ENHANCING OUTPATIENT PARTICIPATION IN ADVANCE CARE PLANNING VIA NURSE-LED INTERVENTION: AN INTEGRATIVE REVIEW

An Integrative Review

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

of Doctor of Nursing Practice

By

Daniel Patrick Arthur, RN

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Lynchburg, VA

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ABSTRACT

Advance care planning allows for medical care at the end-of-life that is congruent with a patient's wishes, values, and beliefs. Even with well-known organizations such as the Institute of Medicine recommending advance care planning completion and legislative encouragement such as the Patient Self-Determination Act of 1990, only approximately one-third of American adults have completed any form of advance directive. Barriers to participation include lack of time, lack of knowledge, and misconceptions on the part of healthcare providers and patients. As an integral part of the care team having significant patient contact in most healthcare settings, nurses are in an ideal position to intervene to improve advance care planning completion and documentation rates. This integrative review examines the ability of outpatient nurse-led interventions to overcome barriers and enhance participation in advanced care planning. Healthcare leaders looking to improve completion and documentation rates of advance care planning in the outpatient setting will find this review provides a solid evidentiary foundation supporting nurse-led advance care planning interventions are effective, feasible, and acceptable to patients and healthcare providers alike.

Keywords: Advance care planning, nurse-led, feasibility, acceptability, effectiveness

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To my wonderful and patient wife Kristi, when my Doctor of Nursing Practice journey began, we had just become parents for the second time. You somehow managed a two-year-old, a new baby, a career, and a household while I worked full-time and followed God's calling on my life to serve Him by going back to school to learn to serve others as a nurse practitioner and educator. This is the culmination of that journey that would have been impossible without your love, encouragement, and support. I love you forever, and promise to never do this again!

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To Dr. Maddox, my Chair and guide – thank you for your guidance and for keeping me on track and focused. Your calming presence balanced my anxiety perfectly. Additional thanks to Dr. Moore for your input and insight and words of encouragement. The Liberty DNP faculty really are the best!

To my friends, I hope you still exist. I have years' worth of ballgames, cookouts, birthday dinners, and celebrations of all sorts to make up for. Here I come!

SECTION ONE: FORMULATING THE REVIEW QUESTION

Advanced care planning (ACP) is a process that helps determine what care a person would want in the future, often at end-of-life (EOL), if decision-making capacity is lost, and/or identification of a surrogate decision maker in case of incapacity (Izumi, 2017). Patients are encouraged to communicate with families, friends, and their healthcare providers regarding their values, beliefs, and wishes. Advance care planning can occur orally, preferably with ongoing communication across the life span and as circumstances change, or with more formal documents such as Advance Directives (AD), Living Wills, Durable Healthcare Powers of Attorney (HPOA), Physician Orders for Scope of Treatment (POST) forms, and/or Durable Do Not Resuscitate Orders (DDNR). Conversation should include, but is not limited to, topics such as end-of-life (EOL) care options, hospice/palliative care preferences, acceptability of life-sustaining or prolonging treatments, and surrogate decision making. Often these conversations do not occur until an acute event necessitates an urgent discussion. Documentation of these preferences should ideally occur in the outpatient setting, well before a patient is critically ill or loses decisional capacity (Chan et al., 2018).

Poor quality communication, inadequate sharing of information, and being unprepared can lead to unwanted aggressive life-sustaining treatments, which in addition to affecting the quality of EOL care for the patient, can also have implications for poor caregiver bereavement (Yun et al., 2019). Standardized tools are available to assist providers in completion, such as Five Wishes and Respecting Choices, yet all too often ACP does not occur, and the patient's wishes go undocumented and potentially unrecognized when needed most (Copley & Ingram, 2020). These decisions may be some of the toughest that individuals will ever make which only underscores the importance of completion, to ensure that the tough decisions are made before a

crisis requiring urgent and emergent decisions regarding life-saving or sustaining treatments (Giannitrapani et al., 2020).

Nurses in the outpatient setting, whether primary care, specialty clinics, or some other setting, are often the primary patient contact making them ideally situated to assist patients and their families, or caregivers, in ACP. The Hospice and Palliative Nurses Association (HPNA) has recognized this nursing role as a key responsibility to ensure care that is congruent with patient values and beliefs (HPNA, 2018). The American Nurses Association (ANA) provides foundational support in asserting the nurse has a responsibility to promote informed decision-making and advocate for care that includes the patient's healthcare preferences (ANA, 1993). Patients report confidence in nurse clinical knowledge and the feeling that nurses spend more time explaining things to them than physicians making nurses an acceptable facilitator from the patient's perspective as well (Young et al., 2016).

Defining Concepts and Variables

To minimize reader ambiguity regarding the focus of the integrative review, it is important to identify the variables associated with the topic and define what the concepts mean in relation to the review. Explicit definitions help determine the overall scope of the review, what literature will be included, and the information that will be extracted from each article (Toronto & Remington, 2020). This integrative review aimed to evaluate literature concerning the feasibility, acceptability, and effectiveness of nurse-led ACP interventions and potential barriers to implementation of nurse-led interventions. The integrative review methodology allowed for experimental and non-experimental research related to nurse-led interventions for ACP to be included. The variables included in the thematic analysis are defined as follows.

For the purpose of this review, ACP is defined as any method, either oral or written, by which a patient (or surrogate healthcare decision maker) makes known to the healthcare provider treatment wishes regarding EOL care. This may include acceptable and/or unacceptable treatment options such as intubation, feeding tubes, dialysis, resuscitative efforts, or the appointment of a healthcare decision-making proxy in the event the patient becomes incapacitated or unable to make healthcare decisions independently.

Nurse-led interventions are defined as any intervention in which a nurse, or a nurse practitioner, is the primary facilitator of the intervention, and may include in-person, phone, or web-based communications with the patient regarding ACP.

Outpatient care refers to care received that does not require overnight admission to the hospital and does not occur in the setting of residential long-term care or a skilled nursing facility. This may include primary care or specialty clinics or associated facilities where patients receive medical care, or treatment and/or information regarding their medical care or ACP, including community facilities.

Feasibility encompasses the characteristics that facilitate the ability to participate in the intervention, either from a provider or patient viewpoint. Feasibility also includes technical, legal, and economic components that may be necessary to make the intervention viable.

Acceptability includes characteristics that affect attitudes and willingness to participate in the intervention. Sekhon et al. (2017, p.1) proposed the following definition: “Acceptability is a multi-faceted construct that reflects the extent to which people delivering or receiving a healthcare intervention consider it to be appropriate, based on anticipated or experienced cognitive and emotional responses to the intervention” Seven constructs (affective attitude, burden, perceived effectiveness, ethicality, intervention coherence, opportunity costs, and self-

efficacy) of acceptability were proposed in the theoretical framework devised by Sekhorn et al. (2017) and helped guide synthesis of data in this project.

Effectiveness refers to the ability of the nurse-led intervention to achieve the desired result. Effective interventions lead to changed perceptions or behaviors (McGuire et al., 2018, p.194). For the purpose of this study, effectiveness was assessed using quantitative data measured and presented in the included articles.

Rationale for Conducting the Review

Reviews are often undertaken following an exploration of the literature that reveals a knowledge gap. Integrative reviews are often best suited to examining broadly focused questions concerning the topic of interest versus more narrowly defined clinical questions about specific interventions with quantitative data which may be more suited to a systematic review (Toronto & Remington, 2020). This review was undertaken based on the following identified gap in knowledge concerning ACP.

In 1990 the Patient Self-Determination Act (PSDA) became federal law. All facilities that receive Medicaid or Medicare funding require that patients not only be educated on AD, but also receive assistance in completing them (PSDA, 1990). The Institute of Medicine (IOM) report, *Dying in America: Improving Quality and Honoring Individual Preferences near the End of Life,* states the current health care system in the United States is primarily aimed at acute, curative care and is ill-suited to meeting EOL needs of patients and families. The comfort care that many may prefer is often implemented too late, if at all, as the programs that most often serve patients with advanced and serious illnesses are fragmented and not well-coordinated, which increases risk and avoidable burdens on patients and families (IOM, 2015).

ACP, when done well, can help eliminate some of the guess work and drive a more streamlined process for EOL care ensuring care that falls within the patient's wishes and desires. ACP can reduce hospital admissions at EOL, decrease psychological stress for families, and ensure treatments that align with the patient's stated wishes (Rogers et al., 2019). Standardized data on ACP and AD completion for the general population do not exist; however, recent studies suggest that only about one-third of U.S. adults have completed any form of advance directive (Blackwood et al., 2019; Yadav et al., 2017). Barriers to completion exist for both healthcare providers and patients. Lack of training, knowledge, and time, and lack of support, both institutional and financial, have been cited as common barriers for providers (Blackwood et al., 2019; Chan et al., 2018; Dixon & Knapp, 2018; Houben et al., 2019; Izumi, 2017; Ke et al., 2015; Miller, 2018; Miller et al., 2019; Rabow, 2019; Rogers et al., 2019). Additionally, lack of role clarity and poor interprofessional communication have been cited as barriers to ACP completion (Dixon & Knapp, 2018; Izumi, 2017; Miller, 2018). Bennet and O'Connor-Von (2020) recognized that the lack of clinician's communication skills, experience, and training impacts both clinicians and families/patients as each side ends up waiting for the other to initiate goals of care (GOC) conversations. This can lead to clinician stress and burnout, as well as patient/family dissatisfaction with EOL care (Bennet & O'Connor-Von, 2020). Patient-centered and goal-concordant EOL care becomes a greater reality when there is collaboration and communication between clinicians and caregivers leading to efficacious GOC conversations that increase comprehension of the patient's wishes (Bennet & O'Connor-Von, 2020).

Recent data suggests that patient and provider alike agree non-physicians are more tactful in their approach to ACP. Patients often report confidence in the clinical knowledge of nurses and increased time spent explaining information as compared to physicians (Ora, 2019). It has

been argued nurses are ideally suited for initiating and leading ACP interventions. Regular, frequent contact with patients, the penchant for care coordination, and the multiple roles that nurses can assume (e.g., educator, advocate, case manager, facilitator) place nurses at the forefront of many patient-centered interactions and care initiatives. It is hypothesized nurse-led interventions for ACP can assist in overcoming barriers and increase participation in ACP, resulting in more congruent EOL care and greater documentation of preferences in the medical record (Chan et al., 2018).

Problem Statement

In 2014, the IOM released *Dying in America: Improving Quality and Honoring Individual Preferences near the End of Life* suggesting the "purpose of comprehensive advance care planning is to ensure that people receive the care they desire and minimize the burden on their families. In doing so, an additional benefit may be lower health care costs." (IOM, 2015, p. 139). The IOM recommended that professional healthcare societies and other organizations concerned with quality of care establish measurable, actionable, and evidence-based standards and interventions for ACP. Patients should be able to share and be active in healthcare decision-making across the life-span, but particularly as it concerns EOL care. Clinicians should initiate conversations and communications early and regularly, and document and integrate these into the plan of care. Plans should be revisited from time to time as the patient progresses through the stages of life so that decisions can be made in line with the patient's beliefs, values, and wishes. Despite this recognition and recommendation, guidelines regarding evidenced-based facilitation and implementation of evidence-based interventions are lacking, leaving healthcare providers, including nurses, and organizations without official guidance on how to best serve their patients regarding the ACP process. This ambiguity leaves many nurses unsure of expectations and

doubting their ability to effectively facilitate ACP and thus ambivalent about participation in general.

Purpose Statement

For nurses to successfully engage in ACP, they must believe they have the time, tools, and support of patients and organizations to be effective. This project sought to determine if nurse-led ACP intervention is feasible, acceptable, and effective for overcoming barriers and enhancing outpatient participation in ACP. The expected outcome was the identification of feasible, acceptable, and effective nurse-led interventions or protocols that can be implemented within an outpatient organization to support ACP efforts.

Lack of ACP when a patient has an acute or emergent condition is often a source of consternation for care providers, patients, and caregivers alike. Many organizations lack evidence or theory-driven procedures or protocols that identify expected facilitators of ACP discussions, or consistent methodology for attaining documentation of ACP, including oral or written (i.e., AD, living wills, DDNR orders, or POST) documentation. As nurses in most organizations have the most consistent patient contact, a nurse-led intervention likely has great potential for success and is thus the impetus for this project. This project seeks to inform those looking to enhance ACP within an outpatient organization of the feasibility, acceptability, and effectiveness of nurse-led ACP intervention and provide practical suggestions for implementation. Upon dissemination and implementation of identified interventions within an organization, the project leader will have the ability to assess for outcomes including increased ACP conversations, AD/DDNR completion, and documentation in the medical record, and develop a plan for sustainability utilizing theories, such as the theory of planned behavior and transtheoretical model, as guides to modify behavior.

Clinical Review Question

With the IOM goal of establishing measurable, actionable, and evidenced-based standards or protocols for ACP in mind, the following clinical question was pursued by the project leader. Is nurse-led ACP intervention feasible, acceptable, and effective for overcoming barriers and enhancing participation in ACP in the outpatient setting?

