ADVANCE CARE PLANNING: IMPLEMENTING ONLINE EDUCATION FOR RURAL

PRIMARY CARE PROVIDERS

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ABSTRACT

Advance care planning (ACP) can assist patients and their families in navigating personal and medical choices at the end-of-life; however, these conversations often transpire too late. Primary care providers (PCPs) frequently develop extended relationships with their patients, especially those with chronic disease, and possess opportunities throughout a patient's lifespan to assess when ACP conversations could be initiated. Unfortunately, many PCPs lack confidence in leading ACP conversations, although they are willing to facilitate them. Despite the alarming number of people living with chronic disease and documented benefits of ACP, advance directive completion remains low. According to previous research, online ACP education for PCPs can bridge gaps in end-of-life care by increasing overall perceived knowledge, confidence, and understanding of ACP and advance directives.

The purpose of the practice improvement project was to improve rural PCPs perceived knowledge and confidence in facilitating ACP discussions and to increase the completion rate of advance directives among adults living with chronic disease(s) seen within the rural primary care setting. The theoretical underpinning for this DNP project was Lewin's Theory of Behavior Change. Project implementation occurred within a federally qualified health center comprised of eight clinics throughout rural North Dakota. The project's design methodology was a quantitative, quasi-experimental study using a convenience sample of eight PCPs employed within the federally qualified health center. Participants could access the ACP educational webinar, surveys, and posttest for four weeks. Four participants (50%) participated in the practice improvement project and acquired continuing education credit from the North Dakota Board of Nursing. The surveys aided in assessing participants' reported ACP knowledge, confidence, perceived benefits of ACP, and prior experiences in initiating advance directives and

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ACP conversations before and after viewing the webinar. The outcomes of the practice improvement project objectives were evaluated and demonstrated an increase in participants' perceived knowledge and confidence of ACP, an increase in PCPs' reported knowledge of the *Serious Illness Conversation Guide,* and an improved understanding of the role of ACP facilitators.

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DEDICATION

The journey to becoming a nurse practitioner would not have been possible without the endless patience, love, and support I received from my husband, Christian. Thank you for keeping me grounded and uplifted as we endured graduate school.

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LIST OF ABBREVIATIONS

AANP	American Association of Nurse Practitioners
AD	Advance Directive
ACP	Advance Care Planning
APRN	Advanced Practice Registered Nurse
CDC	Centers for Disease Control and Prevention
CDSR	Cochrane Database of Systematic Reviews
CE	Continuing Education
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CMS	Centers for Medicare and Medicaid
DNI	Do Not Intubate
DNP	Doctor of Nursing Practice
DNR	Do Not Resuscitate
EBP	Evidenced-based Practice
EOL	End-of-Life
FQHC	Federally Qualified Health Center
ICU	Intensive Care Unit
IRB	Institutional Review Board
NDBON	North Dakota Board of Nursing
NDNPA	North Dakota Nurse Practitioner Association
NDSU	North Dakota State University
NP	Nurse Practitioner
PCP	Primary Care Provider
PIP	Practice Improvement Project

PSDA	.Patient Self Determination Act
POLST	.Physician Orders for Life Sustaining Treatment
SICG	Serious Illness Conversation Guide

INTRODUCTION

A person's life requires many decisions that necessitate planning and preparation to guarantee that their preferences are fulfilled. Choosing a college major, planning for a child, and accepting a new career opportunity are all examples of decisions that can change the trajectory of one's life. However, making decisions can be difficult, especially those revolving around one's death.

Although the topic of aging and death can be distressing and uncomfortable, it is essential to have these conversations because it allows individuals to choose their medical preferences and select a representative to make medical decisions when they are no longer able. Advance care planning can help alleviate the stress and anxiety surrounding medical choices for end-of-life (EOL) care and comfort patients by knowing their decisions are upheld when they are most vulnerable. Families are also known to favor ACP conversations as these opportunities guide EOL goals, preventing potential emotional turmoil and conflicts within families when critical medical decisions are necessary. In addition, documenting an advance directive (AD) and ACP conversations promotes patient autonomy while guiding medical providers in managing patients' treatment at the end of life.

Background and Significance

Advance care planning is the process of interacting and communicating between a patient, a qualified clinical provider, and a family member/surrogate decision-maker to define and develop future medical treatment options and goals of care (Abu Al Hamayel et al., 2019). Advance care planning conversations allow patients to share their medical preferences, cultural beliefs, values, and expectations regarding life and future medical treatment. The outcome of ACP is typically the drafting of an AD, a legal document that states what future medical

treatments a patient would want (Solis et al., 2018). The AD also appoints a medical power of attorney, whose purpose is to advocate for the patient when they may no longer have the capacity to make medical decisions for themselves (Solis et al., 2018). However, the process of ACP is not linear. Instead, ACP conversations are a continual multistep process. Patients' preferences can change throughout their lifetime, especially during a new diagnosis, a shift in family dynamics, or their desire to continue specific therapies.

In 1991, the United States (US) Congress passed the Patient Self Determination Act (PSDA), which required healthcare facilities to make inquiries about ADs during patient hospital admissions to continue receiving federal funding from the Centers for Medicare and Medicaid (CMS) (Xu et al., 2021). Over two decades later, in 2016, the CMS approved ACP education and documentation reimbursement for qualified healthcare providers (Sudore et al., 2017). Unfortunately, despite the involvement of the US Congress and CMS, the completion rate of ADs remains low, with approximately two-thirds of chronically ill patients not having a documented AD (Nassikas et al., 2019). Nevertheless, ACP has positively affected patient care and outcomes, including increased satisfaction with healthcare providers and healthcare visits, decreased healthcare-associated costs, and decreased chances of decline in the acute care setting with life-sustaining treatments (Xu et al., 2021).

Although ACP can help patients and their families navigate personal and medical choices at the EOL, these conversations often occur too late in a disease process or when patients' cognitive ability has already started to decline. Primary care providers can develop longwithstanding relationships with their patients and possess opportunities to assess when ACP conversations could be initiated. Unfortunately, many PCP's lack confidence in leading ACP conversations while being willing to facilitate these conversations (Fulmer et al., 2018). To

increase the quantity and quality of ACP conversations and AD completion, implementing continuing education (CE) efforts focused on ACP for PCPs is needed.

Problem Statement

How does the implementation of an hour-long educational advance care planning webinar affect rural primary care providers' knowledge and confidence in facilitating end-of-life conversations with adults suffering with chronic disease?

Purpose

The purpose of this practice improvement project (PIP) was to improve rural primary care providers' knowledge and confidence in facilitating advance care planning discussions and to increase the completion rate of advance directives among adults living with chronic disease(s) seen within the primary care setting.

Objectives

- Primary care providers' reported knowledge in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar.
- Primary care providers' reported confidence in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar.
- Primary care providers' reported knowledge of the Serious Illness Conversation Guide will improve after viewing a one-hour online educational webinar.
- 4. Primary care providers' reported knowledge of the role of advance care planning facilitators will improve after viewing a one-hour online educational webinar.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Chapter two comprises of a list of definitions to assist in understanding concepts throughout the project, a systematic review of literature found between October 2022 and January 2023, and the application of Lewin's Theory of Behavior Change to guide the design of the practice improvement project.

List of Definitions

Advance care planning. The continual process of identifying and defining preferences for future medical goals and cares over a series of conversations with patients, family members, caregivers, and their healthcare provider (Kishino et al., 2022).

Advance directive. A legal form for the documentation of advance care planning conversations (Institute of Medicine, 2015).

Barrier. An obstacle that impedes a behavior from occurring (Merriam-Webster, n.d.).

Chronic disease. Conditions that last one or more years and require medical management or restrict activities of daily living or both (Centers for Disease Control and Prevention [CDC], 2022).

Facilitator. A person or tool that helps create an outcome by providing assistance, guidance, or supervision (Merriam-Webster, n.d.).

Hospice. End-of-life care implemented for individuals who have an estimated six months or less of survival, based on symptom relief; care without curative intent (Duncan et al., 2019).

Palliative care. Medical and related care provided to a patient with a serious, lifethreatening chronic disease that provides relief from symptoms and stress related to chronic disease based on the needs of the patient, not the prognosis; may include a curative intent (Center to Advance Palliative Care, n.d.).

Lewin's Theory of Behavior Change

Lewin's Theory of Behavior Change was utilized to guide this practice improvement project (PIP) (Figure 1). Lewin's Theory of Behavior Change was introduced by Kurt Lewin in 1951 and posits that an individual's behavior is a function of that individual and their environment. The theory consists of three stages of change, known as unfreezing, change, and refreezing, which require the learner to renounce what is currently known and preconceived opinions, learn a new concept, and then replace the prior knowledge with new knowledge obtained (Petiprin, 2023). Lewin's Theory was easily applied to this PIP due to its practicality, versatility, and ease of understanding (Shirey, 2013).

The first stage of Lewin's Behavior Change Theory is "unfreezing." Primary care providers often have pre-existing knowledge or hesitancies related to ACP. The first step of this PIP required the co-investigator to recognize a problem, identify the need for change, and then mobilize project participants to see the need for change (Shirey, 2013). The co-investigator recognized that many patients admitted to the intensive care unit (ICU) where she is employed did not possess ADs, leading to medical treatment that may not align with the patient's wishes. In addition, this step required PIP participants to recognize a gap in knowledge and confidence in leading ACP conversations and accept the need to obtain further education to improve their perceived emotions. To avoid failure of the "unfreezing" stage, a key stakeholder was involved in the content development of the ACP educational webinar. Participants were educated on the importance of ACP in the PCP setting, how to lead ACP conversations, and were provided an ACP toolkit to assist with ACP conversations in clinical practice.

The second stage of Lewin's Behavior Change Theory is "change" also known as "moving." This stage requires a detailed plan to engage and motivate people to try the proposed

change (Shirey, 2013). The "moving" stage is often the most difficult, as fear and uncertainty plague the idea of change (Shirey, 2013.) The co-investigator and the key stakeholder acted as coaches to help participants overcome change fears to avoid losing sight of the desired change behavior (Shirey, 2013). At this step, providers viewed the ACP educational webinar and were provided with case studies and evidenced-based practice (EBP) tools for initiating ACP conversations. Additionally, providers learned how to utilize *The Serious Illness Conversation Guide* (Ariadne Labs, n.d.) in practice and developed improved skills, confidence, and knowledge in facilitating ACP conversations. The *Serious Illness Conversation Guide* is a free online resource by Ariadne Labs often utilized for providing education on ACP conversations in all healthcare settings.

The third step of Lewin's Behavior Change Theory is "refreezing," also known as stabilizing change so it becomes embedded into a system, becoming a new normal (Shirey, 2013). After the PIP participants viewed the ACP webinar and reviewed the ACP toolkit, the co-investigator hoped participants would have improved knowledge and confidence in leading improved ACP conversations with their patients. Furthermore, the co-investigator hoped providers would continue to integrate what they learned from the webinar into practice and increase ACP conversations at their respective rural clinical sites.

Figure 1



Lewin's Three Steps Model of Behavior Change

Note. This figure demonstrates the elements of Lewin's Behavior Change Theory. From "Kurt Lewin's change model: A critical review of the role of leadership and employee involvement in organizational change," by Hussain et al., 2018, *Journal of Innovation & Knowledge*, *3*(3), 123-127 (https://doi.org/10.1016/j.jik.2016.07.002).

Literature Review

An extensive review of literature occurred between August 2022 and January 2023 utilizing PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Database of Systematic Reviews (CDSR), and Elsevier ScienceDirect databases. Inclusion criteria and controlled vocabulary searches for the databases included the terms: advance care planning, advance directive, primary care, and barriers. The investigation was further narrowed to provider education, confidence, and comfort. In addition, they included the limiters years 2018 to 2022, the English language, academic journals, and systematic reviews.

The database PubMed was the first to be extensively searched with key terms "advance care planning," "advance directive," and "primary care," yielding 36 search results. The limiters

"randomized controlled trials" and "systematic review" were added to narrow the search further, producing 11 results. A secondary search using the PubMed database included the key terms "advance care planning" and "provider confidence," which yielded three articles. A similar search with the terms "advance care planning" and "provider knowledge" yielded three articles. To broaden the search, the following key terms were searched without quotations: advance care planning provider education, advance care planning provider comfort, advance care planning primary care, and advance care planning provider confidence. These searches yielded 470, 107, 924, and 125 results, respectively. Search results were further narrowed with the addition of the limiter "systematic review," resulting in 18, four, 53, and five articles, respectively.

The initial search on the CINAHL database included the key terms "advance care planning," "advanced directive," and "primary care," yielding 34 results. The search was further narrowed by adding the limiter academic journals, yielding 31 results. Next, an age limiter was applied to include only articles referencing adults, which then yielded 14 articles. A similar search utilizing the same key terms and limiters, "provider comfort," "provider confidence," and "provider education" in exchange for "primary care," yielded nine, eight, and 42 articles, respectively. Finally, the Cochrane database was searched with the keywords "advance care planning in primary care" and "advance directive," resulting in four relevant trials since 2018.

The Elsevier ScienceDirect database was searched with the key terms "advance care planning," "advance directive," and "primary care," with the limiters of 2018-2022 and research articles yielding 92 results. The search was further screened with the addition of "provider knowledge," "provider confidence," and "provider comfort," yielding six, one, and eight articles, respectively.

After searching the four databases, a total of 333 articles were screened. Article titles and abstracts that did not relate to primary care, adults, and geriatrics, and duplicates were excluded. Articles were chosen based on their level of evidence as well as measurable outcomes. The end of the article search resulted in a total of 38 articles included in the literature review. As these articles were read in completion by the co-investigator, an additional 15 articles and sources were found by hand-searching reference sections of selected articles and by searching gray literature. A review of the articles revealed similarities in the findings, which will be further discussed in the literature review.

Advance Care Planning

Advance care planning is the continual process of identifying and defining preferences for future medical goals and cares over a series of conversations with patients, family members, caregivers, and their healthcare provider (Kishino et al., 2022). The objective of ACP is to document patients' desired medical treatments and preferences in an AD and choose a family member or surrogate decision-maker to make healthcare decisions for them when they are no longer able, whether temporarily or permanently. An AD is a legal form for documenting these conversations, which defines desired future medical care and EOL treatments such as cardiac resuscitation, intubation, and artificial nutrition and hydration. The AD also documents and appoints a durable power of attorney for health or a healthcare proxy who should make medical decisions if the patient is incapacitated (Institute of Medicine, 2015).

In all 50 states, the AD needs to be signed by a witness; however, some states require the AD to be notarized to become a legal document (National Institutes of Health [NIH] & National Institute on Aging [NIA], 2018). Copies of the AD can then be shared with patients' healthcare providers, families, and healthcare systems and uploaded into the electronic medical record for

future reference. Application of the information in the AD only occurs when the patient becomes incapacitated, typically in the days approaching the patient's death.

The foundation of an AD is deeply rooted in patient autonomy. The legal definition of autonomy is the quality or state of being self-governing (Merriam-Webster, nd.). According to the Code of Ethics for Nurses (2015), nurses are obligated to preserve, protect, and support patients' moral and legal rights. To respect human dignity is to recognize the right to self-determination, which is honored by nurses promoting ACP conversations (American Nurses Association, 2015).

A literature review resulted in several articles acknowledging the benefits of ACP for patients, patients' families, decisional surrogates, healthcare providers, and the economic relief from preventable heroic life-saving measures. One systematic review found that ACP made patients feel empowered, respected, heard, and in control because they could make an informed decision regarding their EOL (Zwakman et al., 2018). Nouri et al. (2021) stated that patients and families who had undergone ACP had increased satisfaction with their care at the EOL, an increased probability of receiving goal-based care, and a decreased likelihood of receiving heroic-measured care at the EOL. Xu et al. (2021), similar to the review by Nouri et al., observed that patients with previous experiences with ACP were more likely to have better-quality EOL care, increased concordance with EOL goals and actual EOL outcomes, and decreased caregiver stress and anxiety related to EOL decisions.

Substitute decision-makers and caregivers may experience many emotions while experiencing EOL care. Advance care planning conversations are commonly avoided entirely or only occur when patients are seriously ill (Abu Al Hamayel et al., 2019). Another study found that without ACP conversations, families tended to avoid conversations about death and dying,

and differences in opinions about EOL outcomes caused interpersonal conflict (Kishino et al., 2022).

A review by Su et al. (2019) similarly found that most surrogate decision-makers lacked EOL preparation and experienced negative consequences when making EOL decisions. Su et al. (2019) continued that surrogate decision-makers desire education and guidance from healthcare professionals to make better-informed decisions about EOL care goals. Family and surrogate decision-makers participation in developing EOL and GOC treatment plans for patients can improve the quality of communication and result in better outcomes for substitute decision-makers (Cresp et al., 2018). One study found that patients considered completing an AD essential but were concerned about how the AD would be interpreted, emphasizing the importance of ACP conversations with family and surrogate decision-makers (Abu Al Hamayel et al., 2019).

When having ACP conversations with patients and families, providers may want to consider discussing patients' financial well-being and the estimated costs associated with different treatment options. While the purpose of the conversation may not focus on clinical decision-making, it can bring awareness to the financial burden families could endure with aggressive EOL measures (Starr et al., 2019). Undesired extreme life-saving measures at EOL are associated with additional hospitalization costs, which may have been prevented with early ACP conversations and AD documentation. A study by Starr et al. (2019) stated that palliative care consultations for EOL and GOC were associated with reducing future costs by more than \$6000 US per patient. For Medicare beneficiaries, it is estimated that EOL expenditures range from 13 to 25% of total Medicare expenses, totaling \$19 billion annually (Duncan et al., 2019). Duncan et al. (2019) further compared daily inpatient-hospital EOL care versus hospice EOL

costs, stating that patients who spend 1-3 days in the hospital for EOL care will pay \$5983 per day, while patients on hospice care will pay \$230.74. Although the many benefits of ACP are well documented, the completion of ADs remains low.

Chronic Disease

Chronic disease is defined as a condition that lasts one or more years and requires medical management or restricts activities of daily living or both (Centers for Disease Control and Prevention [CDC], 2022). The CDC further reports (2022) that six in ten US adults have a chronic disease, and four in ten adults in the US have two or more. Chronic diseases kill 41 million people annually, with 17 million dying from chronic diseases before age 70 (World Health Organization [WHO], 2022). Chronic diseases are known to be disabling, causing a significant decline in quality of life, and require frequent visits to healthcare providers for adequate medication and treatment management. While the care of one chronic disease can be manageable, many elderly adults suffer from multiple chronic diseases, causing an exorbitant amount of time on medical management rather than their desired interests and activities.

