your physician, you make decisions regarding your personal health care. You tell your doctor/physician about your medical problems. Your physician makes a diagnosis and informs you about available medical treatment. You then decide what treatment to accept. That process works until you are unable to communicate your decisions. Advance directives are a way to manage your future health care when you cannot speak for yourself.

**WHAT IS AN ADVANCE DIRECTIVE?**  
 "Advance directive" is a term that refers to your spoken and written instructions about your future medical care and treatment. By stating your health care choices in an advance directive, you help your family and physician understand your wishes about your medical care. An advance directive may name a person of your choice to make health care choices for you when you cannot make the choices for yourself.

**ARE ADVANCE DIRECTIVES REQUIRED?**  
 While completing an advance directive provides guidance to your physician in the event that you are unable to communicate for yourself, you are not required to have an advance directive.

**WHAT HAPPENS IF I DO NOT HAVE AN ADVANCE DIRECTIVE?**  
 If you do not have an advance directive and are unable to choose medical care or treatment, Indiana law decides who can do this for you. Indiana Code 16-36 allows any member of your immediate family (meaning your spouse, parent, adult child, brother or sister) or a person appointed by a court to make the choice for you.



*Advance directive is a term that n*



**Franciscan**  
**ALLIANCE**  
*inspiring health.*

**Appendix B**

PROCEDURE TITLE:		Advance Directive Engagement Protocol	
AUTHOR:	Gloria Dillman, MSN, APN, FNP- BC	APPLICABLE TO:	Healthcare Providers and Support Staff within the office of Internal Medicine Dyer, Indiana
DATE ORIGINATED:	8/14	DATE EFFECTIVE:	10/14
Page 1 of 5			

**GENERAL INFORMATION:**

According to the National Institutes of Health [NIH] (2014), more than one out of four Americans will face questions about medical treatment near the end-of-life, although many will not be capable of making those health care decisions. To support patient choice and autonomy with end-of-life decisions, the National Institute of Aging [NIA] (2014), recommends that patients discuss end-of-life wishes with healthcare providers and family.

The lack of a structured protocol on Advance Directives (AD) was identified at the target organization for this evidence-based practice (EBP) project, it was clear that a clinical practice change using the EBP process would be beneficial in this primary care setting. The proposed change for this organization was the implementation of an AD protocol developed based on the most current AD guidelines and EBP literature. This EBP project is designed to increase quality and outcomes for patients, their families, healthcare professionals, and the target organization.

This EBP project will be implemented with the objective of increasing AD engagement between the patient and healthcare provider, which includes assigning a health care representative and completing a living will.

TITLE:	Advance Directive Engagement Protocol	
DEPARTMENTS:	Healthcare Providers, Support Staff	Page 2 of 5

The procedure was developed with input from a multi-disciplinary team consisting of healthcare providers (Kathy Mulligan MD, Cheryl Anthony -Worix, MD, Bobbi Schwabe MS, RN ANP-BC, and Gloria Dillman, MS, RN, FNP-BC [EBP project leader] and support staff.

#### PROCEDURES:

- 1.0 From October 14, 2014 to January 15, 2015, office staff will follow advance directive protocol.
  
- 2.0 Adult primary care office patients age 50 years and older, who have an annual/wellness visit scheduled with Dr. Mulligan, Dr. Anthony-Worix, Bobbi Schwabe NP, or Gloria Dillman NP. All patients who qualify will have a protocol attached to their billing sheet; this will be completed by the front desk staff. Every am the front desk will attach these protocols to the patients billing sheets. Staff will have access to the protocol at the front desk, but if the supply needs to be replenished, the office manager and EBP project leader will have original copies of all forms and appendices needed for the EBP project. When patient arrives the front desk to check in, the patient will receive (a) the patient informational sheet/letter (see Appendix D), and (b) the Franciscan Advance Directive booklet to AD protocol (see Appendix A). The patients will be given instructions to review these documents during the wait time (usually 5 to 15 minutes) prior to being roomed for their annual/wellness visits. The patient informational sheet (Appendix D) will inform patients they are involved with a quality improvement project and no time during this quality improvement will

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patient be required to have an advance directive or develop an advance directive. No consent is required for this is a QI project.