Formation of Inclusion and Exclusion Criteria

As reviews by nature address broad questions, it is likely initial searches of the literature will return a large volume of potential articles and studies to examine. Refining the volume of literature available on any given topic is important to the goal of succinctly and accurately addressing the clinical question of interest. To accomplish this, the project leader developed inclusion and exclusion criteria. Inclusion criteria defined the required characteristics for inclusion in the final analysis, while exclusion criteria defined characteristics that made an article ineligible for final analysis (Toronto & Remington, 2020).

Inclusion criteria for the literature review to form the basis of this scholarly project included articles published between January 1, 2015 and February 28, 2021. Articles included had to be English-language articles that were available in full-text and published in peer-reviewed publications. All levels of evidence were included for this review. Articles were included if they presented results of nurse/nurse practitioner-led ACP interventions, explored nurse experiences or perspectives regarding ACP, or discussed facilitators or barriers to ACP. Articles discussing facilitators and/or barriers did not have to exclusively discuss the nursing perspective, but the nursing perspective had to be included.

Exclusion criteria included any articles that were published outside of the defined time window to ensure the most recent data were evaluated. Articles not primarily focusing on ACP

interventions, facilitators, or barriers were excluded. Additionally, articles that included an intervention were excluded if it could not be determined who led the intervention, or if the intervention was not nurse-led in nature. Articles reporting data from multiple sites were included, even if some intervention occurred during acute inpatient hospital admission or in a long-term care facility, as long as outpatient sites were included in the same study. If specific data could be attributed directly to the inpatient or long-term care interventions, those data were excluded. The idea of including grey literature, such as conference proceedings, dissertations and/or theses, government reports, white papers, and other typically non-published sources, was initially contemplated. However, most grey sources examined had little information to inform the methodological rigor of the data. For that reason, grey data were excluded from this review.

Conceptual Framework

This integrative review was undertaken utilizing the updated integrative review methodology proposed by Whittemore and Knafl (2005). A need exists, as routes to providing the best evidence-based practice are sought, to produce many types of literature reviews to assist in the synthesis of information and translation from research to practice and policy. As opposed to other review methods, the integrative review allows for both experimental and non-experimental methodologies to inform a more comprehensive understanding of the phenomenon of interest (Whittemore & Knafl, 2005).

Whittemore and Knafl (2005) recommended a five-step methodology consisting of problem identification, literature search, data evaluation, data analysis, and presentation. Clarity in problem identification facilitates the identification of variables which can then be extracted from the primary sources. This integrative review focused on the problem of low completion rates of ACP and examined the feasibility, acceptability, and effectiveness of nurse-led

interventions in facilitating ACP and barriers that may exist to prevent completion and documentation.

Literature Review

The literature search for this project evolved through several iterations as the scope was narrowed to focus on the clinical question. Key words were used in the EBSCO Search database to produce results related to ACP interventions, particularly those that are nurse-led. Those that were not related to nursing interventions, or those for which the facilitator of the intervention could not be determined, were excluded. Fifteen articles were originally selected. Additional articles were included based on further refinement of the search criteria, specifically as relating to the addition of the terms “feasibility,” “acceptability,” and “effectiveness,” for a total of 21 included articles.

Data Evaluation

Data evaluation is often a challenge for integrative reviews. Varying study designs, diverse sampling frame, and non-empirical nature of some included studies makes evaluation of primary source quality a complex undertaking (Whittemore & Knafl, 2005). In this integrative review examining feasibility, acceptability, effectiveness, and barriers to nurse-led ACP, both qualitative and quantitative data were evaluated.

Data Analysis

Data analysis results in an innovative synthesis following a thorough interpretation of the data, involving the processes of data reduction, display, and comparison. Data reduction is completed via the process of categorizing the data into a logical, succinct system of subgroups that enables later comparison of the data. Chronology, sample characteristics, or conceptual classifications may be used to categorize the data. For this review, data were examined

thematically and the most relevant data were extracted from each primary source. It was important to identify and correct for any form of bias that may have factored into the conclusions at this point to maintain rigor in data extraction (Whittemore & Knafl, 2005).

A table was created to reduce the data found in the primary sources to a manageable, workable framework. This information may be found in Appendix C. This process, data display, was completed with the final articles selected for inclusion. The display process enhanced visualization of patterns which assisted in the interpretation of the data and in the drawing of conclusions.

Data Display

Displayed data were utilized for comparative purposes to identify patterns, themes, and relationships among the empirical and theoretical evidence concerning nurse-led ACP interventions. Whittemore and Knafl (2005, p.551) suggested several other analysis strategies, including: seeing plausibility, clustering, counting, contrasting and comparing, and identification of intervening factors, among others. It was expected that common themes would emerge highlighting specific strategies to overcome barriers and improve nurse-led ACP. These themes of feasibility, acceptability, and effectiveness are discussed in detail in this review.

Theoretical Framework

Doctor of Nursing Practice (DNP) programs are practice-based and prepare graduates to utilize theory in practice, including nursing theories and those from other various disciplines with broad generalizability (Chism, 2016). Among the most commonly applied to the realm of nursing are those from behavioral sciences including, the theory of reasoned action, and its extension, the theory of planned behavior, and the transtheoretical model (also known as the stages of change) (Scherrens et al., 2018). These not only align with many types of nursing

research but are complementary to each other. The theory of planned behavior describes the relationship between one's own abilities, values, and motivation to achieve a result and suggests the likelihood of achieving a result is based on the value placed on that result. Theoretically, this could extend to the organizational level, as organizations that place value on specific issues are more likely to achieve or excel in those areas. Studies included in this review often used nurses experienced in ACP and EOL issues for implementation of interventions, perhaps expecting that those with experience place greater value on ACP and in achieving positive outcomes. In clinical practice this may mean that selecting intervention nurses who more highly value ACP may increase the likelihood of improving overall rates within a practice. Additionally, organizations that prioritize ACP as a key element of holistic care are more likely to provide the necessary resources and tools for nurses and to have higher rates of ACP completion among their patients.

Motivation and readiness for change are the primary focus of the transtheoretical model. Research suggests that despite its weaknesses, such as being highly dependent on cognition and not accounting for unconscious processes, the theory of planned behavior can account for up to 50% of variance in intention, and up to 38% of variance in behavior (Scherrens et al., 2018). Supplementation with another model, such as the transtheoretical model which can elucidate strategies to inform targeted interventions, may enhance the effect of both and produce more desirable results (Scherrens et al., 2018).

Advanced care planning could broadly fall under the concept of health promotion, a field that has relied heavily on these theories. The theory of planned behavior has implications for both the nurse performing the intervention and the patient receiving the intervention who is expected to take action. Beliefs about the effectiveness of the intervention or the ability to perform the intervention, as well as the overall importance, may have implications for

implementation. Additionally, understanding the patient's attitudes and beliefs regarding ACP, including whether it is important to those by whom the patient is influenced (subjective norms), and the patient's perception of ability to control the behavior, may influence success of the intervention in causing the patient to act. The transtheoretical model can help inform strategic intervention for both the nurse and the patient. Assessment of the stage of change can help tailor interventions to progress along a spectrum until desired change is achieved. It must be stated that patient autonomy is paramount, and ACP is not mandatory. A desire by clinicians to see improved rates of ACP are based on a desire to see improved, patient-centered end-of-life care, which is most effectively delivered when the provider, patient, and family/surrogate decision-maker are all in agreement regarding the values, assumptions, beliefs, and expectations of the patient as to what is acceptable at that crucial time.

SECTION TWO: COMPREHENSIVE AND SYSTEMATIC SEARCH

Search Organization and Reporting Strategies

University-licensed electronic databases were primarily utilized to identify articles for inclusion in this integrative review. The EBSCO Search tool was used to search CINAHL, MEDLINE, and Health Source: Nursing/Academic Edition. A research librarian was consulted for search term consideration. In addition to articles discovered using key word search, the references of articles selected via search criteria were examined for further articles that would meet inclusion criteria.

Terminology

Search terms for this literature review were supplemented by suggestions from the database search function and assistance of a research librarian. Terms included in all searches included, "nurse-led, nurse led, nurse-delivered, or nurse-managed" AND "advance care

planning, end of life planning, or advance directives." The first search included "nurse-led, nurse led, nurse-delivered, or nurse-managed" AND "advance care planning, end of life planning, or advance directives" AND "systematic review or randomized controlled trial or integrative review." (*n*=30). The search criteria were further refined to include "nurse-led, nurse led, nurse-delivered, or nurse-managed" AND "advance care planning, end of life planning, advance directives" plus "effectiveness" or "efficacy" (*n*=265), or "feasibility" (*n*=42), or "outpatient" or "ambulatory care" (*n*=110). Total results revealed *n*=447 articles that met search criteria. Results were then filtered for duplicates. Articles that did not focus on ACP interventions or barriers were excluded (*n*=93). The remaining titles, abstracts, and methodology sections were scanned, and articles were excluded if it could not be determined who led the intervention, or if the intervention was not nurse-led (*n*=16). The references of these articles were then reviewed to identify articles not found via the original search. A total of 21 articles were selected for inclusion.

SECTION THREE: MANAGING THE COLLECTED DATA

The literature review for integrative reviews often produces a volume of data that necessitates utilization of a data collection strategy. While sorting by hand and removing duplicates is possible and common, it is time and labor intensive. This strategy was utilized for purposes of an initial literature review to establish a knowledge gap and form the basis of the proposal for this integrative review. A more exhaustive search was undertaken following project proposal acceptance, and other options for managing the data, including data management software, were considered. As the project leader had no experience with the cited tools and the initial search did not produce an unmanageable number of results, it was determined to manage the data by hand, using only the functionality of the EBSCO database search engine. Each

iteration of the search was sorted into folders which were then hand-sorted for duplicates. Titles and abstracts were reviewed to ensure inclusion and exclusion criteria were met. Methodology was reviewed when the setting or provider of the intervention could not be determined from the title and abstract review. Twenty-one articles were accepted for inclusion.

SECTION FOUR: METHODOLOGY

The aim of this integrative review was to assess the feasibility, acceptability, and effectiveness of nurse-led interventions for overcoming barriers and increasing outpatient participation in ACP and documentation of patient preferences. The integrative review methodology was chosen for this project as it allows for inclusion of quantitative, qualitative, experimental, and non-experimental evidence found in the research concerning nurse-led ACP interventions.

The highest-level evidence available was included to increase the rigor of this integrative review and support the robust analysis on which conclusions were drawn. While randomized controlled trials (RCTs) may be preferable for answering research questions about specific interventions and their relative effectiveness, RCTs do not necessarily capture all data important to assessing other domains. Domains such as human response and meaning, which are important to the assurance of patient-centered care, are important elements of ACP (Powers, 2015). Additionally, these domains are important to the feasibility and acceptability of an intervention. A potentially effective intervention that is difficult to implement due to feasibility and acceptability concerns has little chance of providing the desired effect. This project focused on the delicate topic of deciding and documenting EOL care preferences. Patients, their families, and healthcare providers often have difficulty broaching such a sensitive subject, thus underscoring the importance of acceptability to the overall ability to implement a nurse-led

intervention. For this reason, an integrative review that encompassed both experimental and nonexperimental research evaluating quantitative and qualitative data was most likely to provide evidence-based intervention options that are both effective and palatable.

The updated integrative review methodology proposed by Whittemore and Knafl (2005) formed the basis of this project. The project leader used the five-step methodology consisting of problem identification, literature search, data evaluation, data analysis, and presentation to focus on the problem of low completion rates of advanced care planning and examining the feasibility, acceptability, and effectiveness of nurse-led interventions in facilitating advance care planning and barriers that may exist to prevent completion and documentation.

Problem Identification

Clear problem identification is the first step of the integrative review methodology and includes variables of interest and the type of literature to be included in the review. This question or phenomenon of interest sets the stage and facilitates all other stages of the review. Data extraction is complex, and without a well-defined problem it is difficult to narrow the vastness of the available research into a collection of data focused on the topic at hand (Whittemore & Knafl, 2005).

The problem identified for the basis of this integrative review was the low rate of ACP completion in the United States due, at least in part, to nursing clinical inertia based on perceived barriers including role confusion, lack of time, and lack of knowledge/training/education (Izumi, 2017). Yadav et al. (2017), in a systematic review of ACP completion, identified that only about one-third of US adults has any form of AD in place, whether a living will, or HPOA. While not encompassing all possible aspects of ACP, Yadav et al. (2017) provided a benchmark highlighting the unacceptably low rate of patients making their EOL wishes known. Without

documentation a patient is more likely to experience incongruent care, including unwanted treatments, or care not being provided in the desired setting at EOL.

Literature Review

Completion of the literature search is the first measure of the rigor of an integrative review. As database searches can be incomplete due to limitations of search and indexing functions, it is recommended that other search methods be employed in conjunction with database searches. This integrative review included a cited reference search of articles cited by other resources identified during the literature review. In conducting the literature review for this integrative review, a keyword search was used, as previously described, to identify potential articles for inclusion. The abstracts of the remaining articles were scanned by the project leader to ensure proper focus. If the information could not be obtained from the abstract, the methodology section was reviewed, taking care to avoid results and conclusions to minimize the possibility of selection bias of articles that may align with any preconceived conclusions.