The CDC identifies heart disease, cancer, chronic lung disease, stroke, Alzheimer's disease, diabetes, and chronic kidney disease to be the leading causes of death and disability in the United States, leading to a total of \$4.1 trillion spent annually on healthcare costs (Centers for Disease Control and Prevention [CDC] 2021). Modifiable behaviors that lead to the development of chronic disease include tobacco use and exposure to secondhand smoke, poor nutrition, including a diet low in fruits and vegetables, high in sodium, decreased physical activity, and excessive alcohol use (Centers for Disease Control and Prevention [CDC], 2022; World Health Organization [WHO], 2022). Furthermore, these modifiable risk factors can lead to elevated blood pressure, hyperglycemia, atherosclerotic changes, obesity, and hyperlipidemia.

Despite the alarming number of people living with chronic diseases, AD completion remains low. While patients with chronic disease had a higher percentage of completed ADs than those without chronic disease, that percentage is marginal at 38.2% (Yadav et al., 2017). For this PIP, patients with chronic disease are defined as individuals with chronic obstructive pulmonary disease (COPD), end-stage renal disease (ESRD), stage IV cancer, end-stage dementia, and heart failure. These chronic diseases were most identified throughout the review of the literature.

The following list reveals results of AD completion rates and ACP conversations for patients with COPD, ESRD, stage IV cancer, end-stage dementia, and heart failure:

- In an eight-month-long cohort study of 106 patients with COPD, the monthly completion rate of ADs averaged 25.4%. Post-intervention average AD completion rate increased to 28.8%, implying that both combined education and promotion of ACP conversations can improve AD completion, therefore improving healthcare outcomes for patients and their families (Stephens et al., 2019).
- A retrospective review of the medical records of 808 hemodialysis patients revealed that 49% had an AD. Additionally, only 10.6% of ADs mentioned dialysis, and three percent of ADs further detailed dialysis preferences at EOL (Feely et al., 2016).
- In a large prospective cohort of patients with stage IV lung and colorectal cancer, those with documented EOL conversations who died during follow-up (n=959) participated in initial ACP conversations in the hospital at an average of only 33 days before death (Agarwal & Epstein, 2018).
- It is projected that there are currently 44.4 million people globally with dementia. If prevention, treatment, and death rates remain the same, this number will increase to

75.6 million in 2030 and 135.5 million in 2050. Dementia remains the most common cause of death in adults over age 80 (Harrison Dening et al., 2019).

- An Australian prospective multicenter audit and cross-sectional survey of 52 patients with dementia found that 59.6% of participants had heard about ACP, 55.8% of participants had discussed ACP with someone, 38.5% of participants appointed a POA, and only 26.9% had a documented AD (Bryant et al., 2021).
- In a randomized control trial of 50 heart failure patients, treating physicians

 anticipated death within a year for 32 patients (64%), but 42 patients (84%) predicted
 their life expectancy to be longer than five years. Patients at high risk of death from
 HF often overestimate their life expectancy (O'Donnell et al., 2018).
- While ACP is advocated for HF patients, only 7% of HF decedents, compared to 50% of cancer patient decedents, had their palliative care needs recognized by their provider. In addition, only eight to ten percent of those patients had the opportunity to participate in ACP (Schichtel et al., 2021).

Patients suffering from chronic disease have an increased mortality rate and disease burden. Furthermore, their families and friends experience stress and fear from watching their family members endure life-sustaining chronic disease management. As a result of low procurement of AD completion, patients may suffer undesired life-sustaining treatment modalities, and families will be forced to make EOL decisions that may be discordant with the patient's EOL wishes (Harrison Denning et al., 2019).

Advance Care Planning Barriers

Political attempts by the US federal government and quality initiatives by hospital systems have improved ACP opportunities, but many barriers still exist. Though the PSDA of

1991 and CMS's 2016 approval for ACP patient education reimbursement has made access to ACP more accessible, approximately one in three US adults have completed any AD, and about two-thirds of chronically ill patients do not have a documented AD (Nassikas et al., 2019; Sudore et al., 2017; Yadav et al., 2017). Recently, ACP has been more supported with the onset of the COVID-19 pandemic to assist patients and families in making decisions about future care under unprecedented circumstances (Kishino et al., 2022). While the long-term effect of the pandemic and AD documentation is still unknown, a recent cohort study from a single healthcare system found a 4.9-fold increase in online AD completion compared to pre-pandemic efforts on increasing AD completion (Auriemma et al., 2020). Although public health threats have improved awareness of ACP, providers and patients still face barriers to initiating these conversations.

Barriers to advance care planning can exist at intrapersonal, interpersonal, provider, or system levels (Risk et al., 2019). At the intrapersonal level, patients can be apprehensive about verbalizing their wishes because discussing death and dying can be fear-inducing, causing anxiety and distress. In addition, confronting imminent mortality can cause emotional turmoil and further instigate patients to continue avoiding ACP conversations. Contrary to the study by Hall et al. (2019), Zwakman et al. (2018) found that patients had ambivalent feelings toward ACP. While being invited to ACP conversations, patients recognized death was fast approaching but felt reassurance because their autonomy would be respected at the EOL (Zwakman et al., 2018).

Beyond the fear of dying, patients dreaded initiating ACP conversations because they feared losing hope, leaving EOL care circumstances to chance, at the control of their provider and relatives, or to their God (Poveda-Moral et al., 2021). Risk et al. (2019) identified patients

delayed ACP conversations because of distrust towards the healthcare system, with the belief that having an AD could somehow limit the care they could receive, or the care would not be concordant with their wishes. Grant et al. (2021) argued that most people were aware of ACP and believed its utilization is essential but confused ACP with palliative care or hospice. This misunderstanding can lead to reluctance to be involved with ACP conversations.

A lack of clarity in initiating ACP conversations is an interpersonal barrier between the patient and provider. For example, Hall et al. (2019) found that patients abstained from starting ACP conversations because they preferred their provider to be responsible for facilitating them. Conversely, patients were usually more inclined to discuss ACP when their provider initiated these conversations (Risk et al., 2019).

Family involvement in initiating ACP can assist patients in starting a conversation with their provider, but it can also be a hindrance. A systematic review by Kishino et al. (2022) identified two significant communication challenges between patients and their families: avoidance communication and conflicts in EOL preferences. Patients avoided ACP conversations with family due to unhealthy relationships, unwillingness to include family in the conversations, and not wanting to burden family members with thoughts of their deceased (Risk et al., 2019). In addition, the lack of family awareness of the patient's EOL preferences can lead to interpersonal conflict due to a predisposition to what the family believes the patient would desire. Discussing death during ACP conversations is often complicated and can further instigate conflict if pre-existing tensions are present; however, having an ACP facilitator initiate these conversations assists patients and families in decision-making (Mulcahy Symmons et al., 2022.)

Providers face multiple barriers to initiating ACP conversations, the most common being time constraints, knowledge, skills, and confidence (Risk et al., 2019; Schichtel et al., 2019;

Sloan et al., 2021). The daily patient census of the family practice provider can significantly determine the amount of time they have available to lead these conversations. Conversations about ACP can take an hour to complete, and with a busy clinic schedule, providers might not remember to initiate these conversations in the rush of everyday practice (Schichtel et al., 2019).

Providers also struggle with knowing when to initiate ACP conversations because patients' disease prognoses can be unpredictable, there is an absence of a clear beginning of the terminal disease process, and estimating survivability is uncertain (Jabbarian et al., 2018; Johnson et al., 2018; Poveda-Moral et al., 2021). Furthermore, providers have been known to miss opportunities to start ACP conversations with their chronic disease management patients out of preference, especially when these patients are feeling well (Nedjat-Haiem et al., 2018). Similar to patients' fear of losing hope, providers do not want to destroy their patient's hope while facilitating ACP conversations. However, starting ACP conversations too early may provoke fear of dying prematurely and distress (Zwakman et al., 2018).

Schichtel et al. (2019) noted that providers lack knowledge about the legal differences between ACP, AD, and POLST (physician orders for life-sustaining treatment) forms, further causing avoidance of having ACP conversations. Concerns for these deficiencies could cause adverse situations from an ethical perspective, especially when there is a dispute between family members and professionals (Proveda-Moral et al., 2021). "Educating and training clinicians in the delivery of ACP should help them become more skilled with initiating these conversations" (Schichtel et al., 2019, p. 7).

Advance care planning conversations are best supported when the system they are initiated in advocates for them. Risk et al. (2019) identified uncertainties related to the efficacy of ACP templates and toolkits, a lack of consensus and clarity regarding ACP conversation

requirements, and poor systemic linkages between healthcare facilities as barriers to ACP conversations. Patients can see several healthcare providers at various facilities throughout their lifetime, leading to a lack of cohesiveness, making ACP difficult (Chow et al., 2022). Although healthcare delivery systems have transitioned to an electronic format, allowing for streamlined care, gaps still exist. A study completed by Hafid et al. (2021) found that ACP would be significantly promoted if PCPs were triggered by the electronic medical record identifying patients eligible for ACP conversations. Bringing awareness to the obstacles preventing ACP conversations can encourage ACP on all socioecological levels.

Advance Care Planning Facilitators

A facilitator is a person or tool that helps create an outcome by providing assistance, guidance, or supervision (Merriam-Webster, nd.). In ACP conversations, facilitators can be physicians, nurse practitioners, physician associates, ACP-certified registered nurses, social workers, and chaplains. While various healthcare specialties are trained to lead ACP conversations, many healthcare systems fail to have a streamlined ACP service, relying on the healthcare providers' availability and interest in initiating ACP (Hage et al., 2022). While the lack of standardization can inhibit ACP, allowing several different specialties to lead ACP conversations increases access to ACP, especially those in rural areas.

While there are numerous guidelines for ACP in the palliative care setting and position statements by various healthcare societies, a singular guideline for ACP in the primary care setting does not exist. The absence of a guideline can lead to confusion on the responsibility of who should start the conversation, who would be an appropriate candidate for ACP conversations, and how often to readdress ACP goals. To improve ACP awareness, healthcare systems have adopted ACP toolkits created by various ACP associations to help guide ACP

conversations. Although there has been a positive impact on provider and patient awareness, documentation of ACP conversations is lacking.

Several toolkits and documentation aids have been curated to assist healthcare providers in carrying out ACP conversations. With the internet and web-based education, ACP has been made more accessible and easier to follow. In 2017, a randomized control trial evaluated the effect of the PREPARE website. This internet-based tool assists in AD engagement and documentation to improve the completion rate of ADs compared to an easy-to-read AD. The PREPARE website consists of five easy-to-follow steps with visual aids which encourage patients and families to take action in their potential future medical treatments. Sudore et al. (2017) found that the easy-to-read AD only increased ACP documentation by 25%, while using the PREPARE website increased ACP documentation by 35%. "Both tools were rated highly in terms of ease-of-use, satisfaction, and helpfulness, suggesting that PREPARE and the easy-toread AD could serve as scalable, easy-to-disseminate tools to improve the ACP process, especially in busy and resource-poor primary care clinics" (Sudore et al., 2017, p. 1108).

A prospective before and after study from Ontario, Canada, evaluated the effectiveness of the PREPARE website on patient engagement with ACP. Rather than assessing a percentage change in AD completion, the authors sought to see a change in behavior and engagement, which they felt would encourage patients to converse about their medical wishes with their families and surrogate decision-makers. Howard et al. (2020) found the PREPARE website increased behavior change and engagement while entertaining the ACP process.

Another frequently used tool for ACP is The Conversation Project, a four-step initiative created by the Institute for Healthcare Improvement. The Conversation Project is geared toward patients, which assists and encourages them to initiate ACP conversations by gathering their

thoughts related to EOL, planning a conversation with their family and healthcare providers, sharing their EOL choices, and then revisiting EOL goals as they age or as treatment plans change (The Conversation Project, 2021). Unlike the PREPARE website, The Conversation Project does not include the opportunity to draft an AD or living will; however, it does encourage patients to do so and provides them with a website to find the correct forms necessary to complete one in each state.

Contrary to the PREPARE website and The Conversation Project, Respecting Choices is a well-known model of ACP that guides education for healthcare professionals and systems, specifically physicians, APPs, nurses, and social workers who would be involved in leading ACP conversations. Respecting Choices builds on leadership engagement by working with existing electronic medical records, improving ACP competency, creating a message that is motivating, and measuring outcomes for continuous quality improvement (Respecting Choices, 2022). Respecting Choices has three different stages of ACP, allowing patients to engage in these conversations at any point in their lives, whether they are completely healthy or in their last few years of life.

Provider Knowledge and Confidence

Several studies have documented that provider comfort and confidence have been barriers to ACP conversations (Abu Al Hamayel et al., 2019; Blackwood et al., 2019; Pearse et al., 2021; Poveda-Moral et al., 2021). For example, only 61% of older adults have reported sharing their preferences for medical treatment with a friend or family member if they become seriously ill in the future, and less than one percent of Medicare beneficiaries have stated they have had an ACP conversation with their PCP (Abu Al Hamayel et al., 2019). "Given that uptake of ACP remains low, discovering obstacles which may be preventing implementation of ACP by

healthcare professionals is critical if patients are to influence their treatment decisions when unwell and lacking capacity" (Blackwood et al., 2019, p. 15).

Poveda-Moral et al. (2021) underscore a clear need for specific training, qualifications, and leadership opportunities for implementing ACP. A systematic review by Pearse et al. (2021) revealed continuing education programs could improve healthcare participants' perceptions of their confidence, knowledge, skill, and overall preparedness to participate in ACP conversations with their patients. The findings by Pearse et al. (2021) aligned with the systematic review by Chan et al. (2019), which also found that training for healthcare professionals in ACP positively affected providers' knowledge, skills, and attitudes. A small pre- and post- study by Nassikas et al. (2019) showed a 30-minute educational intervention improved resident PCPs' attitude toward ACP as well as instigated a behavior change in finding the importance of having ACP conversations in the primary care setting. While this study was modest in comparison to the systematic reviews, it shows that continued efforts into ACP conversation education can be impactful on both provider and patient levels.

Patient Preferences and Clinical Expertise

Understanding the experiences of patients and surrogate decision-makers with EOL care is essential for healthcare providers to carry out meaningful ACP conversations. At all stages of life, healthcare should be individualized and patient-centered. The sole purpose of the AD is to provide patients with autonomy, dignity, and shared decision-making opportunities while they cannot make decisions for themselves. Patients typically want to pass peacefully, in their homes, with their families by their sides (Zwakman et al., 2019). A systematic review by Schichtel et al. (2019) found that patients felt ACP improved their quality of life, increased their satisfaction with EOL care, and enhanced the quality of EOL conversations. Initiating ACP while the patient is still ambulatory, with or without family members, can encourage subsequent conversations and comfort patients in planning for the unknown.

In the ICU, patients with multiple end-stage chronic diseases and comorbidities are frequently cared for. Some patients may be approaching the end of life, and others may be battling to survive. The ICU is not an ideal location for ACP because the specific patient population is often incapacitated and incapable of making decisions for themselves, requiring healthcare decisions to fall on the next of kin or surrogate decision-maker (Mercadante et al., 2018). The lack of conversations regarding EOL care quickly becomes evident when families feud on how to proceed with medical treatment. Patients admitted to the ICU can expect an admission lasting a few days to several weeks to care for their critical acute care needs, depending on the family's decisions and what is documented in the AD if it exists.

Although the ICU can be an excellent place for healing and rehabilitation, it is not a therapeutic environment for families to witness the death of their loved ones. Nevertheless, having those difficult conversations with family and drafting ADs before an emergency can prevent further stress and anxiety related to treatment and decision-making during an ICU admission (Mercadante et al., 2018). Discussing death and dying can be difficult; however, observing someone endure their chosen medical treatment at the EOL can bring peace to family members and the healthcare team.

Serious Illness Conversation Guide and Serious Illness Messaging

The Serious Illness Conversation Guide is an ACP communication-focused care delivery tool created by a team of palliative care experts at Ariadne Labs in 2012 to help clinicians have more, earlier, and improved ACP conversations with their seriously ill patients (Ariadne Labs, n.d.). The Serious Illness Conversation Guide is part of *the Serious Illness Conversation*
Program, designed to achieve the quadruple aim of healthcare: improving population health, improving patient experience, improving clinician experience, and reducing patient-driven costs (Ariadne Labs, n.d.). Components of *The Serious Illness Conversation Guide* include setting up the ACP conversation, evaluating and understanding preferences, sharing prognosis, worries, and concerns, exploring significant matters, closing the conversation, documenting the conversation, and communicating with clinicians of the healthcare team (Ariadne Labs, n.d.). Ariadne Labs' approach to ACP is focused on the quality of the conversation by fully understanding what patients care about the most at the end of life and not the formality of completing an AD (Ariadne Labs, n.d.).

Clinical trials have shown favor in the outcomes of utilizing the *Serious Illness Conversation Guide* in practice (Bernacki et al., 2019; King et al., 2022; Ryan et al., 2022). For example, a randomized control trial in the primary care setting found that most patients (83.3%) felt the Serious Illness Conversation Guide improved their relationship with their provider (King et al., 2022). In addition, most patients had confidence that their wishes would be followed and respected at EOL. Bernacki et al. (2019) reported patients felt their anxiety and depression symptoms decreased (10.4% vs. 4.2% and 17.8% vs. 12.5%) with the use of the *Serious Illness Conversation Guide* intervention in ACP conversations. The *Serious Illness Conversation Guide* could also be used in family conference interventions, leading to earlier EOL discussions between patients, care providers, and clinicians (Ryan et al., 2022). By providing a structured ACP conversation method, clinicians can keep ACP conversations patient-centered and improve EOL goal-concordant care.

A new development by The John A. Hartford Foundation and Cambia Health Foundation called *Serious Illness Messaging* is the newest evidence-based practice instrument to assist

healthcare providers in speaking with and engaging the public about ACP. The goal of this new toolkit is to change public perceptions about death and dying so that advance care planning, palliative care, and hospice are types of care people know, want, and request (The John A. Hartford Foundation & Cambia Health Foundation, 2022). The creators' goal was to create an evidence-based method to disseminate information at a level that enables the public to take action to protect their health (Back et al., 2021). With the onset of the COVID-19 pandemic, distrust of the healthcare system has become a new normal, placing importance on developing therapeutic ways to communicate about ACP with the public henceforward.

Serious Illness Messaging consists of five messaging principles: (1) talk up the benefits, (2) present choices for every step, (3) use stories that are positive and aspirational, (4) invite dialogue, and (5) invoke a new team of people who are ready to help (Back et al., 2021). Compared to traditional ACP conversations, the messaging approach focuses on how to talk to patients about EOL care in present time and at future visits (The John A. Hartford Foundation & Cambia Health Foundation, 2022).