- 3.0 Medical Assistants (MA) after rooming the patients will make sure protocol is on chart. If not will have a supply of the protocol at their work station and will get protocol in room verifying demographic information is filled out.
- 4.0 The MA will assist patients The MA will complete the demographics with the patient and verify information is correct prior to healthcare provider's engagement.
- 5.0 Healthcare provider will ask the patients if they have any questions on the AD protocol, follow the AD algorithm and engage in AD discussions.
- 6.0 Based on the results on the AD algorithm, healthcare providers will (a) ask patients to get a copy of their completed AD to office for scanning into their EMR chart, (b) have patients schedule a follow up appointment based on their results with the algorithm, either 1 month or 6 months or (c) no scheduled follow up at this time but will take the advance directive booklet home to review.
- 7.0 The completed AD algorithm sheet will go into a file at each of the healthcare provider work station and be collected daily by the EBP project leader and locked in the EBP project leader's desk.
- 8.0 Once healthcare providers complete AD protocol MA will verify that follow up appointments are scheduled and AD documents will get scanned into the EMR.



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- 9.0 If supply of any of the forms, booklet, protocol or algorithm needs to be replenished, staff to these forms at front desk, office manager office and EBP project leader desk. The office manager and EBP project leader will have original copies of all forms and appendices needed for the EBP project. Every morning the office manager will round to all work stations and front desk and resupply these areas.
- 10.0 Patients to be eligible for the AD Engagement Protocol must be able to legally make self-decisions. Therefore, patients having dementia or decrease mental capacity are excluded from this AD Engagement Protocol.
- 11.0 Patients will be informed by healthcare providers at the beginning of this advance directive engagement protocol between the healthcare provider and patient on;
- 12.0 Advance directive engagement is not intended to be legal advice and although an attorney is not required for advance directives, an attorney is often helpful in advising the patient on complex family matters.
- 13.0 During this initial engagement between the healthcare provider and patients, staff will not proceed in the development or discuss specifics of the AD documents. However, patients will be encouraged to discuss these specifics with family members and attorneys (if patient decides to include in discussion).
- 14.0 If the patient lives in more than one state during the year, an attorney can advise patients on whether their advance directive completed in another state are recognized in Indiana.

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- 15.0 Once the AD engagement protocol is complete, a follow up appointment may be scheduled depending on the stage of change the patient is found to be in. Family members should be encouraged to attend this meeting.

### **Appendix C**

#### *Introductory Letter for Staff on Advance Directive Protocol*

I am completing my doctoral studies at Valparaiso University. As part of studies and degree requirements, I am required to develop an evidence-based practice project. I have chosen to focus on advance directives in the office setting and will be initiating an advance directive (AD) protocol in our Dyer, Indiana office starting October 14th and continuing through January 15, 2014. This AD protocol is a quality improvement project for our patients and will focus on patients who are 50 years of age and older who are scheduled for their annual/wellness exam with Dr. Mulligan, Dr. Anthony-Worix, or Bobbi Schwabe NP. We will be having a meeting 1:00 pm on Thursday, October 9, 2014 for healthcare providers and another meeting for the medial assistants of the above healthcare providers, front desk staff, and our office manager on Monday, October 13, 2014 at 11:30 am -1:00 pm, in the break room. During this meeting, you will be asked to take a brief pre-survey on AD. This survey will take approximately five minutes to take.

A follow up meeting on Wednesday October 22, 2014 that will include all staff to evaluate, trouble shoot and answer questions on the AD protocol. On January, 19, 2014, the same survey will be given post education and AD protocol implementation. To ensure anonymity, yet allow correlation of individual pre- and post-intervention results, participants' surveys will be coded with a unique identifier randomly assigned by the EBP project coordinator. I will review the AD terms, the AD protocol and forms, and your role in the AD protocol. I will also answer any questions you may have on the AD protocol and/or your role in this quality improvement project. I am happy to say we have the cooperation of Franciscan Alliance's risk management and Franciscan Medical Specialists' management for this project and our attempts to improve our engagement on advance directives.

## Appendix D

### *Introductory Letter for Patients on Advance Directive Protocol*

We would like to inform you, that you have been selected to be part of a quality improvement project for our office. Gloria Dillman MS, RN, FNP-BC, a certified Nurse Practitioner here in our Dyer, Indiana Franciscan Medical Specialist office is a Doctor of Nursing Practice student at Valparaiso University and is conducting a quality improvement project as part of her coursework. This evidence based practice project is a requirement to fulfill her doctoral degree at Valparaiso University. Gloria has elected to focus on a specific need within our office. The quality improvement project will focus on advance directives for adult patients 50 years of age and older, who have an annual or periodic wellness visit scheduled with Dr. Mulligan, Dr. Anthony-Worix, Bobbi Schwabe, NP, or Gloria Dillman, NP. If you are receiving this letter, you meet the criteria and eligible to take part in this project.