Fifteen articles were initially selected; however, additional terminology that would likely produce more comprehensive results was identified. Inclusion of the terms “feasibility” and “acceptability” in the final search strategies allowed for the most accurate reflections of the clinical question being addressed and the most comprehensive analysis based on the best available research. Applying these criteria led to 21 articles being selected for inclusion in the integrative review.

Data Evaluation

Integrative reviews present a challenge for data analysis as varying research designs have different criteria to underscore quality, and the quality of nonempirical data may be difficult to define. When multiple study designs and a diverse sampling frame are included, the complexity

of quality evaluation increases. It is suggested that quality of data be discussed in a meaningful way in the review, although a defined, consistent methodology for incorporating multiple experimental and nonexperimental designs into a quality evaluation is lacking (Whittemore & Knafl, 2005).

In this integrative review examining the effectiveness of and barriers to nurse-led ACP, qualitative, quantitative, experimental, and nonexperimental research and data were evaluated. To ensure quality was adequately addressed, "authenticity, methodological quality, informational value, and representativeness of available primary sources" was considered and discussed in the final analysis (Whittemore & Knafl, 2005, p. 550).

Data Analysis

The goal of data analysis is to present a thorough and unbiased interpretation and synthesis of included research. To accomplish this goal a stepwise process consisting of data reduction, data display, data comparison, conclusion drawing, and verification, as discussed by Whittemore and Knafl (2005), was utilized for this integrative review to maximize integrity of results.

The data were categorized into a logical, succinct system of subgroups enabling comparison of the data per Whittemore and Knafl (2005). For this project the data were categorized conceptually into data addressing the three primary domains: feasibility, acceptability, and effectiveness. The data from each source article were reduced, with similar and most relevant data extracted from each primary source. Bias was examined, identified, and corrected for throughout the reduction process to maintain rigor in data extraction.

A table like the literature review matrix found in Appendix B was created to reduce the data to a manageable, workable framework. Grouping via themes was undertaken to enhance the

visualization of patterns to set the stage for interpretation of the results (Whittemore & Knafl, 2005). The data display process was completed with the 21 articles selected for inclusion.

Data Comparison

Data may be compared using several strategies as suggested by Whittemore and Knafl (2005), including: seeing plausibility, clustering, counting, comparing and contrasting. Patterns, themes, or relationships among the empirical and theoretical evidence concerning nurse-led ACP interventions may then be identified to support earlier interpretive efforts. The process of data comparison identified common themes highlighting specific strategies to overcome barriers and improve nurse-led ACP which were included in the final analysis.

Conclusion Drawing and Verification

The final phase of data analysis moves beyond identified patterns and themes into a generalizable conclusion that encompasses the particulars of the interpretive analysis. Conclusions should be considered through the analysis process, but care had to be taken to consider all information and not become wed to a particular conclusion before all data were evaluated. As explained by Whittemore and Knafl (2005), premature analytic closure results from becoming too locked into a particular conclusion before all data can be incorporated which may lead to exclusion of pertinent data that would have made the final conclusions more robust. During this phase, verification of accuracy and confirmability of all primary source data is a must. Additionally, any conflicting evidence must be accounted for with significant positive and negative findings considered. Counting the positive versus negative findings, and examining confounders contributing to variable findings are two ways that may be utilized to address conflicting data (Whittemore & Knafl, 2005).

Presentation

Once the data conclusions from each subgroup were formed, a synthesized analysis of each element was integrated into a summation, logically supported by the evidence. It was expected that a thorough, unbiased review of the data would be the product of this integrative review, with conclusions supported by the preponderance of data presented in the Discussion and Conclusion section. The expectation was that the aforementioned conclusion would lead to a recommendation for nurse-led intervention to be disseminated and implemented in the project leader's practice setting to improve ACP efforts. Though specific recommendations for interventions were not achieved, the data were sufficient to recommend action in general as inaction was sure to produce no results at all. Reasonable alternatives to the status quo will be suggested based on the final synthesis.

Ethical considerations

Specific elements common to evidence-based practice projects were not necessary for this project. Since there was no intervention, or work with human subjects, there was no specific setting or population described or measurable outcome of a proposed intervention. Additionally, ethical concerns were limited since this was a review of previously completed studies. It was assumed any published studies included for analysis obtained appropriate Institutional Review Board (IRB) review and approval. Though human subjects were not utilized for this review, a proposal was submitted to the IRB of Liberty University for review with the outcome being the expected confirmation of exempt status. A letter from the IRB is attached as Appendix E.

Timeline

A timeline of project milestones was created to ensure timely completion of each task associated with this integrative review. Tentative dates are included for additional milestones

with project completion marked by submission and acceptance to Scholar's Crossing. This timeline is included as Appendix A.

SECTION FIVE: QUALITY APPRAISAL

Sources of Bias

Methodological rigor of integrative reviews is directly tied to the quality of the studies included in the final analysis. Ideally studies should be designed, conducted, and analyzed in ways that minimize the introduction of bias, or anything that distorts the results in a manner so that the results do not portray the truth. The potential for the introduction of bias that may taint the trustworthiness or believability of the results must be accounted for when examining collected data (Toronto & Remington, 2020).

Potential sources of bias in studies include selection bias in study inclusion or participant allocation, measurement bias due to inconsistency in measuring variables, attrition bias related to differences in those lost to follow up versus those completing the study, and performance bias related to potential differences in delivery of care between study arms resulting in systematic differences between the groups. During the literature review care was taken to avoid results and conclusions to reduce selection bias for studies with favorable results. Each study evaluated was examined for sources of potential bias to ensure methodological rigor of the proposed review. The most common source of bias in the included articles was found in the sampling procedures, potentially limiting generalizability of the results of certain studies. Identified sources of potential biases were included in the limitations section of the literature review table.

Internal Validity

The believability of a study, evidenced by lack of bias, is referred to as internal validity. Quantitative bias affects the reliability and validity of the results of a study, whereas qualitative

data quality is often measured by trustworthiness. Qualitative rigor is accounted for via four components of trustworthiness: transferability, credibility, confirmability, and dependability. Transferability describes the ability of the findings to be relevant in other settings. Transferability was accounted for in this review by ensuring that a robust description of the setting, participants, and context was contained in the methodology of the included studies. While settings varied, they were all outside of the acute care setting. Generalizability may still be limited due to the diverse nature of outpatient settings. Use of verbatim quotes and independent analysis of qualitative findings by multiple reviewers were a few methods researchers used in the included studies to ensure the results were believable, appropriate, and credible. The literature review and data analysis for this review only employed one individual, the primary author, potentially increasing risk to internal validity and introduction of bias. As previously mentioned, care was taken during the initial literature review to avoid results and conclusions that would lead to selection bias for articles favorable to the research question. and any sources of potential bias found in included studies identified during review by the primary researcher were included in the literature review table.

Appraisal Tools

Each study included for analysis was critically appraised to ensure the best evidence available was included in the review. Available tools to appraise studies are heterogenous in design and complexity but share a similar purpose in that they are designed to evaluate the quality of the data reported. Lack of a gold standard appraisal tool for nursing research has resulted in the creation of at least 100 different tools, making literature evaluation challenging for novice and expert reviewers alike; however, agreement does exist that data included in an integrative review should be critically appraised before being accepted for inclusion (Toronto &

Remington, 2020). For the purpose of this review, a data matrix utilizing Melnyk's hierarchy and critical appraisal checklist was completed and included in the final product.

Critical Appraisal and Applicability of Results

Critical appraisal of the articles was undertaken, and a matrix was created including title, purpose, sampling, methodology, results, level of evidence, and a critique of whether the data is applicable and supportive of practice change. Melnyk's hierarchy of evidence was used to level the articles (Melnyk, & Fineout-Overholt, 2011). Levels of evidence ranged from Level I systematic review of randomized controlled trials to level VI qualitative, descriptive primary studies. The matrix is attached as Appendix B. One included article is a Level I systematic review of randomized controlled trials (RCT). Eight included articles are Level II evidence obtained from a single RCT. Three articles are Level III evidence obtained from non-randomized, or quasi-experimental designed trials. Four articles are Level V systematic reviews of qualitative studies, and five articles are Level VI primary qualitative studies. Sixteen primary source articles and five secondary source articles are included in the literature review forming the basis of this integrative review.

Synthesis

During the data analysis three domains were identified as integral to nurse-led advance care planning. Once identified, a synthesis of the data was performed scrutinizing the identified domains of feasibility, acceptability, and effectiveness. Feasibility was examined by identification of barriers to ACP completion, that if acted upon could improve ability to participate in ACP. Acceptability assessment included examination of attitudes and beliefs of patients and providers that encouraged or discouraged participation in ACP. Effectiveness

assessment sought to examine if the nurse-led interventions were successful as implemented for enhancing elements of ACP.

Feasibility

Examination for feasibility revealed common themes related to barriers of knowledge and time. Miller (2018) included knowledge, along with education and confidence, as necessities for feasibility. Knowledge and education deficits were often related to lack of training for crucial communication and lack of ability to initiate conversation (Blackwood et al., 2019; Ke et al., 2015; Rogers et al., 2019). Chan et al. (2018), Ke et al., and Dixon and Knapp (2018), recognized time constraints as a significant barrier to engagement in ACP. Walzcak et al. (2019) and Dixon and Knapp each recognize the importance of existing staff nurses providing interventions, with Walzcack et al. suggesting utilization of existing staff with a short but robust training increases feasibility. Dixon and Knapp suggested existing staff nurses already have their hands full and do not have the time to engage in ACP. Houben et al. (2018) suggested proper screening and identification of appropriate patients increases feasibility, while Ora et al. (2019), Rogers et al. (2019), and Dixon and Knapp (2018) suggest varying iterations of a specific ACP nurse facilitator to support feasibility. Dixon and Knapp additionally suggested the leadership typically does not believe the dedicated nurse facilitator model is sustainable or scalable, while most physicians and nurses believe it to be preferable to have a dedicated individual or team to facilitate ACP due to time constraints and other duties. This highlights a divide between the leadership and the clinicians, as alluded to in other studies. Izumi (2017) cited a lack of organization leadership prioritization of ACP as an inhibitor of nurse participation, even though nurses believe ACP to be part of their responsibility. Ke et al. also suggested that the leadership should be more involved in ensuring appropriate training and resources are available if ACP is to

be an organizational priority. Rabow et al. (2019) were the only authors to mention cost. Though cost could possibly be a part of the sustainability and scalability concerns mentioned by Dixon and Knapp, it was not explicitly mentioned. Rabow et al. did not find cost to be a barrier in conducting community educational workshops for ACP education and completion.

Acceptability

Appraisal for acceptability focused primarily on the attitudes and willingness of individuals, mainly nurses and patients, to participate in ACP. The literature supports that nurses believe ACP is part of their role and responsibility (Blackwood et al., 2019; Chan et al., 2018; Izumi, 2017; Ke et al., 2015; Miller, 2018). Blackwood et al. found nurses are mostly accepting and comfortable with the role of ACP and negative attitudes of healthcare workers regarding ACP is not a significant barrier to participation. Ora et al. (2019, p. 3727) reported, "Patients report nurses spend more time explaining information than doctors, creating a more relaxed atmosphere, and felt confident in nurses' clinical knowledge." Chan et al. indicated healthcare providers tend to agree with that assessment stating both patients and providers think non-physicians are more tactful in handling ACP conversations. Rabow et al. (2018) and Splendor and Grant (2017) administered post-surveys following nurse-led interventions showed patients expressed gratitude to the nurses for providing the information and appreciated the open format to be able to ask questions freely. Splendore and Grant noted the group setting seemed to comfort people because they felt they were not the only ones with questions, and it also helped break the ice when talking about a difficult topic. Holland et al. (2017) reported satisfaction with a nurse-led intervention and positive increases in engagement scores after the nurse-led intervention. Houben et al. (2019) and Frankin et al. (2020) found that no psychological distress was caused by ACP nurse-led interventions and that no patients were made uncomfortable by

ACP screening questions, respectively, implying that nurse-led intervention was acceptable to the patient and did not increase anxiety or depression.