Healthcare providers typically start ACP conversations by leading with complicated definitions and explanations of what will happen if an AD is not created. Instead, *Serious Illness Messaging* places importance on the patient's benefit, not the healthcare system (The John A. Hartford Foundation & Cambia Health Foundation, 2022). The change in perspective allows patients to view ACP and ADs as a way to voice their opinions and have a say in their care, therefore promoting patient autonomy and dignity.

Rural Communities

Rural communities face unique health challenges due to complex cultural, social, economic, and geographic factors, including disparities in age, income, and health status (Rural

Health Research Gateway, 2018). According to the United States Census Bureau, roughly 20% of the population resides in rural or nonmetropolitan areas, although 85% of the total United States' land area is classified as rural (HRSA, 2021). In comparison to urban areas, rural areas have a larger percentage of adults over the age of 65, higher poverty rates, lower per capita income, and a higher prevalence of adults with multiple chronic health conditions (34.8% vs. 26.1%) (Agency for Healthcare Research and Quality [AHRQ], 2021; Boersma et al., 2020).

For the last two decades, age-adjusted death rates have been higher in rural areas compared to urban areas. According to the CDC (2021), in 1999, the age-adjusted death rate in rural areas was sever percent higher than in urban areas, but by 2019, the death rate in rural areas was 20% higher than in urban areas. People who live in rural areas are at greater risk of death from chronic diseases such as heart disease, cancer, chronic lower respiratory disease, and stroke (Centers for Disease Control and Prevention [CDC], 2017).

Rural areas are also known to have an increased shortage of healthcare professionals who can provide primary care, dental care, and mental health services (Agency for Healthcare Research and Quality [AHRQ], 2021). "Rural primary care providers deliver a wider range of medical services than their urban counterparts, coordinate care that must be obtained in other locations, and have an essential role in connecting patients to specialty services that are unavailable locally" (Larson et al., 2020, p. 3). While many specialists work in urban areas, telemedicine has helped bridge the healthcare access gap, especially for those in rural areas. However, elderly patients in rural areas may not own or be able to borrow a computer or laptop or have internet access with enough bandwidth necessary for a video visit, inhibiting them from engaging in telemedicine opportunities.

While efforts have been made to improve ACP in hospitals and nursing homes, where rural patients are often transferred for a higher level of care, ACP must be initiated in the primary care setting to become more proactive (Nelson-Brantley et al., 2019). With the shortage of medical specialties in rural areas, specifically certified ACP facilitators, the responsibility of leading ACP conversations becomes the rural PCPs. Providing educational EBP opportunities for rural PCPs about ACP and ADs can positively affect patient outcomes and improve satisfaction of care at EOL in rural communities.

METHODS

Overall Project Design

The PIP included a one-hour online ACP educational webinar for PCPs in a primary care setting in rural North Dakota. Additionally, rural PCPs completed pre- and post-surveys assessing their knowledge and confidence in leading ACP conversations with their patients. Participants were also provided with an ACP toolkit for future utilization in their respective clinics to guide ACP conversations.

Implementation Plan

IOWA Model

The IOWA Model Revised: Evidenced-Based Practice to Promote Excellence in Healthcare (Appendix C) is known to assist providers through the EBP process by following a problem-solving approach, simplifying the process, and being highly application-oriented (Melnyk & Fineout-Overholt, 2018). Permission to utilize the IOWA EBP model was obtained from the University of Iowa Hospitals and Clinics (Appendix B). The IOWA model assisted in developing and facilitating a PIP consisting of an educational ACP webinar for rural PCPs. The IOWA model is known for its ease of use by healthcare professionals and applicability in clinical decision-making. The IOWA model involves a multiphase change process with feedback loops that guide clinical and administrative decisions, which can then influence healthcare outcomes (Melnyk & Fineout-Overholt, 2018).

Step 1: Problem and Knowledge-Focused Triggers

• Chronic diseases are known to be disabling, causing a significant decline in quality of life, and requiring frequent visits to healthcare providers for adequate medication and treatment management (World Health Organization [WHO], 2022). While the care of

one chronic disease can be manageable, many elderly adults suffer from multiple chronic diseases, causing an exorbitant amount of time on medical management rather than their desired interests and activities.

- Patients suffering from chronic disease(s) have an increased mortality rate and disease burden. Patients with previous experiences with ACP are more likely to have better-quality EOL care, increased concordance with EOL goals, and actual EOL outcomes (Nouri et al., 2021; Xu et al., 2021).
- As a result of low procurement of AD completion, patients may suffer undesired lifesustaining treatment modalities, and families will be forced to make EOL decisions that may be discordant with the patient's EOL wishes (Harrison Denning et al., 2019).
- Despite the alarming number of people living with chronic diseases and documented benefits of ACP, AD completion remains low, especially among those with chronic disease at 38.2% compared to those without chronic disease (Yadav et al., 2017).
- Providers face multiple barriers to initiating ACP conversations, the most common being time constraints, knowledge, skills, and confidence (Risk et al., 2019; Schichtel et al., 2019; Sloan et al., 2021).

Step 2: Topic Priority for Organization

• According to a prior dissertation project by Murphy (2022), online ACP education for PCPs can bridge gaps in EOL treatment by increasing overall knowledge, confidence, and understanding of ACP and ADs. Continued efforts to further ACP education for rural PCPs was the primary motivator for implementing this PIP. The second motivator was the co-investigator's personal and professional experiences with EOL

care, specifically watching patients' families struggle to make and often delay EOL decisions of their family members while admitted in the ICU.

- The literature review revealed a lack of a dedicated guideline for ACP in the primary care setting, which can lead to confusion on who is responsible for initiating ACP conversations. The knowledge gap suggests that continued education on ACP should be provided for PCPs to promote patients' quality of life at EOL.
- Early identification of patients with chronic diseases such as COPD, ESRD, stage IV cancer, end-stage dementia, and heart failure to initiate ACP conversations in the primary care setting can improve the quality of care for individuals with these advanced diseases (ElMokhallalati et al., 2020). Patients who discuss EOL with their PCP at the beginning of their diagnosis have a better quality of life, less distress, and a higher likelihood of receiving goal-concordant care (Bernacki et al., 2019)
- A federally qualified health center that manages eight clinics throughout rural North Dakota was utilized as an implementation site due to the respective clinic's rural geographical locations, average patient ages, and the number of patients seen for chronic disease management. The clinic's mission is to increase access to healthcare and strives to provide access to care regardless of the patient's financial status.

Step 3: Form a Team

• The team consisted of the co-investigator and four committee members from North Dakota State University (NDSU): a committee chair, two committee members, and a graduate appointee. The co-investigator facilitated the recruitment process, implemented the ACP educational webinar, and evaluated the results after the project's implementation. The committee chair is a nurse practitioner currently

practicing at a private family practice clinic in a rural setting. One committee member is a nurse practitioner with a doctorate in Educational Leadership and completed her dissertation on EOL education for undergraduate nursing students. The other committee member is a practicing nurse practitioner. All committee members are current faculty at NDSU with profound expertise in the family nurse practitioner (FNP) curriculum requirements. The graduate appointee has a background in athletic training with extensive knowledge in patient-clinician relationships and quantification of outcomes.

 Collaboration with a key stakeholder, the President of Honoring Choices® North Dakota, aided in educational content development and delivery of the ACP webinar.
 She is a certified ACP facilitator, a medical decision advocate, and is certified as an Advance Practice Hospice and Palliative Care Nurse. Her support, recommendations, and networking connections were imperative to the success of this PIP.

Step 4: Assemble and Analyze Relevant Research

 A systematic review of literature and synthesis was completed and revealed that enough information exists to continue into the next step of piloting a change in clinical practice. Several benefits of ACP have been established and documented in conjunction with the implementation of the *Serious Illness Conversation Guide* (Appendix E) and *Serious Illness Messaging*. The literature review supported the implementation of an online ACP webinar to educate PCPs on how to lead ACP conversations (Chan et al., 2019; Pearse et al., 2021; Poveda-Moral; Nassikas et al., 2019). The PIP consisted of objectives, EBP provider education, an evaluation of the process and outcomes, and provided recommendations for clinical practice modifications and ACP conversations.

Step 5: Pilot the Change in Practice

- This PIP aimed to improve rural PCPs' knowledge and confidence in leading ACP conversations. The one-hour ACP webinar accessed by several rural ND primary care clinics provided ACP education and copies of the *Serious Illness Conversation Guide* to participants. After supervisory committee and IRB approval in May 2023, implementation of the PIP occurred from July 3rd, 2023, to August 11th, 2023.
 Step 6: Integrate and Sustain the Practice Change and Disseminate Results
- Pre- and post-survey data completed by participants who viewed the ACP webinar
 was used to evaluate the PIP's outcomes. The ACP webinar was available to
 participants over a four-week period. Evaluation of the findings took place after the
 implementation period. Recommendations for further research and implementation
 were provided after the completion of the project.
- After rural PCPs viewed the ACP webinar and completed the pre- and post-surveys, the results were disseminated at the 2023 North Dakota Nurse Practitioner Association Pharmacology Conference in Bismarck, ND, and at NDSU through a poster board presentation.
- The materials necessary for training were provided to participants at no cost. Additionally, all materials acquired in the ACP webinar and toolkit were made available for rural PCPs for future use in clinical practice, further supporting continued practice improvement.

Educational Content Development

Educational content for the PIP derived from the ACP webinar created by Hannah Murphy, DNP, APRN, FNP-C, and key stakeholder Nancy Joyner, MS, CNS-BC, APRN, ACHPN® in the fall of 2020. Permission for use of the ACP webinar was obtained by Hannah Murphy, DNP, APRN, FNP-C, and Nancy Joyner, MS, CNS-BC, APRN, ACHPN® (Appendix F and Appendix H). To supplement the pre-existing webinar, *Serious Illness Messaging* was added to support newly found EBP changes in ACP conversations further. In addition, the coinvestigator became a certified ACP facilitator by completing an online educational class offered through Honoring Choices North Dakota® in the summer of 2023 (Appendix Q). This certification allowed the co-investigator to initiate ACP conversations with patients in North Dakota as a registered nurse, and to be a better resource for PIP participants if questions arose throughout the educational webinar.

The key stakeholder for the PIP was the president of Honoring Choices® North Dakota, Nancy Joyner, MS, CNS-BC, APRN, ACHPH®. Additions and modifications to the ACP webinar occurred over approximately 10 Zoom® meetings with the key stakeholder. These meetings were necessary to prepare a new video recording and review the educational materials to reflect the most current evidence-based practice. Advance care planning educational material for the webinar was based on information from the literature review, Ariadne Labs, a previous ACP webinar by Hannah Murphy, DNP, APRN, FNP-C, and expertise from the PIPs key stakeholder.

Methods

Participants of the ACP PIP completed electronic pre- and post-surveys via Qualtrics. The surveys aided in assessing participants' ACP knowledge, confidence, perceived benefits of ACP, and prior experiences in initiating ADs and ACP conversations before and after viewing the webinar. The survey also assessed participant demographics such as age range, gender, and years of practice in their respective field. Questions regarding participants' profession were omitted due to the risk of accidental identification by the co-investigator. Questions for the preand post-surveys were developed by utilizing content from Dr. Mary Jezewski's Knowledge, Attitudinal, and Experiential Survey on Advance Directives (KAESAD) instrument© (Appendix D), previous ACP project implementations, and findings from the review of literature.

The KAESAD instrument was developed to measure the knowledge of attitudes toward experiences with ADs in EOL situations (Jezewski, n.d.). The KAESAD instrument[®] has been used in previous dissertation projects, and research studies, and has been reviewed by an EOL and AD expert panel consisting of professionals from nursing, medicine, law, and bioethics. The KAESAD instrument[®] consists of 115 items encompassing eight principal components. Reliability and content validity of the KAESAD were established through a pilot test/retest and an expert panel prior to the main survey (Jezewski & Feng, 2007).

Due to the vast number of questions, select questions were selected based on the dissertation project by Murphy (2022). Only questions relating to the project's objectives were chosen for the Qualtrics pre- and post-surveys. Topics not included in the webinar were omitted from the surveys. Descriptive statistics were utilized to analyze the project objectives and quality of the educational webinar. Demographic questions were analyzed by content analysis for potential themes and feedback.

Setting

The PIP was implemented at a federally qualified health center with eight clinics throughout North Dakota, six of them located in rural areas and two in urban areas. The webinar was made accessible to all PCPs employed at the clinics. The co-investigator completed 120 family practice clinical hours with a nurse practitioner over two semesters at one of the urban clinic locations. Permission from the clinic's medical director for project implementation was obtained via email as the clinic does not have an institutional review board process (Appendix G). The primary care clinics were chosen as implementation sites due to their presence in rural North Dakota communities, typical age and acuity of patients in these rural areas, and an assortment of PCP professional backgrounds, including physicians, physician associates, and nurse practitioners. The locations of the rural clinics serve an area with a population of 286 to 706, while the urban areas serve a population of approximately 47,000 and 77,000 people.

Sample/Sample Size/Recruitment

The ACP webinar and surveys were accessed by any of the PCPs employed at the clinics via email with a link to the ACP webinar from their medical director provided by the coinvestigator. Participation was completely voluntary, and participants were able to withdraw their participation at any point during the surveys. The co-investigator estimated a total of eight participants if all employed PCPs completed the pre- and post-surveys. The target population was chosen based on the evidence from the literature review revealing PCPs can develop a long-withstanding relationships with their patients. Primary care providers possess opportunities to assess when ACP conversations could be initiated, and continuing education opportunities could improve PCPs perceptions of their confidence, knowledge, skill, and overall preparedness to initiate ACP conversations.

Protection of Human Subjects

Recruitment for the ACP PIP occurred through voluntary access of the ACP webinar link via email from the clinic's medical director, and promotion via word-of-mouth and email by the

project champion, a clinical preceptor of the co-investigator. Recruitment efforts occurred from July 3rd, 2023, through August 11th, 2023, with a total of four weekly reminder emails (Appendix O) emailed from the project champion to all potential participants to further improve data collection. All PCPs employed at the clinics were provided with the opportunity to participate in the webinar and surveys. Implied consent of the participants was assumed by voluntary completion of the one-hour online ACP webinar, pre- and post-surveys, and posttest for CE credit. The webinar presentation slides and *Serious Illness Conversation Guide* were made available for printing at the participant's discretion. Participants were informed of the benefits of viewing the ACP webinar, including improvement in knowledge of ACP and ADs, improvement in AD completion rates, and improved knowledge of initiating and leading ACP conversations.

Participation in the PIP did not require any direct participant contact, thus ensuring minimal risk of loss of confidentiality to the participant. A consent form for participants was created for the email link to preface the ACP webinar from the clinic's medical director (Appendix N). Only professional email addresses of potential participants were utilized. Data acquired from the pre- and post-surveys was collected via a Qualtrics link and reported as cohort data and kept confidential via Qualtrics. Qualtrics is an online analytics program that collects data and allows the data to be charted graphically and statistically to the users' needs. Data from the surveys was password protected created by the co-investigator. Demographic and participant survey data collected was accessed on a password-protected computer and only accessible by the co-investigator. The ACP educational webinar was created according to the North Dakota Board of Nursing continuing education policies (Appendix P). Also, the ACP toolkit provided a link to access an additional free online continuing medical education (CME) opportunity about ACP and palliative care from the Center for Rural Health.

Institutional Board Review Approval

Application for Institutional Review Board (IRB) approval by North Dakota State University was obtained prior to the implementation of the PIP (Appendix A). The protection of human subjects was held in the highest regard. No identifying participant information was collected throughout the pre- and post-survey process. Risks and benefits were provided to participants. Participants were informed that their participation is completely voluntary, and they may choose to withdraw at any point in time. Consent was assumed by participation in the project.

Evidence-based Project Interventions and Activities

Implementation for the PIP began on July 3rd, 2023, and ended on August 11th, 2023. The recruitment letter with Qualtrics links to pre- and post-surveys, posttest, ACP toolkit, and link to the one-hour ACP webinar titled *Advance Care Planning: Implementing Online Education for Rural Primary Care Providers* was sent to the medical director of the FQHC via email. The medical director then forwarded the email to all the PCPs employed throughout the eight clinics. Accreditation of the ACP webinar was purchased by the co-investigator from the North Dakota Board of Nursing, allowing participants to obtain 1.0 CE credit. Participants of the project were able to obtain 1.0 CE credit by completing the pre- and post-surveys, viewing the one-hour webinar, and completing a posttest with a score of 80% or greater. Participants were also provided with an ACP toolkit (Appendix L), which included several free resources available for future use in clinical practice, including the *Serious Illness Conversation Guide*, books, videos, and a copy of the PowerPoint presentation (Appendix R). The ACP webinar incorporated a patient case study with ACP conversation scenarios allowing for practice application. The *Serious Illness Conversation Guide*, developed by Ariadne Labs, is a free online resource for

ACP. It can be freely distributed and adapted under the Creative Commons license. The coinvestigator became certified as an ACP facilitator through Honoring Choices® North Dakota in July 2023. The co-investigator along with the project's key stakeholder created the recording for the educational ACP webinar via Zoom®.

Resources Required

Personnel. The co-investigator's family practice clinical preceptor was consulted for potential interest in an ACP doctoral project implementation. The preceptor then consulted the medical director, who granted permission for implementation of the project within the FQHC's eight clinic sites. The President of Honoring Choices® North Dakota was also consulted per recommendation of Hannah Murphy, DNP, APRN, FNP-C for educational content development, as well as for obtaining ACP facilitator certification for the co-investigator.

Technology. The ACP webinar presentation was created with Microsoft PowerPoint and the voice recording was added by using the platform Zoom®. The finalized ACP webinar was distributed to the implementation site's medical director via email which was then forwarded to the clinic's PCPs. The email included a description of the PIP, the ACP toolkit, a Zoom® link to the ACP webinar, a Qualtrics link to the pre-survey, a Qualtrics link to the post-survey and posttest. Participants were recommended to use a computer, laptop, or tablet with internet access and Google Chrome or Safari for ease of use.

Budget. Costs associated with project implementation included \$100 for ACP facilitator certification for the co-investigator and \$200 for CE accreditation from the North Dakota Board of Nursing (Appendix M). The ACP toolkit included the *Serious Illness Conversation Guide* and other free resources. Emailing the ACP webinar Zoom® link and ACP toolkit to the clinic's medical director was also of no cost.

Objective One Interventions

The first objective of the PIP was primary care providers' reported knowledge in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. Project participants viewed the one-hour educational ACP webinar, including a video of an ACP conversation, an ACP case study to promote viewer participation and information on available resources for future ACP conversations in clinical practice. Participants also completed pre- and post-surveys to bring awareness to their perceived knowledge level in initiating ACP conversations.