Keep in mind that at no time during this project will you be *required* to have an advance directive or even develop an advance directive. This quality improvement project has been designed to simply inform our patients of the choices that are available to them, choices about end-of-life wishes that are best made when patients aren't hospitalized in critical or unstable condition.

Accompanying this letter is the advance directive booklet; please take the time to review prior to meeting with your health care provider. The health care provider will ask you just a few questions based on whether you have a living will and health care proxy. You may choose not to engage in the advance directive discussions, simply notifying the health care provider when he or she enters the examination room.

Thank you, for your cooperation. If you have questions, please call Gloria Dillman, NP in the office at 219-934-2492.

**Appendix E***Brief Survey about Staff Attitudes Related to Advanced Directives  
Participant Code Sheet*

<b>Code Number</b>	<b>Staff Member Name</b>
<i>01</i>	
<i>02</i>	
<i>03</i>	
<i>04</i>	
<i>05</i>	
<i>06</i>	
<i>07</i>	
<i>08</i>	
<i>09</i>	
<i>10</i>	
<i>11</i>	
<i>12</i>	

**Appendix F**

*A Brief Survey about Staff Attitudes Related to Advanced Directives*

<b>1) I would rate my comfort level with talking about general end-of-life care issues with patients or clients as:</b>				
Not at all comfortable		Somewhat Comfortable		Very Comfortable
1	2	3	4	5
<b>2) I would rate my understanding of Advanced Directives as:</b>				
Low		Medium		High
1	2	3	4	5
<b>3) I would rate the usefulness of Advance Directives in health care decision making as:</b>				
Not at all useful		Somewhat Useful		Very Useful
1	2	3	4	5
<b>4) I would rate my comfort level with talking about Advance Directives to patients or clients as:</b>				
Not at all comfortable		Somewhat Comfortable		Very Comfortable
1	2	3	4	5
<b>5) In my experience, Advance Directives are followed when making decisions about a patient's or client's care:</b>				
Rarely		Some of the Time		All of the Time
1	2	3	4	5
<b>6) In my practice, I routinely review the Advance Directives of my patients:</b>				
Rarely		Some of the Time		All of the Time
1	2	3	4	5

**7) In my experience, when Advance Directives are not followed it is because (all that apply):**

- They exist but have not been reviewed by the care team
- They exist but are not present on the patient's or client's chart
- There is disagreement or conflict between the family member(s)' and the patient's wishes
- It is unclear whether they are relevant given the patient's condition
- There is disagreement among physicians about the course of care
- There is disagreement among physicians about prognosis
- There is conflict within the care team about the course of care
- There is conflict within the care team about the prognosis
- Other: \_\_\_\_\_

**8) I believe Advance Directives should be followed ( all that apply):**

- When the care team, physicians and patient agree with the course of care

- When the family agrees with the patient's or client's wishes
- When the patient is unable to speak for themselves
- When the patient meets the requirements indicated in the Advance Directive
- Other: \_\_\_\_\_

**Conversations about Advance Directives should happen (☑ all that apply)**

- Upon initial admission to a healthcare facility or program
- When a client or patient's prognosis is poor
- When a client or patient has been diagnosed with a terminal condition
- Upon diagnosis with a serious illness
- When a client or patient is undergoing a serious procedure
- Only at the request of the patient or client
- At annual or routine check-ups
- Other: \_\_\_\_\_

**10) I have completed my own Advanced Directive:**

- Yes             No

***If yes, please ☑ the response that best describes your Advance Directive***

- Living Will only (document expressing my wishes regarding end-of-life care)
- Durable Power of Attorney for Health Care only (document naming another person to speak on my behalf if I cannot express my own healthcare decisions)
- A combined document naming another person to speak on behalf if I cannot express my own healthcare decisions and providing them with instructions about my wishes regarding end-of-life care)
- Other: \_\_\_\_\_
- I am not sure