Rogers et al. (2019) suggested the ACP nurse facilitator role is widely acceptable to physicians who appreciate the burden and time constraints relief it provides. Dixon and Knapp (2018) additionally stated most staff are accepting of the nurse facilitator role, however, some staff did report feeling that a designated facilitator gives the impression that ACP is "somebody else's job" thus discouraging staff nurses to engage in the practice and leading to the patient experience of unintegrated care. Rogers et al. also commented on providers feeling that patients are less accepting of ACP interventions when they are acutely ill and that, unless clinical deterioration is marked and discussions are urgent, it is best to wait until after an acute illness to make the intervention more acceptable to the patient. Rogers et al. stated general practitioners are more accepting of support from a nurse facilitator if they know and trust them, and patients are more accepting if a trusted provider refers them. When initiating ACP, patients found the screening tool utilized by Franklin et al. (2020) useful and stated that it was a great idea to integrate as part of the regular visit and appreciated the regular prompt and reminder. Nurses also found the tool easy to use with non-intimidating content that they were comfortable initiating. Patients expressed high satisfaction with the ACP intervention utilized by Hilgeman et al. (2018) that was developed using the theory of enabling safety framework to address affirmation, comfort, and guidance to increase the acceptability of discussing threatening themes such as loss of autonomy. In addition to expressed satisfaction with the intervention, on follow up eight to 30 days post-intervention patients expressed high satisfaction with the decisions they made based on the intervention

Sinclair (2020) found that ACP neither increased nor decreased satisfaction with care. Ke et al. (2015) found nurses believe ACP is part of a nurse's role, but also prefer and are more comfortable with specialized, dedicated staff such as nurse facilitators outside of the normal clinical workflow, delivering most ACP interventions. Another intervention introduced outside of the normal workflow was the nurse practitioner-led workshop administered by Splendor and Grant (2017) which patients rated as very helpful, averaging 9.7 on a 10-point Likert scale. Walczak et al. (2017) reported high satisfaction scores averaging 4.2 on a 5-point Likert scale, indicating patient acceptance of an improved nurse-led ACP communication support program.

Miller et al. (2019) found that patient satisfaction with ACP is moderated by a good patient-provider relationship as patients often have with their primary care provider. This aligns with Rogers et al.'s (2019) assertion that a trusting, ongoing provider-patient relationship is important for ACP participation and that primary outpatient care is the most acceptable setting for ACP, as opposed to the acutely ill, crisis-driven inpatient setting.

Among the included studies, Izumi (2017) provided a unique perspective on barriers to ACP completion. This author, in reporting on a quality improvement (QI) project in a large academic medical system with inpatient and outpatient locations, reported that clinician reluctance/resistance is the greatest barrier to participation in ACP. This reluctance is not related to the acceptability of the role, but myths and misconceptions regarding ACP. This perspective was informed by a root cause analysis that sought to better understand the barriers to ACP completion within the health system. Izumi (2017) reported the QI team identified several sources of reluctance, with the most common root being misunderstanding or confusion about what ACP is. Common misunderstandings, including mistaking ACP (which is planning for EOL) with actual EOL decision-making, lack of understanding about different stages of ACP

that may be appropriate at different stages of life, and lack of understanding of the various legal issues that may vary state by state, may add to the confusion. The major ACP myth influencing provider reluctance is the perception that patients do not want providers to initiate conversations about and discuss EOL issues, death, or dying. They believe that patients may associate such conversations with bad news and insinuation that EOL is near (Izumi, 2017).

Izumi's (2017) assertion that clinicians may believe patients do not want to have ACP conversations may be at least partially supported by Ke et al. (2015) who asserted some older people may have an aversion to ACP for fear it may cause providers to treat less aggressively or give up too early. Izumi (2017) recognized that nurses believe they should be involved in ACP, but role clarity is lacking. Additionally, a physician-based misconception that ACP is synonymous with EOL prognostic discussions may undercut physician support for nurse involvement or nurse-led intervention as physicians may erroneously believe this is an out-of-scope role.

Effectiveness

Chan et al. (2018) found improved congruence between patient and caregivers and decreased conflicts regarding EOL decision-making following a nurse-led intervention. Chan et al. (2018) also produced increased completion and documentation rates, which aligns with high ACP completion rates following nurse-led interventions in Gabbard et al. (2021), Hilgeman et al. (2018), Holland et al. (2017), Kizawa (2020), Overbeek et al. (2018), and Rabow et al. (2018) as well as nurse-practitioner-led interventions in Splendor and Grant (2017).

Completion rates were not the only measure of effectiveness of nurse-led interventions. Holland et al. (2017) and Ora et al. (2019) showed varying degrees of increased ACP communication or self-reported likeliness to engage in communication, or complete AD. The

intervention group in Walczak (2017) showed increased self-efficacy in knowing how to have ACP conversations and what questions to ask. The intervention group in Sinclair et al. (2020) did not see decreased hospitalizations overall, but did spend fewer nights in the hospital, had fewer outpatient doctor's visits, and spent more time enrolled in palliative/hospice services in the last 90 days of life than those not receiving a nurse-led intervention.

Summary of Evidence

This integrative review suggests that despite legislative requirements to inform patients of their rights, increased opportunity for awareness including an officially designated ACP Awareness Day (April 16) and, at least in theory, reduced administrative burdens, there is still a problem related to low completion rates and participation in ACP by both providers and patients. Nurse-led ACP interventions have been identified as a potential way to overcome barriers and enhance participation in ACP in the outpatient setting. Three domains were identified from the literature as integral elements of nurse-led ACP in the outpatient setting: feasibility, acceptability, and effectiveness.

Feasibility assessment included identification of what it takes to make participation in a nurse-led intervention possible. Time and knowledge were the most common barriers acknowledged, although provider reluctance as a result of myths and misunderstandings concerning ACP was identified in one study. Special nurse ACP facilitators, structured ACP programs with adequate training, management support and resources, integration into existing clinical workflow, patient/nurse/provider education, and good patient-provider relationships are a few of the facilitators of ACP shown to enhance feasibility.

Acceptability was demonstrated in a number of ways. Nurse attitudes suggesting acceptance of the role and responsibility of helping patients complete ACP was the most

common expression of acceptance. The literature showed nurse-led ACP interventions are deemed acceptable to patients with both patients and healthcare providers reporting that non-physicians may be better suited to the task. Primary outpatient care is an acceptable, and likely the most appropriate, location for nurse-led ACP intervention, although successful interventions were introduced in Veteran's Administration clinics, specialty locations such as oncology clinics, and community locations. Patient satisfaction measures were also used as a surrogate for acceptability and satisfaction scores for both the interventions and decisions based on the interventions were high. Non-acceptance, or clinician resistance, may be based on myths, misconceptions, and misperceptions concerning ACP. ACP interventions are more acceptable coming from a trusted healthcare provider-patient relationship and nurses often spend the most time interacting with patients as the coordinator of care in many settings.

The ultimate goal of ACP is to ensure patients receive EOL care that is congruent with their wishes, values, and beliefs. Even if an intervention is feasible and acceptable, this outcome cannot come to fruition if it is not effective. Effectiveness is a quantitative measure of whether the nurse-led intervention was able to accomplish the pre-determined goal. The most common measure of effectiveness was the completion/documentation of some element of ACP, such as naming a surrogate decision maker or completing AD, either as part of the intervention or after the intervention. Other than completion/documentation of ACP, improved communication regarding ACP and improved congruence between patients and family regarding EOL preferences were measured to show intervention effectiveness. This review supports that nurse-led ACP interventions are effective across a variety of outpatient settings.

SECTION SIX: DISCUSSION AND CONCLUSIONS

Toronto and Remington (2020) describe the Discussion and Conclusion section as where the "so what?" question gets answered for the audience. The expectation of a holistic review of the literature is realized via the offering of an explanation of the findings. This section interprets the findings in light of the background knowledge previously discussed with an emphasis on what the current review adds to the scientific body of knowledge regarding the phenomenon of interest and what this means for clinical practice.

Implications for Practice

ACP completion and documentation rates remain low despite efforts aimed at improving them based on the PSDA and recommendations from the IOM. This sets the stage for potential harm in the form of discordant care, potentially unwanted aggressive life-sustaining measures at end-of-life, or end-of-life care occurring in an undesired location. ACP has been shown to improve concordance and nurses can lead the way in helping to improve ACP rates in the outpatient setting. Nurse-led interventions take a variety of forms that show promise across outpatient settings as being effective in overcoming barriers and increasing rates of ACP participation.

Nursing leaders seeking to improve ACP completion rates in the outpatient setting will seek to determine what evidence exists to support the use of nurses in this role. When evaluating the evidence these leaders will want to know if nurse-led intervention works in the outpatient setting, if it is acceptable to both staff and patients, and more importantly is it possible to implement. The evidence confirms that nurse-led ACP intervention in the outpatient setting is indeed feasible, acceptable, and effective.

Although interventions identified in this review were heterogeneous in nature, all were found to be effective for enhancing some element of the outpatient ACP process. Whether the intervention occurred within the context of the normal clinical workflow, via referral to a nurse facilitator, or outside the clinical confines in the community setting, all nurse-led interventions were able to produce a desirable result. These findings suggests that the actual intervention employed, and the outpatient setting in which it occurs, may be less important than taking action in general. Often barriers induce paralysis instead of action. Given the findings of this review, it would be better in practice to implement some nurse-led ACP intervention rather than continuing the current state. Even if the chosen intervention is not the most effective intervention for the population or setting, it would most likely improve ACP rates.

In the context of clinical trials or studies, interventions are structured, and staff is trained to provide the intervention. Some trials utilized ACP-experienced nurse facilitators, others utilized staff nurses, and one used nurse practitioners; however, all were successful. In the outpatient setting, the person who performs the intervention is will likely depend upon the resources available to the practice. Some interventions were less time intensive and thus potentially easier to integrate into current workflow than others based on feasibility data. In practice this may mean that some interventions are more feasible in some settings than others, but specific recommendations cannot be offered based on the findings of this integrative review. Future research aimed at comparing facilitators, interventions, and settings could help determine which nursing team member delivering which intervention in which setting is likely to improve ACP the most.

Provider reluctance based on myth and misconceptions as a key barrier is a compelling argument. Providers may be unaware that their understanding is inaccurate meaning studies that

specifically seek to identify barriers by examining nurse attitudes and beliefs may fail to recognize barriers that providers do not realize exist. The potential implication is that reported perceived barriers may not be the actual underlying cause of providers not participating in ACP, but rather the fallback position.

Root cause analysis is a way to learn from things that have gone wrong (Peerally et al., 2017). Conducting root cause analysis prior to implementing an intervention may be a path to aligning interventions with the barriers that they are most likely to help overcome. If time is the biggest barrier, then identifying a time-efficient intervention to integrate ACP into the normal workflow, or use of a nurse facilitator outside of the clinical workflow might be most beneficial. If misunderstanding of ACP is the biggest barrier, then opportunities for education should be identified before attempting to implement an intervention that may likely be unsuccessful due to improper barrier identification. This represents a significant potential area for future research, to establish whether conducting root cause analysis prior to implementation of an ACP intervention can determine if specific ACP interventions are more likely to be successful at overcoming specific identified barriers to ACP participation.

Limitations

The level of evidence available to answer the review question was lacking overall. While there were a few RCTs and systematic reviews included, each had significant limitations reducing the generalizability of results to a greater population. Additionally, much of the available data were qualitative. While qualitative data were important to the review question, especially regarding acceptability, if an organization or practice is going to invest in resources to support ACP efforts, more quantitative data supporting those efforts would be preferable.

Additionally, there was significant heterogeneity among the nurse-led interventions identified in this integrative review as well as the settings in which they occurred. Although almost all interventions occurred in the outpatient setting, not all outpatient settings are the same and the populations they serve can vary immensely. Primary care, oncology, the Veteran's Administration, and home settings all have distinct care models and patient populations. Comparison of the same intervention across these settings would be difficult, and even more so to attempt to compare different interventions across settings. The inability to compare the groups may hinder generalizability; however, the overall findings should remain unchanged. That is, all of the nurse-led interventions were effective in some aspect for improving ACP regardless of intervention or setting. The unanswered question is whether the intervention utilized in each setting was the most effective available intervention for that particular setting, which was beyond the scope of this review.

Another limitation is the populations included in the identified articles. Many patients were older, frailer, and chronically and/or terminally ill. In general, these patients may have been more likely to be agreeable to ACP as their health concerns may have been enough of an impetus to engage in ACP when given the opportunity to participate. Research studies intervening in younger, healthier patients should be an area of future interest as ACP is an ongoing process best begun early before patients develop serious health conditions.

Dissemination

Dissemination of research results fosters professional learning, expands knowledge within the nursing discipline, and supports evidenced-based practice. Curtis et al. (2017) went so far as to say that no research study is complete until the study findings have been disseminated so that the findings may be translated into practice. The Agency for Healthcare Research and

Quality (AHRQ) (2014) stated that all dissemination should have a purpose, such as raising awareness of an issue, educating and informing others, seeking input or feedback regarding the topic of interest, or simply promoting the completed research. The type of dissemination depends on the expected audience. Intraorganizational dissemination may be less formal than that designed for professional presentation. Poster presentations at professional forums and publication in peer-reviewed journals are two potential avenues of professional dissemination (Dang et al., 2015). The first avenue of expected dissemination of this review is within the author's clinical organization via poster presentation. It is also expected that a manuscript for peer-reviewed publication will be developed at project completion. When disseminating information, the message should be clear and easy to understand, targeted to the audience receiving the message, factually correct, and actionable. The audience should know exactly what is being asked of them after hearing the message (AHRQ, 2014). Whether the next step is active participation in ACP or learning what ACP is and how to participate, the ultimate goal is that the information presented will facilitate greater participation in ACP in the outpatient setting.