Objective Two Interventions

The second objective of the PIP was primary care providers' reported confidence in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. Project participants were able to view the one-hour ACP educational webinar which included an ACP patient case study to promote viewer participation, and information on available resources for future ACP conversations in clinical practice. Participants completed pre- and post-surveys to bring awareness to their perceived confidence level in initiating ACP conversations.

Objective Three Interventions

The third objective of the PIP was primary care providers' reported knowledge of the *Serious Illness Conversation Guide* will improve after viewing a one-hour online educational webinar. Participants viewed the one-hour educational ACP webinar and were provided with a case study during the webinar to learn how to use the *Serious Illness Conversation Guide* in clinical practice. Participants were also provided with a free copy of the *Serious Illness*

Conversation Guide for future use. Participants completed pre- and post-surveys to bring awareness to their perceived knowledge of utilizing the *Serious Illness Conversation Guide*.

Objective Four Interventions

The fourth objective of the PIP was that primary care providers' reported knowledge of the role of advance care planning facilitators will improve after viewing a one-hour online educational webinar. Participants viewed the one-hour educational ACP webinar and accessed the ACP toolkit, which included free resources such as books, cell phone applications, digital files, websites, conversation tools, and videos. Participants completed pre- and post-surveys to bring awareness of their perceived knowledge gained from viewing the ACP webinar and ACP toolkit.

Evaluation/Outcomes/Data Analysis

Evaluation of Objective One

The first objective reads primary care providers' reported knowledge in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. The objective was measured by using a Likert scale with the choices of strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly agree regarding their perceived confidence from viewing the webinar. The Likert scale options utilized a five-point numerical value assigned to all non-demographic questions. Options such as strongly agree was rated as a five, somewhat agree was rated a four, neither agree nor disagree was rated a three, somewhat disagree was rated a two, and strongly disagree was rated as a one. Averages of the scores were calculated for the non-demographic pre- and post-survey questions and were analyzed by using descriptive statistics. Survey questions that evaluated objective one included:

- Question one pre-survey: "I have sufficient knowledge on advance care planning and advance directives."
- Question one post-survey: "After the educational webinar, I have sufficient knowledge on advance care planning and advance directives."
- Question two pre-survey: "I know the benefits of advance care planning and advance directives."
- Question two post-survey: "After the educational webinar, I know the benefits of advance care planning and advance directives."

Evaluation of Objective Two

The second objective of the PIP was primary care providers' reported confidence in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. Objective two was measured using a Likert scale with the choices of strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly agree regarding their perceived confidence from viewing the webinar. Averages of the scores were calculated for the non-demographic pre- and post-survey questions, which were then analyzed by descriptive statistics. Survey questions that evaluated objective two included:

- Question three pre-survey: "I feel confident in initiating advance care planning and advance directive discussions with patients."
- Question three post-survey: "After the educational webinar, I feel confident initiating advance care planning and advance directive discussions with patients."

Evaluation of Objective Three

The third objective was primary care providers' reported knowledge of the *Serious Illness Conversation Guide* will improve after viewing a one-hour online educational webinar. Averages of the numerical values from the pre- and post-Likert scale non-demographic survey questions were calculated and analyzed by descriptive statistics. Survey questions that evaluated objective three were:

- Question four pre-survey: "I understand how to use the *Serious Illness Conversation Guide* with patients."
- Question four post-survey: "After the educational webinar, I understand how to use the *Serious Illness Conversation Guide* with patients."
- Question six post-survey: "After the educational webinar, I will increase advance care planning discussions with patients."

Evaluation of Objective Four

Objective four was primary care providers' reported knowledge of the role of advance care planning facilitators will improve after viewing a one-hour online educational webinar. Averages of the numerical values from the pre- and post-Likert scale non-demographic survey questions were calculated and analyzed by descriptive statistics. Survey questions that evaluated objective four were:

- Question five pre-survey: "I understand the role of advance care planning facilitators."
- Question five post-survey: "After viewing the educational webinar, I understand the role of advance care planning facilitators."

Participant Experience

Non-demographic questions assessing participants' past experiences with ACP were collected in the post-survey. Survey questions that evaluated participants' experiences included:

- Question seven post-survey: "Have you had conversations about advance care planning or advance directives in your practice setting?"
- Question eight post-survey: "Have you been a witness (i.e., involved in documentation) for an advance directive for a patient?"
- Question nine post-survey: "Have you initiated a discussion about advance directives with a patient?"
- Question ten post-survey: "Have you provided treatment to a patient whose advance directive indicated otherwise (i.e., family's goals of care did not align with the patient's)?"
- Question eleven post-survey: "Have you observed others providing treatment to patients who advance directive indicated otherwise?"

Participant Demographics

Demographic information was collected to provide an evaluation of the target population. Evaluation of the participants' professions was not assessed to avoid accidental identification by the co-investigator. Survey questions that evaluated participants' demographics included:

- "What is your age?"
- "What is your gender?"
- "How many years have you been practicing?"

Educational Webinar

Participants were surveyed on the effectiveness of the PIPs ACP webinar. Survey questions that evaluated the effectiveness of the webinar included:

- Question twelve post-survey: "Information presented was current and could be applied to own practice area."
- Question thirteen post-survey: "The teaching/learning resources and instructed materials were effective and suitable for the topic."
- Question fourteen post-survey: "Administration and technology of the online webinar was smooth and customer friendly."
- Question fifteen post-survey: "Instructions for participation and receiving continuing education credits were adequate."
- Question sixteen post-survey: "Is there anything else related to advance directives and advance care planning you wished we would have discussed in the educational webinar?"

In total, the pre-survey comprised of eight questions, including three demographic questions and five questions to assess the PIP objectives. The post-survey totaled 16 questions, with six questions assessing learning objective outcomes and 10 questions evaluating the effectiveness of the online educational webinar. Participants answered a total of 24 questions for both pre- and post-surveys, which took approximately 10 to 15 minutes to complete. In addition, if participants chose to obtain CE, they could complete a posttest with 10 total multiple-choice questions and pass with a score of 80% or greater.

RESULTS

An email invitation to participate in the PIP was sent to the medical director of the FQHC on July 3rd, 2023, to be forwarded to eligible PCPs. The email included Qualtrics links to the presurvey, the post-survey, and the posttest for CE from the NDBON, as well as a Zoom® link to the one-hour ACP webinar. Due to an accidental delay in forwarding the email invitation to eligible PCPs within the FQHC, a one-week extension was granted from the NDSU IRB. Therefore, project implementation started on July 7th, 2023, and was completed on August 11th, 2023. The one-hour ACP webinar featured educational content, including definitions and benefits of ACP and AD, barriers to ACP and AD completion, instruction on how and when to use the Serious Illness Conversation Guide, instruction on when to use and how to refer to ACP facilitators, and an ACP toolkit encompassing additional ACP resources and access to a free CME credit. The one-hour ACP webinar was pre-recorded with Zoom® technologies over a PowerPoint presentation developed by the co-investigator and the key stakeholder. Attribution to content development was also given to Hannah Murphy, DNP, APRN, FNP-C, for her contribution to the project in 2021. Participants were required to take a Qualtrics posttest and achieve a score of 80% or greater to obtain CE credit from the NDBON.

Demographic of Participants

Out of eight eligible PCPs, 50% of participants (n=4) participated in the pre- and postsurveys. All invited participants (n=8) completed the posttest to obtain CE credit from the NDBON. Questions about specific medical professions or specialties were omitted to maintain anonymity and to avoid accidental exposure of eligible participants. All participants (n=4) of the pre-survey identified as female and between the ages of 30 and 39. Participants had varying years of experience as PCPs, with 50% (n=2) having 1-3 years of experience, and 50% (n=2) having 4-6 years of experience.

Objective Results

Objective One

The first objective assessed primary care providers' reported knowledge in facilitating advance care planning conversations in the rural primary care setting after viewing a one-hour online educational webinar. The pre-survey and post-survey each included two questions to evaluate participants' knowledge and perceived benefits of ACP and AD before and after viewing the one-hour ACP educational webinar.

Figure 2



Pre/Post Knowledge of ACP/AD

Figure 2 represents participant responses from the first question on the pre-survey, "I have sufficient knowledge on advance care planning and advance directives." Two participants responded with "neither agree nor disagree," and two participants responded with "somewhat agree." When participants were asked in the post-survey, "After the educational webinar, I have

sufficient knowledge on advance care planning and advance directives," one participant responded with "somewhat agree," and three participants responded with "strongly agree."

Figure 3

Pre/Post Knowledge of Benefits of ACP/AD



Figure 3 represents participant responses from the second pre-survey question, "I know the benefits of advance care planning and advance directives." Two participants responded with "somewhat agree," and two participants responded with "strongly agree." When participants were asked in the post-survey, "After the educational webinar, I know the benefits of advance care planning and advance directives," all four participants responded with "strongly agree."

Objective Two

The second objective assessed primary care providers' reported confidence in facilitating advance care planning conversations in the rural primary care setting after viewing a one-hour online educational webinar. The pre- and post-survey each included one question to evaluate participants' confidence in initiating advance care planning and advance directive discussions with patients.

Figure 4



Pre/Post Confidence in Initiating ACP and AD Discussions

Figure 4 represents participant responses from the pre-survey question, "I feel confident in initiating advance care planning and advance directive discussions with patients." One participant responded with "somewhat disagree," two participants responded with "neither agree nor disagree," and one participant responded with "somewhat agree." When participants were asked in the post-survey, "After the educational webinar, I feel confident initiating advance care planning and advance directive discussions with patients," all four participants responded with "strongly agree."

The post-survey included multiple questions regarding participants' previous ACP conversations in their respective practice settings, previous experiences with initiating ACP conversations, experiences with witnessing AD documentation, and previous treatment of patients with an AD. When inquiries were made about participants' knowledge and experiences with ACP, 50% (n=2) reported that they had previous experiences with having ACP conversations in their practice setting. Although 50% of participants reported previous

experience with ACP, 75% (n=3) of participants have not witnessed the documentation of an AD

in their practice setting. The results of post-survey questions seven through eleven are illustrated

in Table 1.

Table 1

Experience of Participants

Question		N=4	N%
7. Have you had conversations	Yes	2	50%
about advance care planning or	No	2	50%
advance directives in your practice			
setting?			
8. Have you been a witness (i.e.,	Yes	1	25%
involved in documentation) for an	No	3	75%
advance directive for a patient?			
9. Have you initiated a discussion	Yes	2	50%
about advance directives with a	No	2	50%
_patient?			
10. Have you provided treatment to	Yes	2	50%
patients who advance directive	No	2	50%
indicated otherwise (i.e., family's			
goals of care don't align with			
patient's)?			
11. Have you observed others	Yes	2	50%
providing treatment to patients who	No	2	50%
advance directive indicated			
otherwise?			

Objective Three

The third objective assessed primary care providers' reported knowledge of the Serious

Illness Conversation Guide after viewing a one-hour educational webinar. Responses were

collected from one question on the pre-survey and two questions on the post-survey. A

comparison of participant pre- and post-survey responses regarding their knowledge of how to

use the Serious Illness Conversation Guide can be found in Figure 5.

Figure 5





Figure 5 represents participants' responses from the pre-survey question, "I understand how to use the *Serious Illness Conversation Guide* with patients." Three participants responded with "strongly disagree," and one participant responded with "somewhat disagree." When participants were asked in the post-survey, "After the educational webinar, I understand how to use the *Serious Illness Conversation Guide* with patients," one participant responded with "somewhat agree," and three participants responded with "strongly agree." Participants were also asked in the post-survey, "After the educational webinar, I will increase advance care planning discussions with patients." Two participants responded with "somewhat agree," while two participants responded with "strongly agree."

Objective Four

The fourth objective assessed primary care providers' reported knowledge of the role of advance care planning facilitators after viewing a one-hour online educational webinar. Pre- and post-survey responses were obtained from participants regarding their understanding of the role of ACP facilitators. Figure 6 compares participant responses before and after viewing the one-

hour educational webinar.

Figure 6

Pre/Post Understanding of the Role of ACP Facilitators



Figure 6 represents participant responses from the pre-survey question, "I understand the role of advance care planning facilitators." Two participants responded with "neither agree nor disagree," and two participants responded with "somewhat agree." Participants were asked similarly in the post-survey, "After viewing the educational webinar, I understand the role of advance care planning facilitators," to which all four participants responded with "strongly agree."

Likert Means

A five-point Likert scale utilizing a five-point numerical value was used to assess all nondemographic questions throughout the pre- and post-surveys to evaluate the outcomes of objectives one, two, three, and four. Options such as strongly agree was rated five, somewhat agree was rated four, neither agree nor disagree was rated three, somewhat disagree was rated two, and strongly agree was rated as one. Averages of the scores were calculated for each of the non-demographic pre- and post-survey questions regarding objectives one, two, three, and four. Figure 7 illustrates the change in participants' overall knowledge of ACP, knowledge of the benefits of ACP, confidence in initiating ACP and ADs, knowledge of the *Serious Illness Conversation Guide*, and understanding the role of ACP facilitators before and after viewing the one-hour ACP webinar. The Likert averages are listed below.

Figure 7



Pre/Post Likert Averages for Objectives One, Two, Three, and Four

Educational Webinar

Four questions were asked of participants to assess the effectiveness of the educational ACP webinar delivery and content. Post-survey questions 12 through 15 are listed below in Table 2 with their respective scores.

Table 2

Question		N=4	N%
12. Information	Strongly agree	4	100%
presented was current			
and could be applied			
to own practice area.			
13. The	Strongly agree	4	100%
teaching/learning			
resources and			
instructed materials			
were effective and			
suited for the topic.			
14. Administration	Strongly agree	3	75%
and technology of the	Somewhat agree	1	25%
online webinar was			
smooth and customer			
friendly.			
15. Instructions for	Strongly agree	2	50%
participation and	Somewhat agree	1	25%
receiving continuing	Somewhat disagree	1	25%
education credits			
were adequate.			

Evaluation of Educational Webinar Content

Qualitative Data

Participants were invited to one open-ended question at the end of the post-survey, "Is there anything else related to advance care planning and advance directives you wished were discussed in the educational webinar." This question did not result in any answers, comments, or feedback from participants. A report of the results of this question is not possible due to the lack of responses.

DISCUSSION AND RECOMMENDATIONS

Summary

Objective One

The goal of objective one was primary care providers' reported knowledge in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. A five-point confidence Likert scale was used to measure the outcome of the first objective. The Likert scale responses were structured with the following point assignments: strongly agree rated as five points, somewhat agree rated as four points, neither agree nor disagree rated as three points, somewhat disagree rated as two points, and strongly disagree rated as one point. Objective one was considered met if participants responded with "somewhat agree" or "strongly agree" in the post-survey. The goal of objective one was achieved because 100% of participants responded with "somewhat agree" (25%) or "strongly agree" (75%) when asked, "After the educational webinar, I have sufficient knowledge on advance care planning and advance directives." The Likert scale average ranking demonstrated that participants reported knowledge increased from 3.5 (pre-education) to 4.75 (post-education). The Likert scale change indicates a 1.25 change of shift in reported participant knowledge after viewing the one-hour ACP educational webinar.

Participants were additionally asked about their perceived knowledge of the benefits of ACP and ADs to further support the outcome of objective one. Participants responded to the post-survey question, "After the educational webinar, I know the benefits of advance care planning and advance directives." Objective one was considered met if participants responded with "somewhat agree" or "strongly agree" in the post-survey. The post-survey responses revealed that 100% of participants chose "strongly agree." The Likert scale average ranking

demonstrated that reported participant knowledge of ACP and AD benefits increased from 4.5 (pre-survey) to 5 (post-survey). The Likert scale change indicates a 0.5 change of shift in reported provider knowledge of the benefits of ACP and AD after viewing the one-hour ACP educational webinar.

Objective Two

The goal of objective two was primary care providers' reported confidence in facilitating advance care planning conversations in the rural primary care setting will improve after viewing a one-hour online educational webinar. The outcome of objective two was similarly evaluated with a confidence Likert scale with the same rankings as in objective one. Objective two was considered met if participants responded with "somewhat agree" or "strongly agree" when asked, "After the educational webinar, I feel confident initiating advance care planning and advance directive discussions with patients." The goal of objective two was achieved because 100% of participants chose "strongly agree" to the post-survey question. The Likert scale average ranking demonstrated that reported provider confidence increased from 3 (pre-survey) to 4.5 (post-survey). The Likert scale change indicates a 1.5 change of shift in reported provider confidence in initiating ACP conversations after viewing the one-hour ACP educational webinar.

Objective Three

The goal of objective three was primary care providers' reported knowledge of the *Serious Illness Conversation Guide* will improve after viewing a one-hour online educational webinar. A five-point confidence Likert scale was utilized to measure the outcome of objective three, with the same ranking assignments as used in objectives one and two. The goal of objective three was considered met if participants chose "somewhat agree" or "strongly agree" when responding to the post-survey question, "After the educational webinar, I understand how

to use the *Serious Illness Conversation Guide* with patients." Objective three was met because all participants responded with "somewhat agree" (25%) and "strongly agree" (75%). The Likert scale average ranking demonstrated that reported provider knowledge of the *Serious Illness Conversation Guide* increased from 1.25 (pre-survey) to 4.75 (post-survey). The Likert scale change indicates a 3.5 change of shift in reported provider knowledge of the *Serious Illness Conversation Guide* after viewing the one-hour ACP educational webinar.

Additionally, participants were asked in the post-survey, "After the educational webinar, I will increase advance care planning discussions with patients" (question six). All participants responded with "somewhat agree" (50%) or "strongly agree" (50%) with a Likert average of 4.5 regarding their intention to increase ACP conversations with their patients. The findings suggest that all participants will increase ACP conversations with patients in their respective rural primary care clinics.

Objective Four

The goal of objective four was primary care providers' reported knowledge of the role of advance care planning facilitators will improve after viewing a one-hour online educational webinar. A five-point confidence Likert scale was utilized to measure the outcome of objective four, with the same ranking assignments as used in objectives one, two, and three. The goal of objective four was considered met if participants chose "somewhat agree" or "strongly agree" when responding to the post-survey question, "After viewing the educational webinar, I understand the role of advance care planning facilitators." Objective four was met because 100% of participants responded with "strongly agree" when asked in the post-survey, "After viewing the educational webinar, I understand the role of advance care planning facilitators." The Likert scale average ranking demonstrated that reported participant knowledge of the role of ACP

facilitators increased from 3.5 (pre-survey) to 5 (post-survey). The Likert scale change indicates a 1.5 change of shift in reported provider knowledge of ACP facilitators after viewing the one-hour ACP educational webinar.