***If yes, please ☑ the actions that you have taken since completing your Advance Directive***

- I have talked with my physician about my Advanced Directives
- I have talked to my family<sup>1</sup> about my Advance Directives
- I have talked with both my physician and my family<sup>1</sup> about my Advance Directive

---

I have not talked with anyone about my Advance Directive

***If no, please  the response or response that best describe your reason or reasons for not completing an Advance Directive***

- I have not had the time to complete an Advance Directive.
- My family already knows my wishes.
- My physician knows what decisions would be most appropriate for me.
- I do not believe Advance Directives are useful.
- I am not interested in completing an Advance Directive at this time.
- I do not have access to the forms needed to complete an Advance Directive.
- Other: \_\_\_\_\_

***If no, are you interested in completing an Advance Directive within the next year?***

- Yes
- No

**Demographic Information**

My age is ( one)

- 19 – 25
- 26 – 35
- 36 – 45
- 46 – 55
- 56 – 65
- 65 – 75
- 76 or older

I belong to the following professional group ( one)

- Physician
- Nurse Practitioner
- Staff Nurse
- Medical assistant
- Front Desk
- Other type: \_\_\_\_\_

Team/Staff member of:  Home Care Team  Nursing Home  Office Setting

My gender is ( one):

- Male
- Female

My ethnicity is ( one):

- African American
- American Indian or Alaskan Native
- Asian/Pacific American
- Caucasian (White, Non-Hispanic)
- Hispanic/Latino (Non-White)
- Other: \_\_\_\_\_

My highest completed education level is ( one):

- Less than high school
- High school/GED
- Some college/technical school
- College Degree
- Master's Degree
- PhD/MD



**Appendix G***Advance Directive Algorithm*

Medical Assistant's Initials: \_\_\_\_\_

Provider's Initials: \_\_\_\_\_

Patient's Age: \_\_\_\_\_

Patient's Gender: Male/Female

Patient's Race: \_\_\_\_\_

Marital Status: Married/Single/Divorced/Widowed

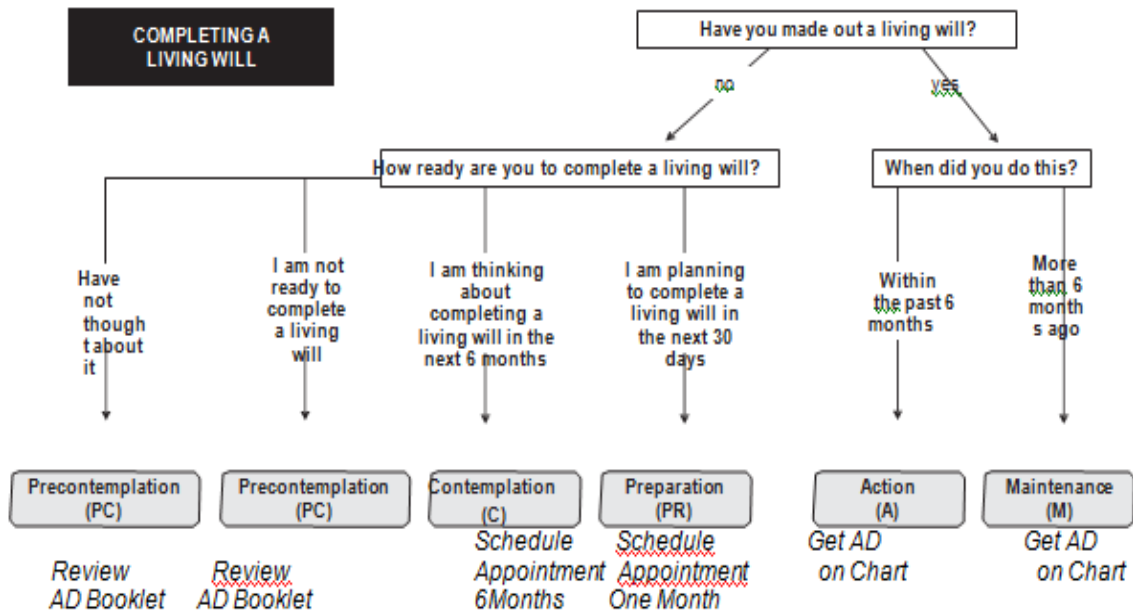
Current Medical Conditions, Circle All That Apply:

- DM
  - HTN
  - COPD
  - CAD
  - Heart Failure
  - Cancer
  - CVA/Stroke
  - Other: \_\_\_\_\_
- 

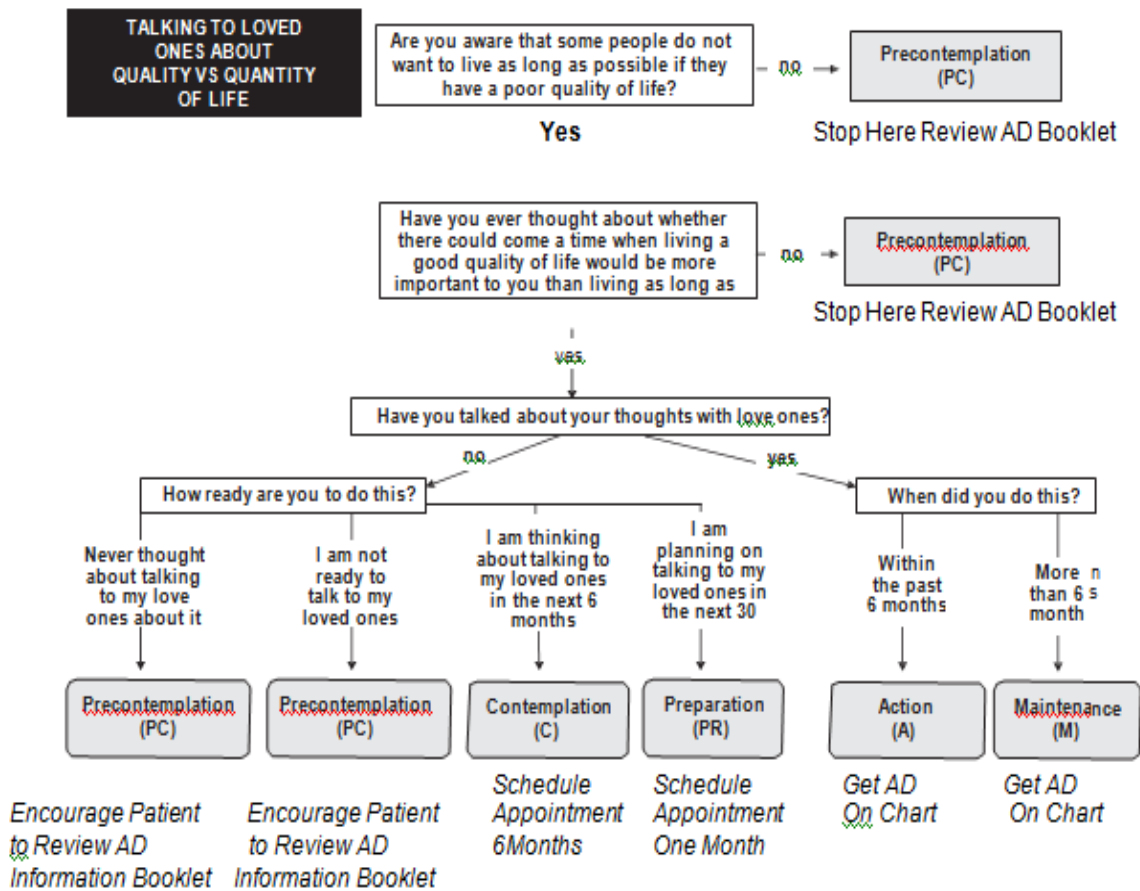
***Healthcare providers start here***

Inform patients

- (a) That an attorney is not required to complete their advance directives. However, they can often be helpful in advising them on complex family matters.
- (b) If the patient lives in more than one state during the year, an attorney can advise patients on whether their advance directive completed in another state are recognized in Indiana.
- (c) Once the AD engagement protocol is complete, a follow up appointment may be scheduled depending on the stage of change the patient is found to be in. Family members should be encouraged to attend this meeting.