Conclusion

This integrative review sought to determine if nurse-led interventions could be a solution to improving participation in ACP in the outpatient setting. This review should help quell concerns that healthcare leaders may have that nurses are up to the task of leading interventions to improve completion and documentation of ACP in the outpatient setting. The year 2020 saw nurses ranked as the most trusted, honest, and ethical profession for the 19th year in a row (Gaines, 2021). Patients trust nurses as healthcare professionals and expect nurses will look out for their best interests. This trusting relationship has been identified as a key facilitator of ACP interventions, and nurses can feel confident that patients are accepting of these interventions

being initiated and led by nursing professionals. Healthcare organization leaders can feel confident that when nurses are called upon to lead initiatives to better integrate ACP into practice that it is not only possible, but acceptable to patients and nurses, and effective at achieving the desired results.

However, nurses cannot affect needed practice changes alone. Organizations need to prioritize ACP, provide resources, and begin to incorporate ACP as part of the routine health assessment during outpatient visits. The topic of ACP will become less taboo as it is normalized as a part of routine healthcare starting earlier before patients develop chronic or terminal illnesses and decision making becomes more urgent. Nursing programs and nurse educators in healthcare organizations need to ensure their students and staff have the required knowledge base to feel comfortable initiating and leading these interventions. Healthcare providers need to examine their own biases and do the work of seeking to understand what ACP is and what role they can and should play in this important process. It is crucially important to assuring EOL care that is congruent with patients' values, beliefs, and wishes that healthcare organizations and providers prioritize ACP. Nurses are ready and willing to step up and take the lead. Given the feasibility, acceptability, and effectiveness of nurse-led interventions identified in this review, healthcare leaders would be wise to take them up on the offer.

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Rogers, J., Goldsmith, C., Sinclair, C., & Auret, K. (2019). The advance care planning nurse facilitator: Describing the role and identifying factors associated with successful implementation. *Australian Journal of Primary Health*, *25*(6), 564–569. https://doi-org.ezproxy.liberty.edu/10.1071/PY19010

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Sinclair, C., Auret, K. A., Evans, S. F., Jane, F., Dormer, S., Wilkinson, A., Greeve, K., Koay, M. A., & Brims, F. (2020). Impact of a nurse-led advance care planning intervention on satisfaction, health-related quality of life, and health care utilization among patients with severe respiratory disease: A randomized patient-preference trial. *Journal of Pain & Symptom Management*, *59*(4), 848–855. https://doi-org.ezproxy.liberty.edu/10.1016/j.jpainsymman.2019.11.018

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Young, J., Eley, D., Patterson, E., & Turner, C. (2016). A nurse-led model of chronic disease management in general practice: Patients' perspectives. *Australian Family Physician*, 45(12), 912–916.

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APPENDIX

Appendix A

Project Timeline

Step 1: Review Scholarly Project Process, Sequence, and Timelines	June 30, 2020
Step 2: Complete CITI Training	May 31, 2020
Step 3: Develop first draft of proposal and submit to chair for review	June 20, 2020
Step 4: Complete final draft of proposal	March 1, 2021
Step 5: Defend Scholarly Project Proposal	March 3, 2020
Step 6: IRB approval for proposed project	March 4, 2020
Step 7: Initiate scholarly project	March 4, 2020
Step 8: Complete literature review/level of evidence/summary matrix	March 6, 2021
Step 9: Complete thematic data analysis matrix	March 13, 2021
Step 10: Complete initial draft (without discussion and conclusions)	March 20, 2021
Step 11: Update and reconfirm timeline	April 1, 2021
Step 12: Submit completed first draft with discussion and conclusions	April 3, 2021
Step 13: Submit to Editor (one week turnaround)	April 15, 2021
Step 14: Request final defense appointment	April 23, 2021
Step 15: Submit final PowerPoint for defense	April 23, 2021
Step 16: Final Defense	May 5, 2021
Step 17: Submit to Scholar’s Crossing	By May 30, 2021

Appendix B

Article Critique and Leveling Matrix

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Blackwood, D. H., Walker, D., Mythen, M. G., Taylor, R. M., & Vindrola, P. C. (2019). Barriers to advance care planning with patients as perceived by nurses and other healthcare professionals: A systematic review. *Journal of Clinical Nursing, 28*(23–24), 4276–4297. https://doi-org.ezproxy.liberty.edu/10.1111/jocn.15049	To describe barriers nurses and healthcare professionals believe prevent them from participating in advance care planning	11 articles of self-reporting surveys	Systematic review of surveys	The two most important barriers to advance care planning are lack of education and time. ACP is well supported, and nurses and healthcare professionals report comfort and confidence in the responsibility.	Level 5	Limited low level evidence, self-reported, lack of standardized survey tool among studies makes compiling and analyzing results challenging	Attitudes of providers are important, and part of the change process established by the transtheoretical model. Knowing where you are can give you an idea of how to get where you want to go.
Chan, H. Y.-L., Ng, J. S.-C., Chan, K.-S., Ko, P.-S., Leung, D. Y.-P., Chan, C. W.-H., Chan, L.-N., Lee, I. F.-K., & Lee, D. T.-F. (2018). Effects of a nurse-led post-discharge advance care planning programme for community-dwelling	To examine the effect of structured, nurse-led, post-discharge advance care planning program on congruence of EOL care preferences of patients, family,	Dyads of patients and partners, patients had to meet EOL criteria as determined by The Gold Standards Framework Prognostic Indicator Guidance; patients had to be over 18	Parallel-group randomized controlled trial	This study demonstrates that the designation of a trained nurse as an advance care planning facilitator effectively improved dyadic	Level 2 random controlled trial	Possible participation bias due to voluntary nature of participation; participation as dyads may have limited participation to those with	Enacting change is not just about the intervention, but who and how the intervention is introduced. The nurse-led intervention may be beneficial for

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
patients nearing the end of life and their family members: A randomised controlled trial. *International Journal of Nursing Studies*, *87*, 26–33. https://doi-org.ezproxy.liberty.edu/10.1016/j.ijnurstu.2018.07.008	decision-making conflicts, and care preference documentation	and not have completed and AD		congruence and reduced the patient's decisional conflict regarding end-of-life decision-making. - The findings suggest that providing written information about end-of-life care and regular assessments of preferences may encourage patients to contemplate these issues. - Furthermore, the findings underscore the importance of allowing time for nurses to conduct advance care planning.		previous motivation	enacting change related to ACP

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Dixon, J., & Knapp, M. (2018). Whose job? The staffing of advance care planning support in twelve international healthcare organizations: a qualitative interview study. *BMC Palliative Care, 17*(1), 78. https://doi-org.ezproxy.liberty.edu/10.1186/s12904-018-0333-10	To elicit provider perspectives and explore professional's firsthand experiences of developing, delivering, and staffing ACP support in their organizations	Purposive sampling of staff from healthcare organizations offering ACP support; facilities had to offer support in education, facilitation of conversations, and completion of documents; preferred to have established practices for minimum of 18 months; different countries, geographies, size providers, rural vs urban to get a variety of responses (3-25 interviews at each location – average of 13)	Exploratory qualitative interview study	Leadership support is necessary; some leaders believe dedicated facilitator are not sustainable or scalable; physicians and nurses tend agree that time constraints are greatest barrier; nurses worry about time and legal liability (knowledge deficits regarding process); some organizations belief nursing role is scalable but expect them to perform ACP coordination in addition to other duties meaning in practical application it does not get done	Level 6 - qualitative	Small sample, varied, no consistency between organizations makes comparison difficult;	To be acceptable to staff they need to be heard and have their input taken into consideration when making recommendations

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Franklin, A. E., Rhee, J., Raymond, B., & Clayton, J. M. (2020). Incorporating an advance care planning screening tool into routine health assessments with older people. *Australian Journal of Primary Health, 26*(3), 240–246. https://doi-org.ezproxy.liberty.edu/10.1071/PY19195	To assess the feasibility, acceptability, and perceived utility of a nurse-facilitated screening interview to initiate ACP with older adults in general practice	24 patients from 4 general practices in metropolitan Sydney, AU; patients were scheduled for visits for 75+ health assessment; 6 nurses in these practices invited to recruit up to 10 patients per practice; average age 81.4,	ACP screening tool for older adults was modified for general practice; 1 hour training for each nurse; screening interview results de-identified before returning to investigators; follow-up demographic and feedback questionnaire; descriptive statistics to analyze Likert results, qualitative analysis of comments	24 completed interviews, 17 completed post-questionnaires; All patients found the screening useful; all 6 nurses found tool useful for initiation of ACP discussions; no patients felt uncomfortable with the questions (overcomes provider barrier of not wanting to cause patient anxiety or discomfort by initiating conversation)	Level 6 – single descriptive/ qualitative study	Small study with homogenous urban population, mostly well-educated and higher socioeconomic status that may reduce generalizability	Yes, the intervention was well-received and easy to administer. A larger confirmation study with more diverse population would be preferred, but no risk, and all patients that replied found it helpful. If looking to improve ACP intervention in a similar practice it may be worthwhile to adopt the interview questionnaire
Gabbard, J., Pajewski, N. M., Callahan, K. E., Dharod, A., Foley, K. L., Ferris, K., Moses, A., Willard, J., & Williamson, J. D. (2021). Effectiveness of a nurse-led	To determine whether a nurse-led ACP pathway combined with a health care professional-facing EHR interface improves the	N=759; patients 65 years or older with multimorbidity and either cognitive or physical impairment, and/or frailty; 8 primary care	Randomized effectiveness trial of ACP intervention vs usual care; patients identified using automated EHR	42.2% in intervention group documented ACP compared to 3.7% in control; 64% vs 35% named surrogate	Level 2 RCT	Used regular staff instead of paid researchers so may not be generalizable to workplaces without resources for nurse	Yes, the study demonstrated that this intervention could be integrated into normal workflow with no need for additional

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
multidisciplinary intervention vs usual care on advance care planning for vulnerable older adults in an accountable care organization. *JAMA Internal Medicine, 181*(3), 361. https://doi.org/10.1001/jamainternmed.2020.5950	occurrence of ACP discussions and their documentation within the EHR	practices in NC recruited patients	query; trained nurse navigator conducted pre-visit phone interview prior to Medicare wellness visit to prime and engage ACP process	decision maker; 24.3% vs 10% completed legal ACP forms; intervention group increased ACP billing 25.3% vs 1.3%		navigator; single health system; could not assess longitudinal effect of ACP on care deliver, medical decision-making, or cost	resources and significantly improve rates of ACP completion
Hilgeman, M. M., Uphold, C. R., Collins, A. N., Davis, L. L., Olsen, D. P., Burgio, K. L., Gordon, C. A., Coleman, T. N., DeCoster, J., Gay, W., & Allen, R. S. (2018). Enabling advance directive completion: Feasibility of a new nurse-supported advance care planning intervention. *Journal of Gerontological Nursing, 44*(7), 31-42. https://doi.org/10.3928/00989134-20180614-06	To evaluate feasibility and describe a new patient-centered nurse-supported advance care planning intervention focused on providing information about the risks, benefits, and alternatives of life-sustaining medical procedures addressed on standardized ACP forms	50 veterans from residential, outpatient, and rural health mobile VA clinics; average age 50.26; more non-Hispanic blacks (67%) than whites, more men (79%) than women	Randomized, controlled, 2 group, pre /post- test feasibility study; 4 VA staff RNs administered intervention of 50 slides discussing ACP rights and options with discussion questions to facilitate eliciting thoughts and feelings; ends with page by	Met all predetermined feasibility criteria (randomization 100% of those who signed informed consent; 94% retention; 99% data completion; mean duration was less than goal of 1 hour at 46 minutes); follow up satisfaction scores showed high acceptability with CSQ-8	Level 2 RCT	Small feasibility study, not powered to make conclusions regarding safety, efficacy, or cost	Yes, a larger scale trial would help ensure the trend towards effectiveness holds, but the feasibility and acceptability of the intervention were high and met all predetermined benchmarks.