Discussion

The results of the PIP were comparable to those identified in the literature review. The objectives of the PIP were centered around rural PCPs rather than institutions or patients. Similar discoveries to those identified in the literature review include:

- The Likert scale averages for reported knowledge rose from 3.5 (pre-survey) to 4.75 (post-survey), while reported understanding of the benefits of ACP increased from 4.5 (pre-survey) to 5.0 (post-survey). These findings further reinforce that ongoing ACP education for rural PCPs enhances their knowledge, confidence, skills, and overall readiness to conduct ACP conversations with patients, as Pearse et al. (2021) highlighted.
- Participants' reported knowledge of the *Serious Illness Conversation Guide* improved significantly from 1.25 (pre-survey) to 4.75 (post-survey). This result supports the findings of Bernacki et al. (2019), indicating that the *Serious Illness Conversation Guide* contributed to more frequent and higher-quality ACP conversations. Following the educational webinar, participants answered with "somewhat agree" and "strongly agree" with a Likert scale average of 4.5 for their intent to increase ACP conversations with their patients.
- Participants' reported confidence in facilitating ACP conversations improved on the Likert scale, rising from 3 in the pre-survey to 4.5 in the post-survey. The outcome is consistent with the findings of Chan et al. (2019) and Pearse et al. (2021), who

concluded that ACP continuing education for healthcare professionals positively influenced their confidence, knowledge, skills, and attitudes toward patients.

- Participants' Likert scale averages for their reported knowledge of ACP facilitators improved from 3.5 in the pre-survey to 5 in the post-survey. The improvement in scores aligns with the research conducted by Schichtel et al. (2019) and Mulcahy Symmons et al. (2022), highlighting that educating and training PCPs on ACP delivery methods can support patients and families in EOL decision-making.
- While 50% of participants (n=2) reported having ACP conversations with their patients, only 25% (n=1) of participants reported being involved in the documentation of an AD. The limited involvement in AD completion could lead to patients receiving life-sustaining treatment they did not desire, placing families in the difficult position of making EOL decisions that might not align with the patient's wishes, as Harrison Denning et al. (2019) noted.

One observation that was detected throughout the PIP and not in the literature included:

Among the participants, two individuals (50%) stated they have had ACP conversations in their practice setting, and an equal number (50%) reported initiating ACP conversations with patients. The results contrast with the findings of Schichtel et al. (2021), who found that while ACP is advocated for HF patients, only 7% of HF decedents had their palliative care needs acknowledged by their healthcare providers. The variance in ACP initiation percentage could be attributed to the limited participant sample size in the PIP.

Findings from research that were not initially included in the review of literature after implementation of the practice improvement project include:

- Participants' reported confidence in conducting ACP conversations demonstrated improvement after viewing the educational webinar on the Likert scale, with the average increasing from 3 (pre-survey) to 4.5 (post-survey). Similar to the findings of Chan et al. (2020), training healthcare providers emerged as a critical factor influencing their preparedness for ACP, impacting their perceived relevance, willingness, and confidence.
- Respecting Choices and the *Serious Illness Care Program* are widely embraced ACP programs among clinicians. Both programs provide training for clinicians in ACP facilitation and communication skills and offer strategies for implementing ACP processes into routine practice (Rosa et al., 2023). Similar to the PIP, all participants (n=4) found the teaching and learning resources effective, suited to ACP, and applicable to their practice. Additionally, all participants perceived the presented educational information as current and relevant to their practice area.
- Kunzler et al. (2023) identified that surrogate decision-makers placed a high value on revisiting ACP. Their account of how ACP serves as a foundation for EOL decision-making provides evidence that ACP equips families to make well-informed 'in the moment' decisions (Kunzler et al., 2023). These findings reinforce the observations by Su et al. (2019), who noted that surrogate decision-makers expressed a strong desire for education and guidance from healthcare professionals to enhance their ability to make more informed decisions regarding EOL goals.

Application of IOWA Model

The development and facilitation of the PIP was guided by the IOWA Model Revised: Evidenced-Based Practice to Promote Excellence in Healthcare. The IOWA Model comprises six
steps: Problem and Knowledge-Focused Triggers, Topic Priority for Organization, Form a Team, Assemble and Analyze Relevant Research, Pilot the Change in Practice, and Integrate and Sustain the Practice Change and Disseminate Results. Chronic disease(s) are known to be disabling, causing a significant decline in quality of life, an increase in disease burden, and an increased mortality rate (World Health Organization [WHO], 2022). Previous ACP research has shown that online ACP education for PCPs can bridge gaps in EOL treatment by increasing overall knowledge, confidence, and understanding of ACP and ADs (Murphy, 2022). Development of the ACP webinar included a key-stakeholder, who further supported content integrity to include the most recent EBP for ACP conversations. The co-investigator completed a thorough review of literature revealing several benefits of ACP education for PCPs. The onehour educational webinar and surveys were distributed to PCPs employed at the FQHC clinics. Rural PCPs viewed the webinar and completed the pre- and post-survey. The co-investigator evaluated the surveys' outcomes, which demonstrated an increase in participants' reported knowledge, confidence, and understanding of ACP, ADs, and the Serious Illness Conversation Guide. The results were disseminated through a poster board presentation at the 2023 North Dakota Nurse Practitioner Association Pharmacology conference.

The IOWA Model served as a valuable guide for the PIP, endorsing the systematic development and application of ACP education into clinical practice. The coinvestigator hopes participants of the PIP will continue to apply the knowledge gained from the educational webinar to future ACP conversations with their patients, further supporting autonomy at EOL care. Furthermore, there is a hopeful expectation that future DNP students interested in ACP and patient treatment at EOL will derive significance from this PIP, and in turn, actively contribute to the continued dissemination of their findings, thus perpetuating the support for ACP education.

Application of Lewin's Theory of Behavior Change

The theoretical framework for the PIP was Lewin's Theory of Behavior Change. The theory consists of three stages of change: unfreezing, change, and refreezing, requiring the learner to relinquish existing knowledge and preconceptions, learn a new concept, and replace prior understanding with newly acquired concepts (Petiprin, 2023). By emphasizing the flexibility of behavior through intentional phases of unfreezing, change, and refreezing, the integration of Lewin's Theory of Behavior Change into the PIP promotes a journey of learning transformation and places importance on adaptability, which is essential for professional and personal development.

The initial phase of Lewin's Theory is unfreezing. Invitations were extended to potential participants, inviting them to engage in a PIP focused on ACP in rural primary care. Participants chose their level of involvement of their own volition, and those who decided to participate consciously committed to setting aside pre-existing knowledge about ACP, demonstrating a willingness to learn new skills and information.

The second stage of Lewin's Theory is change. During this phase, participants completed the surveys and viewed the one-hour educational webinar. In doing so, participants gained awareness of their preconceptions surrounding ACP, acquired an understanding of the advantages of ACP and ADs, identified barriers to ACP and AD completion, learned how to utilize the Serious Illness Conversation Guide effectively, and comprehended the roles of ACP facilitators and other available ACP resources.

The final stage of Lewin's Behavior Change Theory is refreezing, also known as stabilizing change, so it becomes embedded into a system, becoming a new normal (Shirey, 2013). Outcomes of the post-survey revealed that participants' perceived knowledge and

confidence of ACP and ADs improved. Participants also reported increased intention to engage in more ACP conversations with their patients at their primary care clinics. The results underscore rural PCPs' commitment and dedication to patient care, enabling comprehensive healthcare delivery, especially for individuals living with chronic disease residing in rural communities.

Recommendations

Although the PIP's objectives were met, several recommendations exist to enhance the PIP for future implementation. Finding a suitable and willing location to facilitate doctoral project implementation is increasingly challenging. Additionally, healthcare institutions are beginning to restrict the surveying of patients and providers related to burnout experienced from constant requests for survey participation. Therefore, a future target audience for this PIP should include graduate nursing students enrolled in a doctoral family nurse practitioner program. Providing ACP education and surveying family nurse practitioner students about ACP and ADs can contribute significantly to supporting North Dakota's notable demographic, particularly its rural and elderly residents.

The literature consistently highlights the benefits of incorporating ACP education into nurse practitioner program curricula, especially considering that nurse practitioner students often possess diverse professional backgrounds that may have not exposed them to ACP or EOL conversations. The lack of exposure can lead to decreased confidence in initiating ACP or even opting to forego these conversations due to lacking the necessary skill set. A pilot study conducted by Coogan et al. (2021) found that students' experiences with the Letter Project Pilot educational program enhanced their knowledge about ACP, improved their ACP communication skills, and increased their confidence in facilitating ACP conversations. Similarly, Jo et al.

(2023) found that an ACP clinical practice course built into APRN education improved students reported confidence and knowledge of ACP and their perceptions of engagement in EOL treatment decisions. Expanding on the findings of Jo et al. (2023) in integrating ACP curriculum into APRN education, a study by Pastor et al. (2016) found that graduate nurse simulations, which allow students to practice ACP conversations and bad news delivery, improved their communication and interprofessional practice skills. The findings present compelling evidence of how ACP education significantly influences nurse practitioner students' skill sets and preparedness for collaborative joint decision-making for EOL care.

While offering complimentary CE credit can be appealing, potential project participants are less motivated by CE credit than they may have been in previous years. Continuing education credits are often readily available and easily accessible through participant's employers' CE programs. To further incentivize PIP participation, future participants should be offered something of financial interest like a gift card, entry into a gift card drawing, or a small monetary reward. In the context of this PIP, where the maximum participant count is eight, offering each participant a \$25 gift card instead of 1.0 CE credit may have increased the participation rate. Providing a \$25 incentive to each participant in this PIP would equal the \$200 cost requirement for obtaining CE certification from the NDBON. Future co-investigators of a similar PIP should consider the number of potential participants to ensure that the costs associated with a limited number of participants are financially feasible.

The findings of the PIP revealed only a 50% participation rate in the surveys and a 100% participation rate in the posttest. Participants of the PIP were not required to complete the preand post-survey to obtain access to the posttest for CE credit. Participants could exit the surveys at any time if they so choose. The Qualtrics surveys were designed to avoid discouraging

participants from participating at all. In future PIPs, it is recommended to require participants to complete both pre- and post-surveys to gain access to the posttest, as this approach may increase survey participation significantly.

Future co-investigators may find value in asking participants a final open-ended question on how they intend to improve ACP conversations in their family practice setting. The qualitative approach will provide a deeper understanding of participants perspectives, allowing for the identification of personal and nuanced approaches that may not have been captured in Likert scale style questions. Exploring participants intentions in a more open format could uncover qualitative data that compliments the quantitative data collection of the PIP, offering a more comprehensive view of the potential impact of the PIP in clinical practice.

Development of the ACP webinar with Nancy Joyner, MS, CNS-BC, APRN, ACHPN®, the PIPs key stakeholder, was instrumental in the project's success. She provided critical expertise and support to ensure the PIP included the most recent EBP tools for clinical practice. For future PIPs, co-investigators should seek guidance and support from certified ACP facilitators to uphold the integrity of educational content development. Future co-investigators should also continue to obtain ACP facilitator certification from Honoring Choices® North Dakota to ensure their qualification as a valuable resource for future project participants. Educational content should continue to be derived from Ariadne Labs, who created the *Serious Illness Conversation Guide* and be provided via PowerPoint format with case study scenarios.

Lastly, future PIP implementation should continue ACP education for PCPs in an online asynchronous format. "Asynchronous learning is a self-directed method suitable for adult learners, enabling them to balance professional development with personal and professional obligations, particularly for healthcare professionals with irregular work schedules" (Kimura et

al., 2023, p. 2). Online learning increases access to education, provides convenience and flexibility, is cost-effective, and allows for repeated learning (Kimura et al., 2023). For this PIP, online implementation allowed participants to view the webinar in the comfort of their respective office or home compared to an in-person lecture. Additionally, online learning allows participants to have more autonomy in their learning methods, allowing time to reference supporting material before moving onto additional content (Watson et al., 2023). Furthermore, having access to online surveys and posttests enables immediate feedback from participants, enabling co-investigators to review results promptly and efficiently.

Dissemination

Results from the PIP were presented during poster sessions at the North Dakota Nurse Practitioner (NDNPA) Pharmacology conference in Bismarck, ND, September 20-22nd, 2023. The co-investigator presented on the benefits of ACP and ADs in the rural primary care setting and the PIP outcomes. Participants of the NDNPA conference were provided with information on how to view the one-hour ACP educational webinar and complete the posttest for a complimentary CE credit.

Further dissemination of the PIP will occur at a poster presentation for undergraduate and graduate nursing students at North Dakota State University in May 2024, where the project's findings will be discussed. The co-investigator intends to pursue publication with the American Journal of Hospice and Palliative Medicine (AJHPM), Journal of Hospice and Palliative Care (JHPC), and the Journal of American Association of Nurse Practitioners (JAANP) to further disseminate to providers who may be interested in furthering their education on ACP and AD education for PCPs. Additionally, access to the one-hour ACP webinar will be provided to the

NDSU DNP program for future ACP education opportunities for incoming family nurse practitioner students.

Application to the Advanced Practice Nurse Role

In a healthcare landscape marked by complex medical decisions, chronic disease, and evolving patient needs, the role of the advanced practice registered nurse (APRN) has become increasingly important. Effective ACP empowers patients to articulate and document their EOL healthcare decisions, giving them dignity, autonomy, and control during vulnerable times. Educating APRNs about ACP becomes indispensable, as it equips them with the necessary skills and confidence to facilitate meaningful conversations, address patient's concerns, and navigate the complexities of EOL care.

The NDSU DNP curriculum prepares family nurse practitioner students to "demonstrate clinically expert, evidence-based practice that focuses on person-centered, holistic, and individualized care to improve the health of individuals, families, communities, and populations" (North Dakota State University, 2023). This focus not only prepares DNP students to address the diverse healthcare needs of individuals from infancy to EOL but also underscores the significance of ACP conversations to prepare for EOL. By integrating ACP education into DNP curriculum, DNP graduates will be better positioned to address specific challenges faced by patients diagnosed with a chronic disease. Educational simulations allowing students to practice delivering unfavorable news and diagnoses can enhance their confidence and involvement in ACP conversations (Jo et al., 2023). Equipping DNP students for ACP conversations enhances clinical skills and promotes compassionate, empathetic, and culturally sensitive care, which is essential for addressing the complex needs of patients. Such skills are invaluable, especially in

rural communities where a higher proportion of patients are elderly and living with chronic diseases.

Advanced practice registered nurses are uniquely positioned to lead ACP conversations. Their multifaceted role can bridge the gap between theoretical knowledge and clinical practice application, transforming ACP concepts into empowering patient-centered conversations. APRNs should promptly introduce ACP conversations with patients upon diagnosing a chronic disease. Initiating these conversations earlier in the disease process can alleviate stress and anxiety for patients and families enduring the challenges of living with chronic disease. In advanced stages of chronic disease, when patients are burdened with severe symptom management, these preemptive conversations provide crucial support, allowing patients and their families to make informed decisions and establish preferences for their future healthcare. By addressing ACP conversations proactively, APRNs enhance the patient's experience, ensuring that medical care aligns with patients' values and goals while fostering a sense of control and dignity amid challenging circumstances.

Advanced practice registered nurses possess medical knowledge, clinical expertise, and advanced communication skills, enabling them to facilitate ACP conversations. By integrating ACP conversations into the family practice setting, where a broader sense of the patient's life can be supported, APRNs can create an environment where patients feel heard and respected, fostering an open dialogue with a provider they know and trust. Additionally, the APRN can explain complex medical scenarios in a way that patients and their respective families comprehend the implications of their decisions.

Facilitating ACP conversations is not only a professional obligation of APRNs but also a compassionate responsibility. Advanced practice registered nurses facilitate ACP conversations

that honor patient's decisions, preserve dignity, and uphold the essence of patient-centered care through their education, professional expertise, empathy, and advocacy. In this mutual relationship between APRNs, education, and healthcare, the ultimate beneficiaries are patients, who receive care that is not only medically sound but also deeply humane and rooted in patient autonomy.

Strengths and Limitations

Strengths

The co-investigator identified strengths throughout developing and implementing the PIP. The first strength is the flexibility of completion with an online format via Qualtrics and Zoom®. Participants could access the surveys, view the webinar, and complete the posttest in the comfort of their respective home or office space. Allowing participants to complete the PIP in multiple settings improves flexibility and accommodates different schedules. Participants could also complete the PIP in sections, aiding in the flexibility of participation. Qualtrics allowed participants to complete the surveys and posttest seamlessly, and Zoom® allowed participants to view the recorded webinar remotely.

Expertise and insight from a certified ACP facilitator for the educational content development of the webinar and ACP toolkit was another strength of the PIP. Collaboration with the key stakeholder promoted the educational webinar's validity and authenticity and the most recent EBP for ACP conversations. Additional PIP support was provided to participants through the ACP Toolkit shared from a prior dissertation by Hannah Murphy, DNP, APRN, FNP-C. Expanding on existing ACP educational resources, such as books, websites, case studies, and conversation tools, further enhanced ACP education for PCPs.

The final strength of the PIP was the number of clinics utilized for implementation. Providers from eight clinics throughout North Dakota were invited to participate in the PIP. These clinics were located across diverse geographic areas, enabling a larger patient population to benefit from the insights gained through the PIP. This widespread geographical coverage allowed the PIP to gather a comprehensive range of PCPs ACP perspectives, enhancing the PIPs impact on ACP conversations in the region.

Limitations

The co-investigator identified limitations throughout the development and implementation of the PIP. The first limitation was the small number of participants. Eight eligible PCPs were invited to participate in the PIP, but only four completed the pre- and postsurveys. The low participation rate observed in this PIP highlights a significant challenge in recruitment and raises concerns for future PIP participation if implemented within the same site. The low participation rate in the PIP may also impact the generalizability of the results to a broader pool of participants.

Another limitation of the PIP was the absence of explicit established criteria for excluding participants. Due to the small number of participants invited to participate, exclusion criteria could have been defined as patients, nurses, social workers, and/or ACP facilitators. More specific exclusion criteria, such as medical doctors and physician associates, might have been more appropriate for PIPs involving a larger participant pool to gain insight on ACP knowledge and confidence specific to family nurse practitioners. If such criteria had been implemented in this project, only six potential participants would have met the requirements for inclusion in the PIP.

A third limitation of the PIP was the lack of traceability of participants completing the pre- and post- surveys. Although each survey included four participants, there is uncertainty whether the same individuals who completed the pre-survey also participated in the post-survey. Introducing an anonymous traceability system of participants would add value to the PIP by enhancing reliability of survey results and ensure that the observed changes in the survey can be accurately attributed to the ACP webinar intervention. Adding anonymous traceability to a similar project would allow future co-investigators to establish a direct link between the ACP webinar and ACP toolkit, contributing to the PIPs overall outcomes.