Continue with Next Questions



## Post Protocol

### Completing Living Will

- Action Phase, *Patient will bring in AD document to get scanned in and the provider's MA will place in the "Legal" folder in the EHR.*
- Maintenance Phase, *Patient will bring in AD document to get scanned in and the provider's MA will place in the "Legal" folder in the EHR.*
- Preparation Phase, *Schedule appointment one month to discuss AD, advise patient that he/she may bring family and or significant others.*
- Contemplation Phase, *Schedule appointment six months to discuss AD, advise patient that he/she may bring family and or significant others.*
- Pre-contemplation Phase, *No follow up appointment needed. Recommend that patient review booklet at a later date. Make notation in chart to discuss at next annual wellness visit.*

### Quality of Life

- Action Phase, *Patient will bring in AD document to get scanned in and the provider's MA will place in the "Legal" folder in the EHR.*
- Maintenance Phase, *Patient will bring in AD document to get scanned in and the provider's MA will place in the "Legal" folder in the EHR.*
- Preparation Phase, *Schedule appointment one month to discuss AD, advise patient that he/she may bring family and or significant others.*
- Contemplation Phase, *Schedule appointment six months to discuss AD, advise patient that he/she may bring family and or significant others.*
- Pre-contemplation Phase, *No follow up appointment needed. Recommend that patient review booklet at a later date. Make notation in chart to discuss at next annual/ wellness visit.*

## Appendix H

### *Power Point Presentation: Implementation of an Advance Directive Protocol in Primary Care*

**Appendix H  
Implementation of an Advance Directive  
Protocol in Primary Care**

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Gloria Dillman MS, RN, FNP-BC  
Valparaiso University  
College of Nursing and Health Professions

### **Significance of the Problem**

- The population of Americans age 65 years and older continues to rise steadily.
- In 2009, it was estimated as 39.6 million people age 65 years or older.
- By 2030, it is estimated that 72.1 million older adults will be living in the United States.
- As Americans age, they face questions about medical treatment near the end of life, although many will no longer be capable of making those health care decisions when critically needed.

### **Suggested Action for Advance Directives**

- To support patient choice and autonomy with end of life decisions, it is suggested that a discussion of end of life wishes between healthcare providers, patients, and family take place while the patient is still of sound mind and body.

### Barriers

- However, evidence has demonstrated that a number of patient and/or provider barriers are associated with office engagement for patient advance directives (AD):
  - Patient do not want to bring up AD to their healthcare provider or family and hope the healthcare provider will initiate the advance care planning (ACP) discussions.

Primary care providers lack office time and do not feel comfortable in the ACP discussions.

### Target Organization Barriers

- Practice focuses on quality, time-effective care.
- No designated time allotted for ACP discussion in an office visit, based on Center of Medicare and Medicaid Services reimbursement.
- Advanced care planning (ACP) needs to be "fit in" to appointments.
- This creates time constraints for initiating ACP discussions for the non-critical, stable patients seen within the office setting.

### Advance Directive Terms

- Advance directives (AD) are defined as instructions about the individual patient's future medical care and treatment if the individual patient becomes incapacitated.
- These are written Instructions based on the Individual patient's choices for end of life care.
- There are two main types of AD:
  - a living will, and
  - a healthcare representative.

### Advanced Directives Terms

- Living wills are written document that puts into words wishes in the event that the AD holder becomes terminally ill and unable to communicate. A living will is an advance directive that lists the specific care or treatment that the AD holder wants or does not want during a terminal illness.
- Living wills often include directions for CPR, artificial nutrition, maintenance on a respirator, and blood transfusions.

Indiana State Department of Health, 2014

### Advanced Directives Terms

- A health care representative is a predetermined chosen person that would represent the individual patient, and convey healthcare choices or preferences of the individual patient.
- This chosen representative would receive health care information and make health care decisions when the individual patient cannot.
- These choices are AD holder that the health care representative follows are based on the individual patient advance directive.

Indiana State Department of Health, 2014

### Forms

- Franciscan Alliance Advance Directive Booklet
- Advance Directive Protocol
- AD Algorithm
- Will review all Appendices

### **Advance Protocol Clarity of Roles**

- Front Desk- Provide booklet to all eligible adult patients 50 years old or older who are scheduled for annual/wellness visits when they check in at the front desk. Do not provide booklet to individuals who have been identified by the project coordinator as being ineligible to participate due to dementia or limited mental capabilities which impact their ability to make an informed **decision on their own**.
- MA-When rooming patient, (1) make certain that there is an AD form on the chart, if not obtain one from (2) complete the patient demographics section of the AD form.
- Healthcare Provider- Follow AD protocol (circling the stage and intervention on the algorithm), make the appropriate notes in the patient chart, and schedule a follow up as directed by AD form. Then, place the completed form in the designated location.

**Questions?**