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
			page guidance for filling out VA Advance Directive form if so desired	average score of 31.03 out of 32 possible and 91% "very satisfied" with intervention and 87% "very satisfied" with decisions made; not powered for effectiveness, but 3x as many in intervention group completed AD as in control group			
Holland, D. E., Vanderboom, C. E., Dose, A. M., Ingram, C. J., Delgado, A., Austin, C. M., Green, M. J., & Levi, B. (2017). nurse-led patient-centered advance care planning in primary care: A pilot study. *Journal of Hospice & Palliative Nursing*, *19*(4), 368–375. https://doi-org.ezproxy.liberty.edu/10.1097/NJH.0000000000000358	To evaluate the feasibility and acceptability of nurse-led advance care planning in primary care	Adult patients (mean age 64) with multiple chronic health problems (60% female, 98% white), recruited from a large, midwestern primary care practice; eligibility included mental competence to complete AD, no AD on file, or AD older than 10 years	4-arm prospective, comparative design, patients received intervention based on prior assignment to case management	Feasibility – 208 patients screened, 40 eligible participants; given practice size and response rate, intervention would be feasible Acceptance – patients were satisfied to very satisfied overall with the experience and	Level 3 – controlled trial with no randomization	Small, pilot study; Some patients had previous experience with ACP and preformed opinions; sense of urgency of some patients (requested to complete in 1 visit vs. 2) inhibited ability to participate in specific elements, such as reflection	Results indicate nurse-led interventions are not only feasible, but successful in reaching desired endpoints in this small-scale pilot; implementing a nurse-led ACP program could have significant impact on completion of AD, those a larger study for

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
				85% completed a first or updated AD, and all participants designated a healthcare agent		of values before decision-making and sharing decision making with healthcare agent	confirmation would be nice
Houben, C. H. M., Spruit, M. A., Luyten, H., Pennings, H.-J., van den Boogaart, V. E. M., Creemers, J. P. H. M., Wesseling, G., Wouters, E. F. M., & Janssen, D. J. A. (2019). Cluster-randomised trial of a nurse-led advance care planning session in patients with COPD and their loved ones. *Thorax, 74*(4), 328–336. https://doi-org.ezproxy.liberty.edu/10.1136/thoraxjnl-2018-211943	To assess whether a nurse-led intervention can improve quality of patient-physician communication regarding end-of-life wishes in patients with COPD; effects of intervention on patient and caregiver anxiety and depression was examined; quality of death was assessed in patients who died during two year follow up	Convenience sample of 165 patients and caregivers with advanced COPD discharged following hospitalization for COPD exacerbation at 4 hospitals in the Netherlands; 53% male; 66% of caregivers were female	Cluster-randomised controlled trial	Quality of EOL communication score increased significantly in intervention group; >53% in intervention group report ACP discussion with provider w/in 6mo post intervention vs. 30% in control group. Anxiety regarding EOL decreased in intervention group compared to control group; depression scores were comparable in both groups and did not change; caregiver anxiety was less	Level II – random controlled trial	Small sample size due to challenges in recruiting palliative patients; communication was only followed for 6 months so long term impact of intervention on over quality of end of life communication cannot be determined; only the patient's perspective on quality of communication was followed, not physician so there may be perspective and recall; number of doctor visits in follow up period is	The intervention improved communication without increasing psychological stress in patients or loved ones; it is a potential model to build on providing direction for future development of structured nurse-led interventions – could the intervention be done in the office instead of the home?

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
				in intervention group; no significant difference in quality of death and dying scores between groups		unknown, more visits may have increased likelihood of discussing ACP	
Izumi, S. (2017). Advance care planning: The nurse's role. *The American Journal of Nursing, 117*(6), 56–61. https://doi-org.ezproxy.liberty.edu/10.1097/01.NAJ.0000520255.65083.35	To describe what nurses can do to help patients and their families implement ACP to improve EOL care	Large academic medical center health system with multiple hospitals and outpatient primary and specialty care centers	Descriptive case report of quality improvement initiative describing challenges and barriers to ACP implementation and strategies to overcome them	Root cause analysis revealed lack of standard practices for ACP; lack of documentation systems identified as barrier, but clinician reluctance and resistance identified as greater barrier; identified several sources of clinician reluctance/ resistance and suggestions for overcoming them	Level 6 – single descriptive case report of quality improvement initiative	Quality improvement, no results post-implementation to report; single system	Yes, but probably not in isolation. This would be one more piece of evidence in conjunction with other similar reports. Overall lack of guidelines means that best evidence available should be used to improve practice. If identified barriers presented are identified in a healthcare system, then the presented suggestions to overcome barriers may be beneficial in those settings as well.

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Ke, L.-S., Huang, X., O'Connor, M., & Lee, S. (2015). Nurses' views regarding implementing advance care planning for older people: A systematic review and synthesis of qualitative studies. *Journal of Clinical Nursing (John Wiley & Sons, Inc.)*, *24*(15–16), 2057–2073. https://doi-org.ezproxy.liberty.edu/10.1111/jocn.12853	To explore nurse's views regarding implementing ACP for older people	n=18 articles each presenting one study	Systematic review and synthesis of qualitative studies	Nurses felt that advance directives provided more advantages than disadvantages. Nurses generally believed that they were well positioned to engage in advance care planning conversations. Nurses perceived barriers relating to older people, families, environment, time, culture, cost, language,0. and knowledge of health care teams with regard to advance care planning. In nurses' needs, education and support were highlighted.	Level 5 – systematic review of qualitative studies	Searched most comprehensive databases but does not mean all relevant material was retrieved; no limit to care settings so recommendations are broad and not necessarily applicably in all settings; no independent coding to check interrater reliability	Study recommends creation of a formal nurse role to lead team implementation of ACP in health care systems; data supports as a potentially beneficial alternative to current state of physician-led

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Kizawa, Y., Okada, H., Kawahara, T., & Morita, T. (2020). Effects of brief nurse advance care planning intervention with visual materials on goal-of-Care preference of Japanese elderly patients with chronic disease: A pilot randomized-controlled trial. *Journal of Palliative Medicine, 23*(8), 1076-1083. https://doi.org/10.1089/jpm.2019.0512	To examine the effects of brief nurse intervention with visual materials on goals-of-care preference, CPR preference, and designation of a healthcare proxy decision maker	220 Japanese patients over 65 years receiving regular outpatient primary medical care for at least one chronic illness (n=117 intervention; n=103 control); recruited via commercial database of consisting of greater than 1 million Japanese who have voluntarily registered to participate in clinical trials for which they meet inclusion criteria	Randomized clinical trial; intervention of nurse led ACP with visual aids vs control of ACP with verbal descriptions; intervention provided by 6 trained nurses in one-on-one setting not linked to a physician encounter	No significant difference in goals of care decision between groups, however both groups had a significant increase in decisions (no CPR, proxy designation) vs baseline; trend towards intervention group being less likely to want CPR, but not statistically significant	Level 2 RCT	Japanese population may limit generalizability, potential sample bias due to use of commercial database, intervention materials not validated through rigorous development process	Yes. A nurse-led intervention was successful for increasing documentation of ACP decisions, regardless of the type of intervention. Suggests that type of intervention may not be as important as engaging in general.
Miller, B. (2018). Nurse's preparation for advanced directives: An integrative review. *Journal of Professional Nursing*, *34*(5), 369–377. https://doi-org.ezproxy.liberty.edu/10.1016/j.profnurs.2018.07.001	To address the question "what is known concerning nurse preparation for working with AD, including education, knowledge, and confidence"	10 studies addressing knowledge, six addressed confidence, one addressing content in nursing programs	Integrative review	Practicing nurses are not clear what their role is when it comes to advance directives Practicing nurses lack knowledge about advance directives, Patient Self-	Level 5 – integrative review of qualitative studies	All but 4 studies from before 2009; moderate to low quality of evidence	It does address an important component – feasibility. Nurses are willing and well-placed but lack critical components. Supplementation of these components could

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
				Determination Act, and state laws Practicing nurses lack confidence when discussing advance directives with patients There is minimal research about advance directives and nursing students Research in curricula and students shows minimal education, which is consistent with what practicing nurses are reporting.			lead to increased feasibility
Miller, H., Tan, J., Clayton, J. M., Meller, A., Hermiz, O., Zwar, N., & Rhee, J. (2019). Patient experiences of	To explore patient perspectives of and ACP intervention	4 general practices in eastern Sydney, AU; significant elderly population; interested in	Qualitative interviews with thematic analysis	6 themes – working through ideas, therapeutic relationships with	Level 6 qualitative	Not all patients who participated in intervention participated in interview so may	Patient perspectives are important to acceptability

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
nurse-facilitated advance care planning in a general practice setting: a qualitative study. *BMC Palliative Care, 18*(1), 25. https://doi-org.ezproxy.liberty.edu/10.1186/s12904-019-0411-z		implementing ACP; no previously implemented systematic ACP		nurses, significance of making wishes known, protecting family from burden, autonomy in decision-making, challenges of family communication		not have captured full info	
Ora, L., Mannix, J., Morgan, L., & Wilkes, L. (2019). Nurse-led integration of palliative care for chronic obstructive pulmonary disease: An integrative literature review. *Journal of Clinical Nursing (John Wiley & Sons, Inc.), 28*(21/22), 3725–3733. https://doi-org.ezproxy.liberty.edu/10.1111/jocn.15001	To uncover what is known about nurse-led models or interventions in integration of palliative care for patients with COPD.	Using PRISMA framework, electronic databases utilizing search terms for "COPD" "palliative care" "interventions and services", and "patient and caregiver perspectives" six studies that met eligibility criteria: English language, no more than 10 years old	Mixed-studies integrative review using PRISMA framework	Evidence is generally limited and uncommon for nurse-led interventions for palliative care in COPD; ACP was main intervention focus in most studies detailing an intervention	Level 5 – integrative review includes evidence from qualitative studies	Small number of studies meeting criteria; integrative reviews utilize quantitative and qualitative data	The main takeaway from this review that could be used to guide practice was the secondary analysis that nurse-led ACP interventions are effective and associated with positive outcomes
Overbeek, A., Korfage, I. J., Jabbarian, L. J., Billekens, P., Hammes, B. J., Polinder, S.,	To determine effectiveness of advance care	Clusters determined by household income, randomized within cluster; care	Cluster, randomized controlled trial	No differences between groups in patient activation or	Level 2 RCT	Mean age was 87 which is significantly higher than most ACP	Yes, reasonable response rate (feasibility), intervention was

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Severijnen, J., Swart, S. J., Witkamp, F. E., van der Heide, A., & Rietjens, J. A. C. (2018). Advance care planning in frail older adults: A cluster randomized controlled trial. *Journal of the American Geriatrics Society, 66*(6), 1089–1095. https://doi-org.ezproxy.liberty.edu/10.1111/jgs.15333	planning in frail older adults	home and community dwelling adults receiving in-home care, 75 and older, frail, capable of consent; N=201, n=101 intervention; n=100 control		quality of life, satisfaction with healthcare or healthcare utilization; significantly more patients in the intervention group completed advanced directives and named a surrogate decision maker		studies; low death rate in study given the age could have indicated lower need for medical decision making during study period; outcomes assessors could not be blinded due to nature of follow up	appreciated by patients (acceptability) and improved rates of ACP (effectiveness); it would be nice to see downstream affects in other domains, but the primary objective is to assess the three domains
Rabow, M. W., McGowan, M., Small, R., Keyssar, R., & Rugo, H. S. (2019). Advance care planning in community: An evaluation of a pilot 2-session, nurse-led workshop. *American Journal of Hospice & Palliative Medicine, 36*(2), 143–146. https://doi-org.ezproxy.liberty.edu/10.1177/1049909118797612	To evaluate a 2-session nurse-led workshop to create notarized advance directive forms at a comprehensive cancer center	Convenience sample of 35 patients invited to attend the workshop by a member of their care team, or via advertising in the cancer center; 57% white; median age 58;	Quasi-experimental	The intervention was determined to be feasible, effective, and well-received; 65.4% of participants created a new AD by end of 2nd workshop, an additional 3 family members of patients completed their own	Level 3	Small sample size from single institution, some demographic information is missing	AD is personal, so small sample size and single institution is not necessarily bad; each institution has to do what works for them, but if a similar model works in a larger scale trial it would be worth considering; what barriers prevented people from participating?