A fourth limitation of this PIP is the inability to identify participants' professions. While this information was purposely not captured to avoid unintentional identification of participants, it would have been valuable information to support the project's objectives further. Different professions, for example, nurse practitioners, physician associates, and medical doctors possess unique perspectives, knowledge, and ACP experiences. Without the information on participant's professions, assessing the PIPs performance across the NP, PA, and MD career paths is difficult.

A fifth limitation of the PIP was the lack of a unified learning module for participants. Participants had to navigate between Qualtrics links and one Zoom® link to access the surveys, posttest, and webinar. Navigating between multiple links and resources can be cumbersome for participants, especially when completing the PIP requires integrating information from various sources. Using a singular platform that integrates survey access, video recording, and posttest opportunity can significantly enhance the participant experience of the PIP and streamline the overall navigation process.

The last limitation identified for this PIP was the region of the target population. While participants were employed at rural clinics throughout North Dakota, additional insight into

providers' perspectives may have been captured if the project had been implemented throughout additional rural clinics. Future co-investigators of a similar project may benefit from collaborating with the Center for Rural Health, associated with the University of North Dakota, School of Medicine and Health Sciences. The Center for Rural Health works with rural healthcare facilities in North Dakota to provide resources, share best practices, quality initiatives, and coordinate continuing education opportunities (Center for Rural Health, 2023). Expanding to more rural clinics will allow for data collection from nurse practitioners, physician associates, and medical doctors, strengthening the PIPs objectives.

Future co-investigators could consider connecting with the NDNPA or the American Association of Nurse Practitioners (AANP) to increase a potential data pool further. Future coinvestigators could consider implementation at the annual NDNPA Pharmacology conference, similar to the project led by Hannah Murphy, DNP, APRN, FNP-C, to capture more participants from varying healthcare settings within rural North Dakota. The mission of the NDNPA is to promote quality healthcare in North Dakota by supporting, advocating, leading, and continuing education for nurse practitioners (North Dakota Nurse Practitioner Association, 2023). Furthermore, partnering with the AANP state liaison for North Dakota could allow for an expanded opportunity to educate NPs in rural clinics across region eight of the AANP, encompassing North Dakota, South Dakota, Montana, Wyoming, Colorado, and Utah. The collaboration could enhance the scope and impact of ACP education targeting NPs in these geographic areas.

Conclusion

The practice improvement project encompassed the development of provider education based on the review of literature, evidence-based practice, key stakeholder consultation, the

implementation of surveys, data analysis, and practice recommendations. Furthermore, all four objectives of the practice improvement project were met, and suggestions for future research were provided, along with resources to enhance nurse practitioners' understanding of the significance of ACP and ADs. The findings of the practice improvement project indicated that rural PCPs who participated in the educational online webinar demonstrated an increase in reported knowledge, confidence, and understanding of ACP, ADs, and the *Serious Illness Conversation Guide*. These findings can raise awareness among APRNs and other PCPs about existing knowledge disparities and practices concerning ACP and ADs.

The knowledge acquired through the practice improvement project can empower rural PCPs to better address rural patients' needs. In rural communities, PCPs often assume multiple healthcare roles, especially for elderly patients living with chronic disease who reside in those areas, ACP education becomes pivotal. Advance care planning continuing education equips providers with the necessary knowledge and skills to confidently deliver all-encompassing healthcare, especially for those nearing the EOL. By bridging gaps in confidence and understanding, ACP education ensures that rural PCPs can offer sensitive, tailored, and compassionate care to patients, thereby improving the overall healthcare experience in those communities.

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APPENDIX A: IRB APPROVAL

NDSU NORTH DAKOTA

05/19/2023

Dr. Kerri D Benning Nursing, Sanford Bismarck

Re: IRB Determination of Exempt Human Subjects Research: Protocol #IRB0004793, "Advance Care Planning: Implementing Online Education for Rural Primary Care Providers"

NDSU Co-investigator(s) and research team:

- Kerri D Benning
- Jess Kurtz
- Allison Evelyn Peltier
- Kolby Lee Schaeffer Fraase
- Shannon Lyn David Misialek

Approval Date: 05/19/2023

Expiration Date: 05/18/2026

Study site(s): A federally qualified health center that manages eight clinics throughout rural North Dakota will be used as an implementation site due to the respective clinic's rural geographical locations, average patient ages, and the number of patients seen for chronic disease management. The webinar will be accessible to all primary care providers employed at the clinics. These primary care clinics were chosen as implementation sites due to their presence in rural North Dakota communities, typical age and acuity of patients in these rural areas, and an assortment of PCP professional backgrounds including physicians, physician associates, and nurse practitioners. The locations of the rural clinics serve an area with a population of 286 to 706, while the urban areas serve a population of approximately 47,000 and 77,000 people. Funding Source:

The above referenced human subjects research project has been determined exempt (category 1,2) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, *Protection of Human Subjects*).

Please also note the following:

- The study must be conducted as described in the approved protocol.
- Changes to this protocol must be approved prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Promptly report adverse events, unanticipated problems involving risks to subjects or others, or protocol deviations related to this project.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.

NDSU has an approved FederalWide Assurance with the Department of Health and Human Services: FWA00002439.

RESEARCH INTEGRITY AND COMPLIANCE

NDSU Dept 4000 | PO Box 6050 | Fargo ND 58108-6050 | ndsu.research@ndsu.edu Shipping Address: Research 1, 1735 NDSU Research Park Drive, Fargo ND 58102

APPENDIX B: PERMISSION TO USE IOWA MODEL

3/1/23, 2:13 PM

Mail - Kurtz, Jess - Outlook

Permission to Use The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care

Kimberly Jordan - University of Iowa Hospitals and Clinics <survey-bounce@survey.uiowa.edu> Wed 3/1/2023 2:10 PM

To: Kurtz, Jess <jessica.kurtz.2@ndsu.edu>

You have permission, as requested today, to review and/or reproduce The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care. Click the link below to open.

Iowa Model - 2015.pdf

Copyright is retained by University of Iowa Hospitals and Clinics. Permission is not granted for placing on the internet.

Reference: Iowa Model Collaborative. (2017). Iowa model of evidence-based practice: Revisions and validation. Worldviews on Evidence-Based Nursing, 14(3), 175-182. doi:10.1111/wvn.12223

In written material, please add the following statement: Used/reprinted with permission from the University of Iowa Hospitals and Clinics, copyright 2015. For permission to use or reproduce, please contact the University of Iowa Hospitals and Clinics at 319-384-9098.

Please contact UIHCNursingResearchandEBP@uiowa.edu or 319-384-9098 with questions.

https://outlook.office.com/mail/deeplink?popoutv2=1&version=20230217004.07&view=print

APPENDIX C: IOWA MODEL

The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care



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APPENDIX D: SURVEY PERMISSION LETTER

3/15/23, 1:17 PM

Mail - Kurtz, Jess - Outlook

Re: Request to use KAESAD

Mary Ann Jezewski <jezewski@buffalo.edu> Mon 3/13/2023 6:42 PM To: Kurtz, Jess <jessica.kurtz.2@ndsu.edu>

I attachments (167 KB) PDF Final version KAESAD Instrument with R & V.pdf;

Jessica

You have my permission to use the KAESAD and I have attached the instrument with the validity and reliability results. We have three articles one for emergency nurses published in Applied Nursing Research and one with critical care nurses that was published in Critical Care Nurse and oncology nurses published in Oncology Nursing Forum. KEEP IN MIND THAT THIS INSTRUMENT WAS DEVELOPED FOR RNs NOT THE GENERAL PUBLIC. The reliability and validity does not apply to groups other than RNs. The reliability and validity does not apply to groups other than RNs. If you change the wording or change the scales in any way, the reliability and validity of the scales is compromised,

Please read the r & v and note the low Cronbach alphas for the attitudes as a total scale. Thus we did individual item analysis for the attitude items (percent of agreement). You do not need to reverse score to do individual item analysis.

Note that the answers to the questions about state laws will vary according to state or country so you will have to determine the correct answers for your situation. Also the demographics will need to be adjusted to fit your sample [I am sending the oncology instrument which is the same as the critical care and emergency nurses except for a couple of demographic items which you change to suit your sample]. Please understand if you change items or wording of items in any of the sub scales, the reliability and validity of the scale is invalid.

You have my permission to reproduce and use the KAESAD instrument for your project. You may NOT publish the KAESAD instrument in any articles you write nor attach it to any thesis or dissertation report. You can publish a few examples of items if you wish.

The expectation is that you will eventually share your findings with us.

Please respond via email that you agree with the statements above. If you have additional questions, please email me.

Good luck with your project.

Mary Ann Jezewski RN PhD, FAAN Professor Emeritus University at Buffalo.SUNY, School of Nursing

On Mar 7, 2023, at 9:07 PM, Kurtz, Jess <jessica.kurtz.2@ndsu.edu> wrote:

https://outlook.office.com/mail/inbox/id/AAQkADdjMjM3ZWJhLWUzOTctNDg2Mi1hMTgzLTY5ZDIyYjIwYTVhYwAQABplfBt%2Bss1EjnX2rHcdCbk%3D 1/2

APPENDIX E: SERIOUS ILLNESS CONVERSATION GUIDE

Serious Illness Conversation Guide	Serious Illness Conversation Guide
CONVERSATION FLOW	PATIENT-TESTED LANGUAGE
 Set up the conversation Introduce purpose Prepare for future decisions Ask permission Assess understanding and preferences 	"I'd like to talk about what is ahead with your illness and do some thinking in advance about what is important to you so that I can make sure we provide you with the care you want — is this okay?" "What is your understanding now of where you are with your illness?" "How much information about what is likely to be ahead with your illness
3. Share prognosis Share prognosis Frame as a "wishworry", "hopeworry" statement Allow silence, explore emotion 4. Explore key topics Goals Fears and worries Sources of strength Critical abilities Tradeoffs Example	"I would you like from mer" "I want to share with you my understanding of where things are with your illness" <i>Uncertain:</i> "It can be difficult to predict what will happen with your illness" <i>Uncertain:</i> "It can be difficult of a long time but I'm worried that you could get sick quickly, and I think it is important to prepare for that possibility." OR <i>Time:</i> "I wish we were not in this situation, but I am worried that time may be as short as (express as a range, e.g. days to weeks, weeks to months, months to a year)." OR <i>Function:</i> "I hope that this is not the case, but I'm worried that this may be as strong as you will feel, and things are likely to get more difficult." "What are your most important goals if your health situation worsens?"
 Close the conversation Summarize Make a recommendation Check in with patient Affirm commitment Document your conversation Communicate with key clinicians 	 "What are your biggest fears and worries about the future with your health?" "What gives you strength as you think about the future with your illness?" "What abilities are so critical to your life that you can't imagine living without them?" "If you become sicker, how much are you willing to go through for the possibility of gaining more time?" "How much does your family know about your priorities and wishes?" "Yve heard you say that is really important to you. Keeping that in mind, and what we know about your liness, I recommend that we This will help us make sure that your treatment plans reflect what's important to you." "How does this plan seem to you?" "I will do everything I can to help you through this."
Constant and a last last of caller for the staffs for the sta	2013 2121 Andrées table A abre Carter de Nachol Segrerar sourcedant jourse and andrées est le faite annue de la contract

APPENDIX F: PERMISSION FOR WEBINAR UTILIZATION

3/23/23, 1:14 PM

Mail - Kurtz, Jess - Outlook

Re: Advance Care Planning Project

Hannah Murphy <hannahmurphydnp@gmail.com> Sun 1/29/2023 7:54 PM To: Kurtz, Jess <jessica.kurtz.2@ndsu.edu> Hi Jess.

I do give you permission to use what you can. I would try to get into contact with NDNPA webpage master. I'm forgetting her name but ask Adam Hohman. They should have all of the materials I used during my webinar online-perhaps on an inactive webpage. I don't have access to my NDSU email so I cannot give you her contact info at this time. I would definitely talk to Adam and go from there. If they don't have access to my project anymore and the materials, I can try to do some digging to find out where my documents are located. Im currently in CT and I left all of my hard drive materials back in ND. Im currently working full time and have been quite busy as of late.

I would definitely utilize Nancy Joyner as a resource and ask if she knows a ACP facilitator class. She was a tremendous help throughout my project.

I'm so happy you decided to do your project on ACP. Let me know what you need from me and I can do my best to help you out!

Best,

Hannah Murphy

APPENDIX G: PERMISSION FOR SITE IMPLEMENTATION

3/31/23, 12:09 PM

Mail - Kurtz, Jess - Outlook

RE: NDSU DNP Project

Ashley J. Kremer, MD <akremer@northlandchc.org> Fri 3/31/2023 11:07 AM To: Kurtz, Jess <jessica.kurtz.2@ndsu.edu> To: Jessica Kurtz,

You have my permission to implement your DNP project titled "Advance Care Planning: Implementing Online Education for Rural Primary Care Providers" within Northland Health Centers clinics.

Ashley J. Kremer, MD Medical Director Northland Health Centers http://www.northlandchc.org/

401 2nd Ave PO Box 430 Rolette, ND 58366 (101) 246-3391 (101) 246-3392



APPENDIX H: LETTER OF SUPPORT



May 9, 2023

To Jess Kurtz,

It is my privilege to support your efforts in your project, "Advance Care Planning: Implementing Online Education for Rural Primary Care Providers." I am president of Honoring Choices[®] North Dakota and our goal is to disseminate the awareness, education, and the importance of Advance Care Planning (ACP). Your project will be instrumental in propagating the importance of ACP and early conversations as well as <u>Serious Illness messaging</u> to primary care providers in rural areas.

The newest evidence in advance care planning is the idea of having early simple conversations and later, serious illness conversations using the serious illness messaging. To visualize this the recognition of the <u>continuum of advance Care Planning</u> triangle from a healthy individual to later with goals of care, through illness and end-of-life which most people don't want to talk about. Having early conversations when individuals are healthy creates an easier approach in later stages of aging and illness.

For early and simple discussions, some great ice breakers for ACP conversations include <u>Go Wish Card game</u>, <u>Hard Choices For</u> <u>Loving People</u> booklet and <u>What Matters to Me Workbook</u>. There are also some helpful websites including our state's <u>Honoring</u> <u>Choices[®] North Dakota</u>. The national <u>The Conversation Project</u> which includes dementia, children and recognition of <u>National</u> <u>Healthcare Decisions Day</u> of April 16th every year is an excellent resource for many topics.

However, many of the conversations take more time. There are ACP facilitators that have been trained throughout the state that can be utilized as a resource to help when extensive time is needed to finish the conversation and complete a healthcare directive. They can be found by contact Honoring Choices[®] North Dakota.

For providers and healthcare clinicians, there are some excellent tools to use, including the <u>Serious Illness Conversation Guide</u> (<u>SICG</u>) from Ariadne Labs and <u>Serious Illness Care Program through Ariadne Labs</u>. This program and guide are evidence-based and recognized nationally. The guide is easy to use and can be used in guiding ACP conversations in the primary care setting. The average conversation takes 20-30 minutes. To continue ACP conversation, another useful tool is the <u>Vital Talks Tip App</u>.

I am looking forward to working with you to complete this very necessary online education for providers. This information is so important. Thank you for being yet another advocate for ACP and healthcare conversations.

Sincerely,

Nancy Joyner, MS, CNS-BC, APRN, ACHPN* Palliative Care Clinical Nurse Specialist Instructor - First Steps ACP Facilitator Training POLST Trainer HCND's POLST Coordinator 702 Belmont Road Grand Forks, ND 58201 218.779.5037 nancy.joyner@honoringchoicesnd.org http://www.honoringchoicesnd.org/

VISION The health care choices a person makes become the health care the person receives.

Mission To assist communities develop a successful advance care planning process.

APPENDIX I: PRE-SURVEY

DEMOGRAPHICS

What is your age?

- a. 20-29
- b. 30-39
- c. 40-49
- d. 50-59
- e. 60-69
- f. 70+

What is your gender?

- a. Male
- b. Female
- c. Prefer not to say

How many years have you been practicing?

- a. < 1 year
- b. 1-3 years
- c. 4-6 years
- d. 7-9 years
- e. 10-12 years
- f. >12 years

PRE-SURVEY

- 1. I have sufficient knowledge on advance care planning and advance directives.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 2. I know the benefits of advance care planning and advance directives.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 3. I feel confident in initiating advance care planning and advance directive discussions with patients.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 4. I understand how to use the Serious Illness Conversation Guide with patients.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 5. I understand the role of advance care planning facilitators.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree

APPENDIX J: POST-SURVEY

- 1. After the educational webinar, I have sufficient knowledge on advance care planning and advance directives.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 2. After the educational webinar, I know the benefits of advance care planning and advance directives.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 3. After the educational webinar, I feel confident in initiating advance care planning and advance directive discussions with patients.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 4. After the educational webinar, I understand how to use the *Serious Illness Conversation Guide* with patients.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 5. After the educational webinar, I understand the role of advance care planning facilitators.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree

- 6. After the educational webinar, I will increase advance care planning discussions with patients.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 7. Have you had conversations about advance care planning or advance directives in your practice setting?
 - a. Yes
 - b. No
- 8. Have you been a witness (i.e., involved in documentation) for an advance directive for a patient?
 - a. Yes
 - b. No
- 9. Have you initiated a discussion about advance directives with a patient?
 - a. Yes
 - b. No
- 10. Have you provided treatment to patients who advance directive indicated otherwise (i.e., family's goals of care don't align with patient's)?
 - a. Yes
 - b. No
 - c. Prefer not to answer
- 11. Have you observed other providing treatment to patients who advance directive indicated otherwise?
 - a. Yes
 - b. No
 - c. Prefer not to answer
- 12. Information presented was current and could be applied to own practice area?
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree

- 13. The teaching/learning resources and instructed materials were effective and suited for the topic.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 14. Administration and technology of the online webinar was smooth and customer friendly.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 15. Instructions for participation and receiving continuing education credits were adequate.
 - a. Strongly disagree
 - b. Somewhat disagree
 - c. Neither agree nor disagree
 - d. Somewhat agree
 - e. Strongly agree
- 16. Is there anything else related to advance care planning and advance directives you wished were discussed in the educational webinar?

Comments:

APPENDIX K: POSTTEST

- 1. Advance care planning (ACP) benefits include all of the following except:
 - a. Higher rates of completion of advance directives
 - b. Increased hospitalization at end-of-life
 - c. Increased alignment of patients wishes
 - d. Less intensive treatments at end-of-life Answer: b. Increased hospitalization at end of life
- 2. True or False. 21% of patients are open to talk about ACP and 60% of providers report talking about ACP or end-of-life care.