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
Rogers, J., Goldsmith, C., Sinclair, C., & Auret, K. (2019). The advance care planning nurse facilitator: Describing the role and identifying factors associated with successful implementation. *Australian Journal of Primary Health, 25*(6), 564–569. https://doi-org.ezproxy.liberty.edu/10.1071/PY19010	To appraise the components of an ACP facilitator intervention and factors associated with successful implementation	17 healthcare professionals directly (facilitator; n=4) or indirectly (referring provider or ward staff, n=13) involved in implementation; 65% female	Qualitative survey	Defined the role of the nurse facilitator and what process/ protocol is to be followed for patient identification screening; patient and provider factors that are associated with successful implementation; overall themes of trusting relationships and meaningful encounters discussed	Level 6 qualitative	Only evaluated from the perspective of healthcare professionals and not patients; does not compare to other models of nurse-led interventions so relative effectiveness cannot be established	It could be one model for identifying the facilitator of the intervention; in theory, the nurse facilitator could deliver care based on protocols other than what was included in this study; the role in and of itself is likely an effective role and could increase ACP participation
Sinclair, C., Auret, K. A., Evans, S. F., Jane, F., Dormer, S., Wilkinson, A., Greeve, K., Koay, M. A., & Brims, F. (2020). Impact of a nurse-led advance care planning intervention on satisfaction, health-related quality of life,	To investigate whether a nurse-led, facilitated ACP intervention on patients with severe respiratory disease improves patient outcomes	Patients from tertiary care center with affiliated rural health clinics; English speaking adults with severe respiratory disease (COPD, lung cancer, mesothelioma, interstitial lung	Multicenter, open-label, randomized controlled trial; 2:1 randomization protocol in favor of the intervention	Patients with strong preference against receiving intervention were most satisfied group overall; those who received intervention and fewer outpatient	Level 2 randomized controlled trial; some non-random assignment which was used as comparative group	Unblinded allocation to intervention; Patients were allowed to be assigned to preferred group if they had strong feelings for or against the	This is more evidence of the effectiveness of nurse-led interventions improving uptake of ACP; additionally, this study showed no ill-effect on

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
and health care utilization among patients with severe respiratory disease: A randomized patient-preference trial. *Journal of Pain & Symptom Management, 59*(4), 848–855. https://doi-org.ezproxy.liberty.edu/10.1016/j.jpainsymman.2019.11.018		disease) who met Gold Standards Framework criteria for high risk of death, had not previously completed AD, not expected to die within 48 hours; 63% male; n=149		consultations, few hospital nights, and more palliative/ hospice nights during final 90 days of life; nurse-led ACP intervention significantly increased uptake of ACP in the intervention group with stronger effect for those showing preference for intervention at baseline; uptake of ACP did not significantly impact satisfaction with overall healthcare		intervention; not powered to determine differenced in ACP group that had increased healthcare utilization vs. group that had reduced utilization to determine what impact ACP had on the utilization of resources	patient satisfaction or healthcare utilization
Splendore, E., & Grant, C. (2017). A nurse practitioner-led community workshop: Increasing adult participation in	To increase understanding and participation in the ACP process among rural-dwelling	N=40; convenience sample of community-dwelling adults 18 and older; recruited via flyer, local church	Pre-post repeated measure design questionnaire	15 of 32 patients with no AD prior to workshop had completed at 1-month post workshop; 14 of	Level 3 quasi-experimental	Small sample size and convenience sampling from single site and single intervention limits	Yes, there are likely multiple effective methods of nurse-led interventions for ACP; what works

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
advance care planning. *Journal of the American Association of Nurse Practitioners, 29*(9), 535–542. https://doi-org.ezproxy.liberty.edu/10.1002/2327-6924.12467	community members through implementation of an NP-led *Five Wishes* workshop, evaluate the feasibility and acceptability in this setting, and assess impact of the workshop on understanding of Ads, pre- and post	bulletins, newspaper, and word of mouth; 53% female, 100% white		15 had discussed AD with someone besides facilitator (spouse/ Family/GP/ attorney, etc.)		generalizability of findings; measurement instruments devised by investigator and not validated	in an urban setting may not in a rural setting; a larger, more diverse population of study would improve generalizability, but feasibility, acceptability, and effectiveness was demonstrated
Walczak, A., Butow, P. N., Tattersall, M. H. N., Davidson, P. M., Young, J., Epstein, R. M., Costa, D. S. J., & Clayton, J. M. (2017). Encouraging early discussion of life expectancy and end-of-life care: A randomised controlled trial of a nurse-led communication support program for patients and caregivers. *International Journal of Nursing Studies*, *67*, 31–40. https://doi-	To evaluate efficacy of nurse-led communication support program for patients with advanced, incurable cancer to assist in discussing prognosis and end of life decision-making	110 patients with advanced, incurable cancer; English-speaking, adult patient with 2-12 month life expectancy; mean age 64, 66% male, 50% married)	Single-blind, randomized controlled trial	Intervention arm gave significantly more clues for discussion of end of life issues and had significantly increased self-efficacy on follow up compared to a decline in control arm; satisfaction with intervention was high, but did not increase quality of life scores or likelihood of shared-decision	Level 2 - random control trial	Single-blind, data collection in follow-up significantly hampered by quickly deteriorating health of participants leading to high attrition; single follow up focus may not have caught all changes as those with slower disease trajectory may have waited until	Nurse-led intervention was again successful in that patients expressed high satisfaction with the intervention; endpoints do not lead to specific intervention for ACP, but do support the idea of future interventions being nurse-led

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
org.ezproxy.liberty.edu/10.1016/j.ijnurstu.2016.10.008				making preferences being met		later in disease course to discuss EOL decision-making	
Weathers, E., O'Caoimh, R., Cornally, N., Fitzgerald, C., Kearns, T., Coffey, A., Daly, E., O'Sullivan, R., McGlade, C., & Molloy, D. W. (2016). Advance care planning: A systematic review of randomised controlled trials conducted with older adults. *Maturitas, 91*, 101–109. https://doi.org/10.1016/j.maturitas.2016.06.016	Systematic review to evaluate RCTs conducted with older adults to evaluate outcomes measures such as symptom management, quality of EOL care, and healthcare utilization	9 RCT met inclusion criteria, 7 focusing on community/ outpatient setting, and 2 in nursing homes; total of 3,646 patients across studies, all over 65 years	Systematic review of RCTs	All studies reported an improvement some element of ACP including: documentation of EOL preferences, completion of POA, completion of ACP forms, reduction in hospitalization and health resource utilization, improved surrogate understanding of EOL, reduced stress, anxiety, and depression among bereaved family members; Authors concluded in general there is a	Level 1 – systematic review of RCTs	Quality of studies meeting inclusion criteria was variable, lack of RCTs in general on which to draw conclusions, only used three databases potentially limiting findings, heterogeneity of studies increased difficulty of data synthesis	Yes, even though the included studies are mostly low-level evidence it is the best available; the existence of some studies shows that RCTs for ACP is possible and findings may help guide not just future practice, but future research

Article Title & Authors	Study Purpose	Sample Characteristics	Methods	Study Results	Level of Evidence	Study Limitations	Would Use as Evidence to Support a Change?
				lack of high quality RCTs evaluating ACP interventions			

Appendix C

Thematic Analysis Table

Domain	Study	Key Points
Feasibility	Blackwood et al. (2019)	• Lack of time and training presented as most formidable barriers to ACP as part of routine practice • Knowledge concerning legal requirements (such as competency and witness/notary) is lacking • Significant investment in training and reorganization of current practices to allow for ACP during the workday is needed
	Chan et al. (2018)	• Difficulty in prognosticating can produce a barrier as to when is the best time to initiate ACP • Time is needed to build consensus with patient, provider, and family regarding EOL care • A facilitator is important to engage patients and family to bridge the communication gap and provide information and support • ACP should be initiated early in patients with chronic progressive diseases to allow for time needed for patients and family to reach a consensus regarding EOL care wishes • A structured ACP program in primary care supports a consistent and systematic approach to honor patient's wishes regarding EOL decision making by providing patients with the access and time necessary to contemplate these decisions
	Dixon & Knapp (2018)	• Management support is necessary to maintain ACP as an organizational priority • ACP can easily fall of the radar if not represented on organizational committees • Dedicated facilitators generally have significantly more time to devote to ACP conversations than busy clinicians • Nurse-led interventions are scalable – if 20 nurses are successfully trained for a trail, imagine the impact if hundreds of nurses were trained

		• Funding streams designated for care coordination and readmission prevention are potential sources of funding for professional's time to conduct ACP • Team-based models where nurses, or other non-physician team members do the bulk of the ACP coordination are thought to likely be the most cost effective and supportive of good quality care
	Franklin et al. (2020)	• Nurse-administered screening questionnaire is easy to use (at least one study nurse had already incorporated into routine practice
	Gabbard et al. (2021)	• Study demonstrated that nurse-led ACP pathway could be integrated into the existing clinical workflow without the need for any additional resources
	Hilgeman et al. (2018)	• Promising feasibility data include short duration (46 minutes), high retention rates, high patient satisfaction, and treatment fidelity
	Holland et al. (2017)	• 60% of those invited (40/66) agreed to participate reaching an acceptable feasibility threshold for the researchers • Inexperienced clinicians may have difficulty completing ACP in a therapeutic way making training key to feasibility • ACP took place over an average of 2 sessions lasting approximately 60 minutes each • Nurse facilitation of ACP may provide opportunity to improve healthcare outcomes and support full-scope nursing practice
	Houben et al. (2019)	• One at-home, nurse-led ACP intervention session lasting approximately 1.5 hours improved patient-physician EOL communication without inducing psychosocial distress for patients or families • 2-day nurse training provided background information and skills which allowed nurses to tailor intervention to each patient and family's preferences and responses • A respectable number, 165 of 539 (30.6%), of patients informed about study chose to participate
	Izumi (2017)	• While many perceived barriers to ACP are real to the provider, most barriers are rooted in misconceptions that if cleared up could significantly improve ACP

		• Limited education and training leads to misconceptions and confusion of ACP with end-of-life conversations and provider worry that they do not have the appropriate skillset or authority to have the conversation • Lack of knowledge regarding legal requirements inhibits provider participation in ACP • Role confusion is a key barrier to completion of ACP with many providers believing it is not their responsibility, or another HCP is better suited • Scope of practice laws allow for nurses to facilitate and coordinate patient care decisions, including ACP • Lack of time is reason most often cited by nurses for not participating in ACP • Lack of organization priority on ACP is an often cited barrier to completion of ACP • The "timing" barrier is based on misconception that ACP should not be addressed until EOL or patient is chronically or terminally ill; ideally, successful ACP will begin early in adulthood as individuals discuss "what if" scenarios with loved ones and indicate who a surrogate decision maker should be in case of incapacity • All adults should be encouraged to share any discussions they have had with loved ones with their HCP and have it documented in their health record; breaks down the "initiation" barrier that many physicians believe exists • To be successful, ACP needs to be everyone's business • Nurses play the care coordination hub on many healthcare teams and are thus in an ideal role to lead a push for improved ACP • Nurses acting in their role as educator can educate not only patients, but other providers regarding common misconceptions to promote better understanding and thus participation • Nurses must be involved in normalizing ACP as part of routine care
	Ke et al. (2015)	• Nurses lack confidence to implement ACP due to lack of knowledge • Nurses believe real world training scenarios and annual competencies centered around ACP would improve comfort level in completing ACP

		• Lack of available resources (standardized, easy-to use forms), time, and team support are barriers to nurse ACP completion • Nurses often find available ACP forms and language/terminology confusing and expect the public will as well and therefore do not use them to engage in ACP • Nursing administration and leadership must play a key role in educating nurses on ACP and making ACP an organizational priority • Nurses believe multidisciplinary teams are the best option for ACP completion within the busy clinical environment – nurse may lead team but should have referral options
	Miller (2018)	• Nurses experience role confusion regarding ACP completion • Fewer than half of working nurses feel confident, knowledgeable, or both regarding completion of advance directives • Nursing programs are not required to specifically address ACP and thus typically spend 1.5 hours or less educating about the topic • Confidence in ACP completion does not always align with accurate knowledge • Lack of adequate education leaves nurses feeling unprepared and hesitant to participate, and/or misinformed regarding requirements (including legal requirements of the various forms) • Nurses report poor communication among interprofessional team members limits participation
	Miller et al. (2019)	• With adequate training and support, nurses can initiate and facilitate ACP conversations • Average length of conversations was 32.2 minutes • Patients often recognize own bias towards not wanting to initiate ACP conversations (possibly due to expectations of fear or distress) and wait for healthcare providers to initiate • Timing is difficult to get right
	Ora eta al. (2019)	• ACP is a dynamic, iterative process that must be revisited from time to time to examine patient concerns, values, and preferences and the nurse is well-positioned to lead an integrated ACP process

		• A nurse-led ACP process has been found to be feasible and is standard of care for outpatient COPD patients in Denmark
	Overbeek et al. (2018)	• Nurses delivering the intervention were selected based on ability to discuss EOL care and having an open attitude towards individual's preferences • The researchers felt the intervention was feasible, with a quarter of eligible older adults choosing to participate • The trial protocol called for several appointments and completion of multiple questionnaires which is considerably more burdensome than ACP in regular clinical practice leading researchers to suggest it may be more effective without the additional requirements
	Rabow et al. (2019)	• Cost for nurse-led 2-part community ACP workshop was about $1045, including staff, materials, space, snacks • Lack of time and energy were most frequent reasons for those invited to turn down participation • 35 of 43 who signed up for the workshop participated making the intervention a feasible option for ACP completion
	Rogers et al. (2019)	• ACP nurse facilitators time is directed to undertaking ACP discussions removing the time barrier often encountered by primary care providers • Combination of trusted nurse facilitator working with patient in the appropriate setting with sufficient time to meaningfully discuss ACP most likely to produce best outcomes • Previous studies have focused on providing tools for primary care providers to facilitate ACP, while this study focused on a model of PCPs focusing on identifying patients appropriate for ACP discussions and referring to specialist facilitators which can support increased ACP uptake
	Splendore & Grant (2017)	• All who attended consented to participate; 95% of patients who attended were interviewed at one month, so there was minimal attrition • Project lead was familiar with the workshop and the ACP resources which may have contributed to high participation rates • Five Wishes ACP resource can be used successfully in nontraditional, community setting, away from competing demands of a clinical environment