Answer: False, 60% of patients are open to talk about ACP, only 21% of providers report talking about ACP or end-of-life care.

- 3. An advance directive (AD) is all of the following except:
 - a. Legal document
 - b. Medical order
 - c. Appoints a person to speak for patients when they are unable
 - d. Different in every state
 - e. Includes person's values, beliefs, and preferences **Answer: b. Medical order**
- 4. What are the five D's of when to update an advance directive?
 - a. Decline, delirium, divorce, diagnosis, death
 - b. Divorce, decline, decade, determination, death
 - c. Determination, divorce, death, diagnosis, decline
 - d. Divorce, decline, decade, death, diagnosis Answer: d. Divorce, decline, decade, death, diagnosis
- 5. Which barrier is the most common in advance care planning and completion of advance directives?
 - a. Knowledge
 - b. Leadership support
 - c. Time
 - d. System

Answer: c. Time

- 6. Who is appropriate to have advance care planning conversations with?
 - a. Individuals over 65 years old
 - b. Seriously ill
 - c. Healthy adults
 - d. Adolescents
 - e. All of the above Answer: e. All of the above

- 7. Steps of the Serious Illness Conversation Guide includes all of the following except:
 - a. Set up the conversation
 - b. Understanding death
 - c. Assess understanding and preferences
 - d. Share prognosis
 - e. Explore key topics
 - f. Close the conversation Answer: b. Understanding death
- 8. Honoring Choices of North Dakota is all of the following except:
 - a. Online resource for providers
 - b. Assists communities to develop successful ACP process
 - c. For profit organization
 - d. Offers professional outreach and education
 - Answer: c. For profit organization
- 9. When is it best to refer a patient to an ACP facilitator?
 - a. First visit about ACP and AD
 - b. After primary care provider has had initial ACP discussion with patient
 - c. Before talking to primary care provider about new serious illness
 - d. When patients need medical questions answered about prognosis
 - e. Always since providers cannot make appointments for ACP Answer: b. After primary care provider has had initial ACP discussion with patient
- 10. True or False. The PSDA requires that health care facilities advise patients of their rights regarding advance directives.

Answer: True

APPENDIX L: ACP TOOLKIT

Descriptions of ACP Toolkit Resources

Books:

Being Mortal: Medicine and What Matters in the End by Atul Gawande

- Gawande's book reveals suffering produced by medicine's neglect of the wishes people might have beyond mere survival through eye-opening research and gripping stories of his own patients and family. This book, which has already changed the national conversation on aging and death, shows how the ultimate goal is not a good death but a good life-all the way to the very end.
- <u>https://www.amazon.com/Being-Mortal-Illness-</u> MedicineMatters/dp/1781253943/ref=sr_1_1?dchild=1&keywords=Being+Mortal%3A+ Medicine+and+What+Matters+in+the+End+by+Atul+Gawande&qid=1630778395&s=b ooks&sr= 1-1

Extreme Measures: Finding a Better Path to the End of Life by Jessica Nutik Zitter, MD

- Extreme Measures charts Zitter's journey from wanting to be one kind of hero to becoming another—an ICU doctor who prioritizes the patient's values and preferences in an environment where the default choice is the extreme use of technology. In her work Zitter has learned what patients fear more than death itself: the prospect of dying badly. She builds bridges between patients and caregivers, formulates plans to allay patients' pain and anxiety, and enlists the support of loved ones so that life can end well, even beautifully.
- <u>https://www.amazon.com/Extreme-Measures-Finding-Better-Path/dp/1101982551</u>

Gone From My Sight: The Dying Experience by Barbara Karnes, RN

- Author, Barbara Karnes is a hospice pioneer and nurse who provides non-medical language for patients and their families about what to potentially expect in the last months, weeks, days, hours, and minutes of death.
- https://www.amazon.com/Gone-My-Sight-DyingExperience/dp/B00072HSCY/ref=sr_1_1?dchild=1&keywords=Gone+From+My+ Sight%3A+The+Dying+Experience+by+Barbara+Karnes%2C+RN&qid=1630778749&s =boo ks&sr=1-1

Hard Choices for Living People: CPR, Feeding Tubes, Palliative Care, Comfort Measures, and the Patient with a Serious Illness by Hank Dunn

• This book offers honest, practical, reliable advice and information, as well as help with the emotional and spiritual concerns families and patients face during the most difficult time of life. Over 3.5 million copies of Hard Choices have been sold and are being used in more than 5,000 hospitals, nursing homes, hospice programs, and faith communities.

 https://www.amazon.com/Hard-Choices-Loving-PeoplePalliative/dp/099726120X/ref=sr_1_1?dchild=1&keywords=Hard+Choices+for+L iving+ People%3A+CPR%2C+Feeding+Tubes%2C+Palliative+Care%2C+Comfort+Measures% 2C+and+the+Patient+with+a+Serious+Illness+by+Hank+Dunn&qid=1630778510&s=bo oks&sr=1-1

The Conversation: A Revolutionary Plan for End-of-Life Care by Angelo E. Volandes, M.D.

- Through the stories of seven patients with very different end-of-life experiences, Dr. Volandes demonstrates that what people who are approaching the end of their lives need most is one simple thing: The Conversation. He argues for radical re-envisioning of the patient-doctor relationship and offers ways for patients and their families to talk about end-of-life care to ensure that patients will be in charge of the way they live their last days.
- https://www.amazon.com/Conversation-Revolutionary-Plan-EndLife/dp/1620408554/ref=sr_1_1?dchild=1&keywords=The+Conversation%3A+A+R evol utionary+Plan+for+EndofLife+Care+by+Angelo+E.+Volandes%2C+M.D.&qid=1630778450&s=books&sr=1-1

Mobile phone applications:

MyDirectives MOBILE

- The MyDirectives experience helps you record and share your medical treatment goals, preferences and priorities with family, friends, caregivers and medical personnel.
- Download from App store: https://apps.apple.com/us/app/mydirectivesmobile/id931433126

VitalTalk Tips app

- The VitalTalk Tips app enables physicians, nurses, and other clinicians to improve their communication skills for patients who have a serious illness. This app includes a special set of communication skill tips, focused on the moments where clinicians most often get stuck. You can flip through the tips by topic (serious news, prognosis, family conferences, goals of care, and more), or just get a daily tip as a notification. Read the tip (it'll take <10 seconds), try it out, and over time, your inner communication ninja will emerge.
- Download from App store: : <u>https://apps.apple.com/us/app/vitaltalk-tips/id1109433922</u>

PDFs:

Choosing Words Wisely in Communication with Patients with Heart Failure and Families by Anne M. Kelemen, LICSW, George Ruiz, MD, MBA, and Hunter Groninger, MD

- In this work, the investigators unpack language commonly used in advanced HF care and provide explicit suggestions to better provide such pivotal communication. In conclusion, specific phrasing may significantly impact patient experiences and outcomes. Communication that focuses on the disease itself and the therapy or intervention in question may help remove the patient from potential negative emotions, thus facilitating more objective shared decision-making with the clinician.
- Choosing Words Wisely in Communication With Patients With Heart Failure and Families (sciencedirectassets.com)

Clinician Reference Guide

- This guide goes more into depth on explaining the Serious Illness Conversation Guide as seen in the webinar. Use this free booklet by Ariadne Labs for more guidance and explanation of each step to have effective conversations.
- https://implementation.aria.ariadnelabs.net/wpcontent/uploads/2018/03/Implementing%2 0Checklist/01-prepare/01-2selectsites/Clinician%20Reference%20Guide %20Updated%2010.23.17.pdf

"End-of-Life Care Conversations: Medicare Reimbursement FAQs" by Institute for Healthcare Improvement and Conversation Ready

- The changes in Medicare reimbursement policy that went into effect January 2016 provide an opportunity for more clinicians and patients to engage in conversations about preferences for care at the end of life. However, many people are confused about where to start. Whether you are uncertain about the new rules for CMS reimbursements or about starting those conversations with patients, this document will help you understand this new landscape for end-of-life care conversations.
- <u>https://theconversationproject.org/wp-content/uploads/2016/06/CMS-Payment-OnePager.pdf</u>

Serious Illness Conversation Guide

- Print off and laminate this free conversation tool by Ariadne Labs for your office. This tool will help you guide Serious Illness Conversations with your patients. We encourage you to use this tool and take notes as you discuss advance care planning with your patients.
- <u>https://implementation.aria.ariadnelabs.net/wpcontent/uploads/2018/03/About/Serious%2</u> <u>011lness%20Conversation%20Guide%20(7).pdf</u>

Websites:

Aria website: <u>https://www.ariadnelabs.org/aria/</u>

• Available to anyone interested in improving quality in health care, Aria provides members access to free webinars, publications, and implementation resources to accompany tools from Ariadne Labs' Serious Illness Care.

Cake: <u>https://www.joincake.com/blog/category/advance-directives-and-living-wills/</u>

• Website for the community about topics in advance care planning such as end-of-life planning, loss and grief, and mortality.

Conversation Project: <u>https://theconversationproject.org/</u>

• The Conversation Project is a public engagement initiative with a goal to have every person's wish for end-of-life care expressed and respected.

Honoring Choices North Dakota website: https://www.honoringchoicesnd.org/

• Free online resource for the community to help be successful in the advance care planning and advance directive completion process.

National Healthcare Decisions Day: https://theconversationproject.org/nhdd/

• National Healthcare Decisions Day (NHDD) exists to inspire, educate and empower the public and providers about the importance of advance care planning. NHDD is an initiative to encourage patients to express their wishes regarding healthcare and for providers and facilities to respect those wishes, whatever they may be.

PREPARE for your care: <u>https://prepareforyourcare.org/welcome</u>

• Online education on advance care planning using a step-by-step program with several videos and easy to read documents on how to fill out and complete an advance directive. A great option for patients who are willing to learn about advance directives online instead of in-person with an advance care planning facilitator.

Conversation Tools:

Go Wish card game: <u>https://codaalliance.org/go-wish/</u>

• A deck of 36 cards similar to the traditional playing cards available in multiple languages. These cards help guide participants in identifying wishes, values and preferences and to ensure that those wishes are met. Players are introduced to several phrases representing various activities and wishes. Participants sort cards into important stacks and then rank their top 10 wishes most important to them. These cards can be used in advance care planning conversations, end-of-life trainings or seminars, prior to filling out an advance directive, and upon diagnosis of life-threatening illnesses or after serious accidents.

Hello Common Practice card game: https://commonpractice.com/products/hello-game

• Hello is a conversation game that is an easy, non-threatening way to start a conversation with your family and friends about what matters most to you. This game includes 5 Questions Booklets 30 Thank-you chips Instruction Sheet Tips for inviting your friends and family to play.

Videos:

https://www.youtube.com/watch?v=NAlnRHicgWs

• Zubin Damania, MD is a Stanford-trained hospital doctor and host of The ZDoggMD Show. He developed this music video to help describe the difficult journey doctors face during the end-of-life process with their patients.

https://www.youtube.com/watch?v=TJiY8duVgz0

• A documentary series on Netflix featuring Dr. Jessica Zitter and her journey with patients in the ICU. This series is filled with real-life patient stories and shows viewers the emotional journeys and end-of-life decisions as doctors, patients, and families face harrowing choices.

Serious Illness Conversation Guide Demonstration (12 minutes)

https://www.youtube.com/watch?v=fhwa9f50_U4

• Dr. Jo Paladino demonstrates a 12-min conversation using the Serious Illness Conversation Guide with a COPD patient.

Serious Illness Care: What if we don't know the prognosis?

https://www.youtube.com/watch?v=GC-FZ-h6qmQ

• In this video, Michael Nathan, MD, discusses how to have a serious illness conversation with a patient when you don't know the prognosis or if the patient has an uncertain disease prognosis.

Additional CME Opportunities:

Organizing Palliative Care for Rural Populations

- The goal of this teleECHOTM series is to provide insight on how to organize and better understand Palliative Care Services for patients in rural and underserved communities throughout North Dakota, by building and strengthening capacity among primary care and other providers responsible for supporting patient well-being.
- <u>https://ruralhealth.und.edu/projects/project-echo/topics/palliative-care/previous-clinics</u>

Educational Materials	Estimated Cost		
	NDBON CE Accreditation	\$200	
	ACP facilitator certification course	\$100	Total: \$300 USD

APPENDIX M: ESTIMATED COST FOR IMPLEMENTATION

Note: This table was adapted from Roush's (2018) budget example table on p. 59; Advance Care Planning Facilitator Course from receipt; NDBON CE Accreditation from receipt.

APPENDIX N: CONSENT

NDSU North Dakota State University Department of Nursing 1919 N University Dr. Fargo, ND 58102 NDSU Dept. 2670 PO Box 6050 Fargo, ND 58108-6050 701.231.7395

Advance Care Planning:

Implementing Online Education for Rural Primary Care Providers

Dear Participant,

My name is Jessica Kurtz. I am a graduate student in the Doctor of Nursing Practice program at North Dakota State University, and I am conducting a practice improvement project to see if providing advance care planning education for rural primary care providers will improve advance care planning conversations. It is our hope, that with this project, we will improve rural primary care providers perceived knowledge and confidence in initiating and facilitating advance care planning discussions and to increase the completion rate of advance directives among adults living with chronic disease(s) seen within the primary care setting.

Participants of this practice improvement project will complete a pre-survey, view a 50-minute advance care planning online webinar, and then complete a post-survey and a posttest. The surveys and posttest will take approximately 15 to 20 minutes to complete. In total, participants will spend approximately 70 minutes completing the surveys, webinar, and posttest.

Because you are a primary care provider employed at a rural primary care clinic, you are invited to take part in this research project. Your participation is entirely your choice, and you may change your mind or quit participating at any time, with no penalty to you. By completing both pre- and post-surveys, and posttest, you are giving your consent to participate in this study and are attesting that you are at least 18 years of age.

The webinar, surveys, and posttest are completely electronic, anonymous, and will be returned to the data collection team immediately. You will receive a free, 1.0 CE credit upon completion of both pre- and post-surveys and passing the posttest with an 80% or greater. You will also be provided with a link to obtain 1.0 CME credit of no charge regarding advance care planning. All questionnaires will be kept confidential. The questionnaires are anonymous and contain no personal identifying information. Participant information will be used to measure the effectiveness of providing advance care planning education to rural primary care providers. In addition, the de-identified questionnaire results may be used in future publications in a healthcare journal. Approval for project implementation was obtained from the NDSU Institutional Review Board on May 19th, 2023; protocol # IRB0004793.

It is not possible to identify all potential risks in research procedures, but we have taken reasonable safeguards to minimize any known risks. These known risks include emotional or psychological distress related to viewing the advance care planning webinar, and the questions asked during the surveys.

By taking part in this research, you may benefit by understanding more about advance care planning and advance directives. However, you may not get any benefit from being in this study. Benefits to others are likely to include increased knowledge on benefits of advance care planning (ACP) and advance directives (AD), barriers to ACP and AD completion, how and when to use the *Serious Illness Conversation Guide*, role of ACP facilitators, Honoring Choices of North Dakota, and ACP resources available.

This study is anonymous. That means that no one, not even members of the research team, will know that the information you give comes from you.

You have rights as a research participant. If you have questions about your rights or complaints about this research, you may talk to the researcher or contact the NDSU Human Research Protection Program at 701.231.8995, toll-free at 1-855-800-6717, by email at ndsu.irb@ndsu.edu, or by mail at: NDSU HRPP Office, NDSU Dept. 4000, P.O. Box 6050, Fargo, ND 58108-6050.

Thank you for taking part in this research. If you wish to receive a copy of the results, please contact me at jessica.kurtz.2@ndus.edu.

Please click below to complete the surveys.

Thank you for your time,

Jessica L. Kurtz, DNP-S Kerri Benning, DNP, APRN, FNP-C

APPENDIX O: EMAIL REMINDER

NDSU North Dakota State University Department of Nursing 1919 N University Dr. Fargo, ND 58102 NDSU Dept. 2670 PO Box 6050 Fargo, ND 58108-6050 701.231.7395

Advance Care Planning: Implementing Online Education for Rural Primary Care Providers

Dear Participant,

An email was sent to you on July 3rd, 2023, inviting you to participate in my graduate practice improvement project. I hope you have had a chance to watch the advance care planning webinar and complete the pre- and post-surveys. This is a reminder that there are (X) weeks remaining for the project implementation period. The last day to complete the surveys and posttest will be on August 11th, 2023.

The webinar is approximately 50 minutes, and the surveys should take about 15 to 20 minutes to complete. The webinar, surveys, and posttest are completely electronic, anonymous, and will be returned to the data collection team immediately. You will receive a free, 1.0 CE credit upon completion of both pre- and post-surveys and passing the posttest with an 80% or greater. You will also be provided with a link to obtain additional CME credit free of charge regarding advance care planning. All questionnaires will be kept confidential. The questionnaires are anonymous and contain no personal identifying information. Participant information will be used to measure the effectiveness of providing advance care planning education to rural primary care providers. In addition, the de-identified questionnaire results may be used in future publications in a healthcare journal. Approval for project implementation was obtained from the NDSU Institutional Review Board on May 19th, 2023; protocol # IRB0004793.

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Thank you for your time,

Jessica L. Kurtz, DNP-S Kerri Benning, DNP, APRN, FNP-C

APPENDIX P: NDBON CE APPROVAL LETTER



NORTH DAKOTA BOARD OF NURSING

919 S 7th Street, Suite 504, Bismarck, ND 58504 Telephone: (701) 751-3000 Fax: (701) 751-2221 Web Site Address: <u>www.ndbon.org</u>

TO: Jessica Kurtz, BS, MLS(ASCP)^{cm}, BSN, RN, DNP-S NDSU DNP Student

RE: APPROVAL OF CONTACT HOURS FOR EDUCATIONAL EVENT

- Date: June 14, 2023
- Program Title: Advance Care Planning: Implementing Online Education for Rural Primary Care Providers

Year of Approval: June 2023 – June 2024

Total Number of Contact Hours Approved: 1.0

NDBON Course Number Assigned: 2177

Jammy Buchhol DNP, RN, CNE, FRE

Tammy Buchholz, DNP, RN, CNE, FRE Associate Director for Education North Dakota Board of Nursing 06/14/2023

Date

The mission of the North Dakota Board of Nursing is to assure North Dakota citizens quality nursing care through the regulation of standards for nursing education, licensure, and practice.