	Walczak et al. (2017)	• Intervention delivery by existing nursing staff with a relatively short but robust training created high delivery fidelity of the intervention
	Weathers et al. (2017)	• RCTs evaluating effects of ACP on older adults are feasible and thus ACP is feasible in this population, yet methodological rigor is lacking with little data on best setting, facilitator, impact on quality of EOL care, and economic impact
Acceptability	Blackwood et al. (2019)	• Nurses have an overall positive view of ACP finding it helpful, valuable, and worthwhile • Negative attitudes of healthcare workers were not a significant barrier to ACP participation, though comfort level is variable among providers • Most nurses agree that participation in ACP is part of nursing responsibilities • Nurses express concern that even if they complete ACP the patient's wishes will not be followed • Increased knowledge increases nurse comfort with discussions, more positive attitude, and greater perception of ACP as part of the nursing role • If appropriate time and training are available, nurses are amenable to assisting patients with ACP
	Chan et al. (2018)	• Patient and healthcare providers think non-physicians are more tactful at handling ACP conversations • There is a lack of consensus among healthcare providers as to who is responsible (primary vs. specialist) • During the ACP process, family members may become upset and prevent patients from expressing real views or feelings
	Dixon & Knapp (2018)	• Dedicated facilitators are seen as a valuable resource to clinicians • Some feel that dedicated facilitators may cause patients to feel care is unintegrated and "someone else's responsibility"
	Franklin et al. (2020)	• None of the patients were made uncomfortable by the screening questions allaying HCP fears of creating fear or discomfort when initiating ACP • The routine assessment was deemed a reasonable time by healthcare providers and patients for completing ACP screening

		• The tool was easy to use and made the content less intimidating to address enabling nurses to actually complete • Patient stated "I think it (the screening tool) is an excellent idea and that a regular prompt or reminder for the practice would be good" • Majority of patients completed follow-up indicating acceptability • All patients who completed questionnaire found it useful and thought it would encourage future discussions with providers regarding ACP • All nurses involved in delivering intervention found the tool useful for initiating ACP discussion
	Hilgeman et al. (2018)	• Researchers utilized Theory of Enabling Safety framework to develop intervention to increase acceptability of discussing threatening themes such as loss of autonomy • Satisfaction was assessed using CSQ-8 with a mean score of 31.03 out of a possible 32 points indicating very high patient satisfaction with the nurse-supported ACP intervention • On follow up interview, 91% of patients were "very satisfied" with the intervention (the other 9% were somewhat satisfied and none were dissatisfied) • On follow up, 87% were "very satisfied" with the ACP decisions made during the intervention
	Holland et al. (2017)	• Mean satisfaction scores were greater than 4.0 on a 5-point Likert scale indicating "satisfied" to "very satisfied" with the nurse-led interventions • Patients reported enjoying the nurse-led intervention, gaining knowledge, and appreciating assistance during the process • Patients reported being comfortable with the process, asking questions, and feeling they could take the necessary time to make appropriate decisions • Patients stated willingness to recommend the intervention to family and friends indicating acceptability
	Houben et al. (2019)	• The intervention did not increase anxiety or depression in the intervention group, including patients and loved ones • Anxiety was significantly decreased for loved ones in the intervention group at 6 months compared to control group

	Izumi (2017)	• Clinician resistance to ACP participation is mostly rooted in misunderstanding or confusion about what ACP is • Clinicians often believe that patients do not want to have ACP conversations, or such conversations with cause stress or depression or loss of hope, though no evidence was found supporting the notion ACP is in any way harmful to patients or their families • Nurses often believe ACP is within their scope and role, but feel they are not supported by physicians who may feel it is inappropriate (misconception that ACP includes prognostication on the part of the physician) • ACP would be less taboo and more acceptable if normalized as part of routine primary health care
	Ke et al. (2015)	• Nurses recognize some older people may have an aversion to ACP for fear it will cause HCP to treat less aggressively or abandon treatment too early • Nurses recognize family members have emotional struggles between "letting patients go" and "keeping patients alive" • Conflict regarding acceptability of ACP may arise from differing beliefs or opinions between patients and families and healthcare teams • Nurses may have a hard time promoting ACP completion if they believe the public is misinformed about the concept • Nurses often feel uncomfortable addressing medical and legal aspects of the ACP and feel physicians may be better-suited, but do not always want to take responsibility themselves, and do not do a good job of explaining the full ramifications of any decisions made
	Miller (2018)	• Most nurses believe educating on and facilitating ACP is part of the nurse role and critical to ensuring self-determination and autonomy • Some nurses believe only responsibility is to refer
	Miller et al. (2019)	• Patients found discussion with nurses helpful for working through ideas surrounding EOL care • Patients felt nurses facilitated deep consideration of priorities and values • Patients appreciated openness, honesty, and willingness to provide professional advice

		• Patient satisfaction with ACP is moderated by patient-provider relationship
	Ora et al. (2019)	• Patients report nurses spend more time explaining things than physicians • Nurses create a more relaxed atmosphere • Patients feel confident in nurse's clinical knowledge
	Rabow et al. (2019)	• Semi-structured interviews and post-workshop surveys revealed overwhelmingly positive responses to the nurse-led workshop • Patients and family members who attended stated that reading the ACP forms alone was insufficient and having the nurse available to explain everything made all the difference • Group setting encouraged patients to share stories which participants found encouraging and made the process more meaningful and personal
	Rogers et al. (2019)	• Primary care is seen as the most acceptable setting for ACP, with inpatient setting with acutely ill patients deemed generally inappropriate; primary care is less "crisis driven" with more scheduling flexibility • Inpatient visits may be "reality checks" for patients influencing readiness to discuss ACP upon returning to the outpatient setting • Trusting and ongoing provider-patient relationship, holistic knowledge of patient history, and experience in conducting ACP are associated with better ACP participation • Nurse facilitator's personal and professional reputation is important for acceptance on the clinical team • Other healthcare professionals are generally accepting of an ACP nurse facilitator role
	Sinclair et al. (2020)	• ACP did not increase or decrease satisfaction with EOL care
	Splendore & Grant (2017)	• Participants rated the nurse-led workshop as "helpful" to "very helpful" with average 9.7 points on 10-point Likert scale • Non-clinical, comfortable environments may be more conducive to ACP participation
	Walczak et al. (2017)	• Patients who received nurse-led communication support regarding prognosis, EOL care, and future care options rated satisfaction between 3.9 and 4.2 indicating high satisfaction and acceptability of the intervention

Effectiveness	Chan et al. (2018)	• Structured ACP program improves dyadic congruence between patients and family regarding EOL preferences • A structured ACP program reduces patient's decisional conflict • A structured ACP program increases rates of ACP documentation at 6 month follow-up
	Franklin et al. (2020)	• Study was not powered with effectiveness as an end point, however, ACP interviews revealed areas where patients had completed ACP, but the practice did not have documentation in place • Survey was beneficial for recognizing lack of documentation and subsequently completing documentation
	Gabbard et al. (2021)	• A nurse-led intervention led to 42.2% ACP documentation vs 3.7% in control • Nurse-led intervention group more frequently named surrogate decision maker vs control group (64% vs 35%) • Nurse-led intervention group completed more legal AD forms than control group (24.3% vs 10%)
	Hilgeman et al. (2018)	• 30 out of 32 (94%) of intervention participants completed AD compared to 29% in the control group • High completion rate suggests this nurse-supported ACP intervention may be an effective ACP vehicle • Adds to the growing literature positively shaping and expanding nursing role in guiding ACP in clinical practice
	Holland et al. (2017)	• 38 out of 40 participants completed the intervention • 34 out of 40 completed AD during the sessions • All 40 participants identified a healthcare agent
	Houben et al. (2019)	• Quality of EOL communication scores significantly improved in invention group vs no change in control group • Intervention group was more likely to communicate further regarding ACP indicated by at 6 month follow-up 52.1% of intervention group reported communicating about ACP with another healthcare provider vs 29.7% in control group

	Kizawa et al. (2020)	• Brief nurse intervention increased documentation of a healthcare proxy decision maker, improved knowledge of CPR, and increased readiness to engage in ACP • An intervention with visual materials showed a trend towards a decision to forgo CPR, but did not meet statistical significance
	Ora et al. (2019)	• Nurse-led interventions improve ACP documentation and communication
	Overbeek et al. (2018)	• More participants in the nurse-led intervention group completed AD at 12 month follow up (93%) vs control group (34%) • More participants in the nurse-led intervention group named a surrogate decision maker (94%) vs control group (67%)
	Rabow et al. (2019)	• 17 of 26 participants (65.4%) of participants who attended the 2-part workshop and new notarized AD scanned into electronic health record at completion of the workshop; of note, 3 of the patient family members in attendance decided to complete their own forms as well
	Sinclair et al. (2020)	• Overall there was no difference in the number of hospital admissions, emergency department visits, or home visits between intervention and usual care groups, however, ACP intervention group had fewer outpatient consultations, significantly fewer nights in the hospital, and significantly more nights admitted to hospice/palliative care services during the final 90 days of life
	Splendore & Grant (2017)	• 48% of those who entered the intervention session without an ACP had completed an AD by 1 month follow up • At one month follow up 93% had discussed ACP with someone, either HCP or the person named in their AD • Nurse-led ACP workshop significantly increased understanding of living wills, power of attorney, and importance of disseminating AD
	Walczak et al. (2017)	• Significantly more patients in the intervention group increased EOL discussion and question asking regarding prognosis, EOL care, and treatment options and displayed increased self-efficacy

Appendix D

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Daniel Arthur (ID: 9126015)
- **Institution Affiliation:** Liberty University (ID: 2446)
- **Institution Email:** darthur4@liberty.edu

- **Curriculum Group:** Biomedical Research - Basic/Refresher
- **Course Learner Group:** Biomedical & Health Science Researchers
- **Stage:** Stage 1 - Basic Course
- **Description:** Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in biomedical research with human subjects.

- **Record ID:** 36658227
- **Completion Date:** 19-May-2020
- **Expiration Date:** 19-May-2023
- **Minimum Passing:** 80
- **Reported Score*:** 94

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
Belmont Report and Its Principles (ID: 1127)	17-May-2020	3/3 (100%)
Recognizing and Reporting Unanticipated Problems Involving Risks to Subjects or Others in Biomedical Research (ID: 14777)	18-May-2020	4/5 (80%)
Liberty University (ID: 15111)	18-May-2020	No Quiz
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	18-May-2020	5/5 (100%)
History and Ethics of Human Subjects Research (ID: 498)	19-May-2020	4/5 (80%)
Basic Institutional Review Board (IRB) Regulations and Review Process (ID: 2)	19-May-2020	5/5 (100%)
Informed Consent (ID: 3)	19-May-2020	5/5 (100%)
Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)	19-May-2020	4/4 (100%)
Records-Based Research (ID: 5)	19-May-2020	3/3 (100%)
Genetic Research in Human Populations (ID: 6)	19-May-2020	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	19-May-2020	4/5 (80%)
Conflicts of Interest in Human Subjects Research (ID: 17464)	19-May-2020	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?kc850b616-dc60-4480-aa02-0a42ee63aa7a-36658227

Collaborative Institutional Training Initiative (CITI Program)
Email: support@citiprogram.org
Phone: 888-529-5929
Web: https://www.citiprogram.org

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Daniel Arthur (ID: 9126015)
- **Institution Affiliation:** Liberty University (ID: 2446)
- **Institution Email:** darthur4@liberty.edu

- **Curriculum Group:** Biomedical Research - Basic/Refresher
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- **Description:** Choose this group to satisfy CITI training requirements for Investigators and staff involved primarily in biomedical research with human subjects.

- **Record ID:** 36658227
- **Report Date:** 20-May-2020
- **Current Score**:** 94

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Basic Institutional Review Board (IRB) Regulations and Review Process (ID: 2)	19-May-2020	5/5 (100%)
Liberty University (ID: 15111)	18-May-2020	No Quiz
Informed Consent (ID: 3)	19-May-2020	5/5 (100%)
Social and Behavioral Research (SBR) for Biomedical Researchers (ID: 4)	19-May-2020	4/4 (100%)
Belmont Report and Its Principles (ID: 1127)	17-May-2020	3/3 (100%)
Records-Based Research (ID: 5)	19-May-2020	3/3 (100%)
Genetic Research in Human Populations (ID: 6)	19-May-2020	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	19-May-2020	4/5 (80%)
History and Ethics of Human Subjects Research (ID: 498)	19-May-2020	4/5 (80%)
Recognizing and Reporting Unanticipated Problems Involving Risks to Subjects (ID: 14777)	18-May-2020	4/5 (80%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680)	18-May-2020	5/5 (100%)
Conflicts of Interest in Human Subjects Research (ID: 17464)	19-May-2020	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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Appendix E

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

March 5, 2021

Daniel Arthur
Debra Maddox

Re: IRB Application - IRB-FY20-21-691 ENHANCING OUTPATIENT PARTICIPATION IN ADVANCE CARE PLANNING VIA NURSE-LED INTERVENTION: AN INTEGRATIVE REVIEW

Dear Daniel Arthur and Debra Maddox,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your research with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research for the following reason:

(4) “Scholarly and journalistic activities (e.g., oral history, journalism, biography, literary criticism, legal research, and historical scholarship), including the collection and use of information, that focus directly on the specific individuals about whom the information is collected,” are not considered research according to 45 CFR 46.102(l)(1).

Please note that this decision only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

Also, although you are welcome to use our recruitment and consent templates, you are not required to do so. If you choose to use our documents, please replace the word *research* with the word *project* throughout both documents.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office