APPENDIX Q: ACP FACILITATOR TRAINING CERTIFICATE



APPENDIX R: ACP WEBINAR POWERPOINT



Advance Care Planning: Implementing Online Education for Rural Primary Care Providers

Jessica Kurtz, BS, MLS(ASCP)^{CM}, BSN, RN, DNP-S Nancy Joyner, MS, CNS-BC, APRN, ACHPN[®]

Attribution to Hannah Murphy, DNP, APRN, FNP-C

Objectives

At the end of this presentation, participants will be able to:

- Describe the benefits of advance care planning (ACP) and advance directives (AD)
- Identify the barriers to ACP and AD completion
- Identify how and when to use the Serious Illness Conversation Guide in advance care planning conversations
- Describe how to refer and when to use ACP facilitators
- Describe Honoring Choices and ACP resources available

NDSU NORTH DAKOTA STATE UNIVERSITY

Disclaimer

My name is Jessica Kurtz, and I am a doctoral nurse practitioner student in the Department of Nursing at North Dakota State University. I am conducting a research project to see if providing ACP education for rural primary care providers will improve ACP conversations in the rural primary care setting. It is our hope, that with this education, we will find a way to improve primary care providers perceived knowledge, confidence, and understanding of ACP. We hope providers will be more motivated to facilitate these conversations in the primary care setting after completion of this online education.

Approval for project implementation was obtained from the NDSU Institutional Review Board on May 19th, 2023; protocol # IRB0004793.

Dissertation Project

- ICU background
- NDSU graduation for DNP
- Prior dissertation Hannah Murphy bridge the ACP education gap
- Problem: lack of provider training and education about advance care planning and advance directives
- Purpose: to increase healthcare providers' knowledge and confidence in facilitating ACP conversations and completion of ADs



What is Advance Care Planning?

Advance Care Planning (ACP) is:

- The process of interacting and communicating between a patient, a qualified clinical provider, and a family member/surrogate decision-maker to define and develop future medical treatment options and goals of care (Abu Al Hamayel et al., 2019).
- ACP has the power to produce a written plan (Advance Directive) that prepares
 others to make healthcare decisions consistent with the patient's preferences
- 60% patients are open to talk about ACP, only 21% providers report talking about ACP or end-of-life care (Fulmer et al., 2018; Risk et al., 2019)
- "It always seems too early until it is too late"



Benefits of ACP

- ACP provides a framework for surrogates to inform decision-making, keeping in mind patient's goals, values, beliefs, and treatment preferences.
- ACP significantly improves multiple outcomes, particularly for patients with serious illness:
 - Higher rates of completion of ADs
 - Increased alignment of patient's wishes by clinicians and families/loved ones
 - Reduction of hospitalization at end of life
 - Less intensive treatments at end of life
 - Increased utilization of hospice services
 - Increased likelihood patient will die in preferred place

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(Ripchinski & Fuller, 2021

ACP Case Study

John is a 66-year-old gentleman with a smoking history of one pack per day for the past 47 years presents to your clinic with progressive shortness of breath and worsening chronic cough, increasing amount of yellowish sputum, for the past 3 days. On examination, he appears cachectic and in moderate respiratory distress, especially after walking to the examination room, and has pursed-lip breathing. His neck veins are mildly distended. Lung examination reveals a barrel chest and poor air entry bilaterally, with moderate inspiratory and expiratory wheezing. Heart and abdominal examination are within normal limits. Lower extremities exhibit scant pitting edema.



(C, 2020)

ACP and COPD

- COPD is the fourth leading cause of death in the US (Iyer et al., 2022)
- Despite recommendations, advance care planning occurs infrequently in patients with COPD, as low as 11-15% of COPD patients have an AD, and ACP conversations occur at the very EOL (Stephens et al., 2019; Iyer et al., 2022)
- Good advance care planning can reduce anxiety for patients and their families by talking about death and dying and offering emotional support. It can also ensure that care is consistent with their wishes and avoids unnecessary, unwanted and costly invasive approaches (Global Initiative for Chronic Obstructive Lung Disease, 2023)
- People with COPD are less likely to receive such services compared to patients with lung cancer (Global Initiative for Chronic Obstructive Lung Disease, 2023)

		0.00
	Palliative Care	Hospice Care
Who qualifies	Anyone, any age or stage, living with a serious illness	Those with a life expectancy of months, not years, with a terminal condition
When to start	From the time of diagnosis through treatment and living with a serious illness	Choice has been made to stop or go without curative treatments
Referral required?	No. Ask your healthcare team to add	Yes. From a physician. Requires an order
Additional Goals	Advance care planning, information about diagnosis & prognosis, navigating treatment options, referrals to community resources, continuity of care	Compassionate comfort care, preparing for the end of life

Phrase to Avoid	Consider Using Instead	Rationale
You are failing XXX therapy	The XXX therapy is no longer beneficial.	Removes blame from the patient and focuses on the disease progression or ineffective therapy.
You are not a candidate for ling transplant/lobectomy/bullectomy	The lung transplant (or X medication or treatment) will not help you achieve your goal.	Focuses on intervention best fit for patient's condition, rather than on patient. Aligns clinician with patient to participate in shared decision making.
Nothing more we can do for you	There is no effective therapy to cure or slow the disease.	There is always something that can be done to help.
Withholding/ withdrawing care	Aggressive life-sustaining interventions are no longer helping you/your family member achieve the goals of care.	Care is always continued, even when life- sustaining therapies are contraindicated.
	Focus our care on managing pain and other symptoms of the disease.	"Comfort care" meaning varies between clinicians and patients/families. Implies comfort is the only important end-of-life issue to address.
STATE UNIVERSITY		(Kelemen et al., 2016)









When to Discuss

- At annuals
- At initial diagnosis of serious illness
- As illness progresses
- Functional decline
- Follow-up hospitalization
- · Illness is no longer responsive to treatment
- When treatment is causing more harm than benefit
- The 5 D's: Decade, Divorce, Diagnosis, Death, Decline (Sabatino, 2015)

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Who Should You Have ACP Conversations With?

- All adults (over 18)
- Minimally, 65 years and older
 - Especially, those living with chronic disease, serious illness (i.e. COVID) and frailty



- In an eight-month-long cohort study of 106 patients with COPD, the monthly completion rate of ADs averaged 25.4%. Post-intervention average AD completion rate increased to 28.8% (Stephens et al., 2019).
- There are currently 44.4 million people globally with dementia. If prevention, treatment, and death rates remain the same, this number will increase to 75.6 million in 2030 and 135.5 million in 2050 (Harrison Dening et al., 2019).
 NDSU NORTH DAKOTA NDSU STATE UNVERSITY

Role of the Provider

- Engage the patient in ACP
- Discuss prognosis
- Refer to facilitator
- Reassess and review directive and orders
- Document



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Serious inness conversation Guide	Serious Illness Conversation Guide
CONVERSATION FLOW	PATIENT-TESTED LANGUAGE
1. Set up the conversation Introduce purpose Propose for Marre decisions	5 1 securit like to fails together about what's happening with your health and what matters by to you. Would this be est?"
Auk permission	of what's happening with your health now?"
2. Assess understanding and preferences	"You much information about shat might be ahead with your health would be height to docurs today?"
 Share prognosis Share prognosis Frame as "withworry", "hopeworry" statement Allow silence, explore emotion 	** Can't share may understanding of what may be alread with your health?" Overstein: "At can be official to predict what will happen. Happe you will find an well as persible to its long bind, and one of an oth source of the gual. At a star persible to har you end of per take quickly, and them it is in exposite that we persible to that?" On.
4. Explore key topics Goah Fears and worries Sources of strength Critical abilities	e.g. algs to works, weeks to morefly, months to a year) ⁴ Of Porciain "It can be difficult to predict what will happen. It happe year will feel as well as preadful for a long time, and are will not how of that goal. "It's also preadful to that it may get hapfer to do things because of your illness, and I block it is important that we prepare for that." Present allow observe. Validets and explore associates.
Tradeoffs Family	"If your health was to get worse, what are your most important goals?"
5. Close the conversation Summarize Male as recommendation	² "that gives you should an you think about the future?" "that a children you and meaning to your like?" "If you? Bence uses to of neurons. have made would you be willing to go through for the
Oreck in with patient Aftern commitment	possibility of more time?" "You much do the people desset to you knew about your priorities and wishes for your Case?"
6. Document your conversation	"Having tabled about all of this, what are your hopes for your health?
7. Communicate with key clinicians	a) "Yes hearing yes say that knewlip important to yee and the yeu are haping for Knowing that is mond, and what is invox along your directs, investmental that we this will help us make sure that your care enfects what's important to yee. Now does this years are to year"
	"I will do everything I can to support you through this and to make sure you get the best care possible."

Case Study Update

John was admitted to the local hospital with acute COPD exacerbation. He was shortly transferred to the ICU due to increasing oxygen demand, elevated heart rate, and low blood pressures. He was placed on high flow nasal cannula, given IV antibiotics and corticosteroids.

To better support John, the ICU intensivist consulted the Palliative Care Team to discuss goals of care.



[C, 2020]



Step 2 - Assess Understanding and Preferences				
ASSESS	"To make sur of what's ha "How much i discuss toda	e I share information that's helpful to you, can you tell me your understanding ppening with your health now?" nformation about what might be ahead with your health would be helpful to ay?"		
Under	standing	I know I have bad lungs and I just don't feel like I used to. Some things are harder than they used to be. My husband/wife has to run errands with me now.		
Inform Prefere	ation ences	I want to know everything.		
DSI		(Ariadne Labs et al., 2023) PSITY		



Prognosis Phrases

- Time prognosis
 - Discuss prognostic information as a range: days to weeks; weeks to months; months to years
- Functional Prognosis
 - "I think that your productive cough will improve, but I think you will need oxygen and I am concerned that this is as strong as you are going to feel"
- Unpredictable Diagnosis
 - "COPD is unpredictable OR it can be difficult to predict what will happen with your illness. People can life well for years, but sometimes things can happen quickly. I think we need to be prepared for a crisis, or sudden event in which we may be confronted with some difficult decisions"

Step 4 - Explore Key Topics

- Goals
- Fears and worries
- Sources of strength
- Critical abilities
- Tradeoffs
- Family



5	Step 4 - Ex	plore	e Key Topics (Cor	nt.)
EXPLORE	"If your health was to get worse, w "What are your biggest worries ?" "What gives you strength as you "What activities bring joy and me "If your illness was to get worse, h possibility of more time?" "How much do the people closes care?"	think about the taning to your lif tow much would t to you know a	future?" fe?" d you be willing to go through for the about your priorities and wishes for your	riadne Labs et al., 2023)
	"Having talked about all of this, w	hat are your ho	pes for your health?	
		Goals	I want to be able to play cards with our friends. I want to spend more time with my family.	
		FearsWorries	I wony about sufficiality. That happened before I went into the hospital and it was temping. I hate feeling more dependent on my spouse and thends.	
		Strengths	My spouse and my hierds give me shength. They help me get through.	
		Function	ET couldn't interact with my spouse, i wouldn't want to live like that. That is the most important thing. I'm not nursing marathons or anything so if things get worse <u>physically</u> for be lik.	1
		Tradeoffs	If going to the hospital means I can feel better when I get short of breath and have more time with my lamity, I want that, If there comes a time when I'm just a vegetable, I wouldn't want to put my spouse through that.	
NDSI	NORTH DAKOTA	Family Understanding	I signed the proxy form already; it is my spouse. I don't want to worry the kids about all of this. Practice Anno their trees	



What Happened to John?

John met with the Palliative Care Team while he was inpatient and found out palliative care is for anyone with a chronic disease. John expressed he was worried he wasn't going to make it home and thought he was going to die in the hospital.

Fortunately, John's condition improved, and he was able to be discharged home on 2L NC. John went to a follow up Palliative Care appointment with his daughter and was able to have an advance care planning conversation and drafted an advanced directive in case he was ever to be hospitalized again and would not be able to make decisions for himself.

John appointed his daughter as his medical power of attorney and chose to make his code status as a DNR/DNI.

If Johns death become imminent, he wishes to die at his home with his family by his side.

Serious Illness Messaging The newest evidence-based practice instrument to assist healthcare providers in speaking with and engaging the public about ACP Goal is to change public perceptions about death and dying so that advance care planning, palliative care, and hospice are types of care people know, want, and request (The John A. Hartford Foundation & Cambia Health Foundation, 2022) 1. Talk up the benefits Present choices for every step 2. 3. Use stories that are positive and aspirational 4. Invite dialogue Invoke a new team of people that are ready to help 5. Serious Illness Talking to the Public About Advance Care NDSU NORTH DAKOTA Messaging Toolkit Planning, Palliative Care and Hospice

Serious Illness Messaging

What We Assume	What Research Shows
That people without direct experiences think like people who have a serious illness	Having a serious illness changes your perspective and values. So when we talk to the lay public, we need to use an approach that works for lay people who don't have experience.
That most people would be accepting of death if they learned more about how great hospice is.	Only about 10% of the lay public is interested in 'death- positive' talk. The rest aren't interested, and avoid reading about hospice ("I'll worry about that when I have to")
That people have had positive experiences with medical care for serious illness.	The most common story about serious illness care we heard in our focus groups was being in a dingy conference room in a hospital, and hearing from a doctor they had never met before that their parent (or sibling, or friend)
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Advance Directive vs. POLST

	Healthcare Directive	POLST Paradigm Forms
Population	All adults >18 y.o.	Any age, serious illness, at end of life or frailty
Time Frame	Future care/future conditions	Current care/current conditions
Where Completed	Any setting, not necessarily medical	Medical setting
Resulting Product	Healthcare agent appointed and/or statement of preferences	Medical orders based on shared decision making
Healthcare Agent Role	Cannot complete	Can consent if patient lacks capacity
EMS Role	Does not guide EMS	Guides EMS as a medical order
Portability	Patient/Family Responsibility	Healthcare Professional Responsibility
Periodic Review NORTH DAKOTA STATE UNIVERSITY	Patient/Family Responsibility	Healthcare Professional Responsibility
		(National POLST, 2019)



Role of Advance Care Planning Facilitators

- Advance care planning facilitators are certified in advance care planning allowing them to have the knowledge and skills to facilitate advance directive discussion.
 - Explores the patient's story to gain insight into values, goals, and beliefs
 - Notes and questions for providers
- Spend >1.5hrs with patient following a script
- Patients that engaged with advance care planning facilitators were more likely to use hospice.
- · Numerous facilitators within the state




Honoring Choices® North Dakota

- https://www.honoringchoicesnd.org
- Vision: The health care choices a person makes becomes the health care the person receives
- Goal: To assist communities develop a successful advance care planning process
- Objectives:
 - Promote advance care planning through community and professional outreach and education
 - 2. Promote standardization of advance care planning
 - 3. Establish base of financial support

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Billing and Coding

- 99497
 - First 30 minutes
 - Needs to be > 16 minutes
 - Patient, family, and/or surrogate
 - Discussed ACP including advance directives and
 - Completion of advance directives is not required
- 99498
 - Next 30 minutes
 - List code separately

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CPT Codes	Billing Code Descriptors
99497	Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; first 30 minutes, fixed-so-face with the patient, family member(s), and/or surrogate
99498	Advance care planning including the explanation and discussion of advance directives such as standard forms (with completion of such forms, when performed), by the physician or other qualified health care professional; each additional 30 minutes (List separately in addition to code for primary procedure)

ACP Minutes	CPT Code & Units
less than 15	Don't bill any ACP services
16-45	CPT code 99497 (1 unit)
46-75	CPT code 99497 (1 unit) and CPT code 99408 (1 unit)
76-105	CPT code 99497 (1 unit) and CPT code 99498 (2 units)

Key Take Aways

- Benefits of ACP and AD reviewed
- Barriers to ACP and AD reviewed
- Comprehensive Review of the Serious Illness Conversation Guide
- Review of Serious Illness Messaging
- Review use of POLST
- Role of ACP facilitators
- Honoring Choices and ACP resources

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APPENDIX S: EXECUTIVE SUMMARY

Advance Care Planning: Implementing Online Education for Rural Primary Care Providers

Introduction

Advance care planning can assist patients and their families in navigating personal and medical choices at the end-of-life; however, these conversations often transpire too late. Primary care providers frequently develop extended relationships with their patients, especially those with chronic disease, creating opportunities throughout a patient's lifespan to determine when advance care planning conversations could be initiated. Approximately two-thirds of chronically ill patients do not have an advance directive, 41 million people die from chronic disease annually, with 17 million individuals passing before age 70. Despite the alarming number of people living with chronic disease and documented benefits of advance care planning, advance directive completion remains low.

Purpose

For the last two decades, age-adjusted death rates have been higher in rural areas compared to urban areas. Rural areas are also known to have an increased shortage of healthcare professionals who can provide primary care, dental care, and mental health services. With the shortage of medical specialties in rural areas, specifically certified advance care planning facilitators, the responsibility of leading advance care planning conversations rests upon rural primary care providers. Providing educational evidenced-based practice opportunities for rural primary care providers about advance care planning and advance directives can positively affect patient outcomes and improve satisfaction of care at end-of-life in rural communities. The purpose of the practice improvement project was to improve rural primary care providers knowledge and confidence in facilitating advance care planning discussions and to increase the completion rate of advance directives among adults living with chronic disease(s) seen within the rural primary care setting.

Project Design

The project's design methodology was a quantitative, quasi-experimental study using a convenience sample of eight primary care providers employed within a federally qualified health center. The practice improvement project included a one-hour online advance care planning educational webinar for primary care providers in the rural primary care setting in rural North Dakota. Additionally, rural primary care providers completed pre- and post-surveys assessing their knowledge and confidence in leading advance care planning conversations with their patients. Participants were also provided with an advance care planning toolkit for future utilization in their clinics to guide advance care planning conversations.

Results & Conclusions

Out of eight eligible primary care providers, four participated in the pre- and post-surveys over a four-week period. Confidence Likert scales found the educational webinar improved participants reported knowledge, confidence, and understanding of the *Serious Illness Conversation Guide* and advance care planning facilitators. The results also indicated that participants were more motivated to initiate advance care planning conversations with their patients after viewing the one-hour educational webinar. Observations from the practice improvement project support the benefit and importance of providing advance care planning education for rural primary care providers.

Recommendations

- A future target audience to include graduate nursing students enrolled in a doctoral family nurse practitioner program.
- Future participants should be offered monetary incentive to motivate participation instead of continuing education
- credits.
 Require participants to complete the pre- and post-surveys to gain access to the posttest to obtain continuing education credit or monetary gift.
- Collaborate with advance care planning facilitators, a key stakeholder, or subject matter expert for evidenced-based educational content development.
- Continue to provide advance care planning education in an asynchronous online format for healthcare providers.