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Primary Care Provider Adherence to Quality Measures: Advance Directives

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Primary Care Provider Adherence to Quality Measures: Advance Directives

by

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A DNP Project submitted to the faculty of the College of Nursing in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice in the Graduate College at the

Mississippi University for Women

Graduate Committee Approval

The Graduate Committee of Hayden Stokes Kilgore

hereby approves her research project as meeting partial

fulfillment of the requirements for the degree of

Doctor of Nursing Practice

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Primary Care Provider Adherence to Quality Measures: Advance Directives

Hayden S. Kilgore, FNP-C

Mississippi University for Women, 2023

Supervising Faculty: Dr. Shonda Phelon

Abstract

The need for advance directives is increasingly relevant to the current healthcare system. Advancing technology has transformed chronic, terminal illnesses to conditions that cause slow debilitation. Individuals now enter into care alone more often than in the past. With no advance directive in place, families and/or healthcare providers are forced to make difficult healthcare decisions alone. Advance-care-planning affords the opportunity for disease detection and improving patient outcomes while lowering overall costs; however, such conversations are not easy to approach. Therefore, the purpose of this project was to deliver education to primary care providers in rural Mississippi to improve provider attitudes, knowledge, and behavior regarding the advance directive in order to improve current return rates of the advance directive. An educational session was conducted with pre- and post-surveys. Descriptive and inferential statistics were utilized to analyze the responses to the two surveys as independent samples. Standard statistical analysis was performed on these results, and it was determined that the project goals were met. Primary care provider knowledge rates increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 4.667, p = 0.031$). Self-reported competency skills increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.143, p = 0.008$). The percentage of respondents who reported lacking competency or skills decreased from 85.7% to 14.3%, and provider compliance increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.778, p = 0.005$). It was concluded improving knowledge, attitudes, and behaviors of

primary providers with respect to advance directives could improve the quality of care provided for residents in Mississippi.

DEDICATION

I dedicate this project to supportive wonderful family. To my husband, Tyler, thank you for encouraging me every step of the way. You have seen me through each degree for the last nine years. I could not have made it without your patience and love. To my William, you have driven me to complete one of my biggest dreams. I pray one day that you realize how hard Mommy worked for you. I am so grateful you were present on this journey with me- you have made it that much sweeter. To my Mama and Daddy, “thank you” just does not seem like enough. The two of you taught me that the degree hanging on the wall doesn’t define a person- and I am so grateful for that. Mama, I am grateful to have chosen your career path as a nurse. I will always carry your values of compassion and caring throughout my journey. Daddy, I am so glad you instilled in me the importance integrity and honest work. Because of you, I have been adequately prepared to take on life’s many challenges-including this one. Thank you both for investing in my life-long dreams and watching me grow into the Christian, wife, mother and nurse practitioner you knew I could be. To Nana, thank you for being my constant cheerleader not only through this program but any endeavor in life. I owe all that I am today to each of you. Lastly to Dr. Ard and the clinic staff at Noxapater, thank you for always placing an emphasis on a team-based approach to patient care. Each of you has picked me up from my lowest and helped me to see the end of this race. I appreciate you all more than you know.

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Introduction and Background

The Patient Self-Determination Act (PSDA) is a federal law passed by Congress in 1990 after a series of cases involving the withdrawal of life-supporting care when the wishes of the patient regarding such care were unknown. The issue had been controversial for two decades; one prominent court case involved a legally incompetent patient who was not actively dying and wishes were the subject of debate. The PSDA amended titles XVII (Medicare) and XIX (Medicaid) of the Social Security Act to require hospitals, clinics, skilled nursing facilities, home health and hospice agencies to inform patients of their rights to: (1) make decisions concerning their medical care; (2) occasionally inquire if a patient executed an advanced directive and document the patient's wishes regarding their care; (3) show no discrimination against persons who have executed an advanced directive; (4) ensure valid directives are implemented to the extent permitted by law, and (5) provide educational programs for medical staff and patients on ethical issues concerning the patient self-determination act and advanced directives (Patient Self-Determination Act, 1990).

The PSDA defines an advanced directive as, "written instruction regarding the provision of health care when the patient is incapacitated". Two advanced directives are statutorily recognized in Mississippi. These are Individual Instruction and Power of Attorney for Health Care (PAHC). Individual Instruction is a patient's direction regarding health care decisions for the individual. The instruction may be written or verbal. The patient may designate someone to make health care decisions due to temporary illness or injury; this is known as a PAHC. The PAHC must be properly witnessed, must authorize the agent to make health care decisions, and must contain the standard language set out by law, but may contain any instructions the patient

wishes. The advance directive should provide clear guidance for health care providers to ensure wishes are met and avoid unwanted procedures or life-saving measures (Kelley, 1995).

Medicare beneficiary spending accounts for about 25% of total Medicare spending in patients' final year of life. The fact that a disproportionate share of Medicare spending goes to beneficiaries at the end of life is not surprising given that many patients have multiple comorbidities and often use costly services including inpatient hospitalizations, post-acute care, and hospice in the year leading up to their death (Cubanski, 2017). Nicholas et al. (2020) found advance directives specifying wishes in end-of-life care were associated with significantly lower levels of Medicare spending, lower likelihood of in-hospital death, and higher utilization of hospice care. Although research has indicated advance directives work to lower end of life spending, they remain underutilized.

Advance care planning discussions play a crucial role in advance directive completion. Advance care planning offers information on key elements that help patients make decisions about end-of-life care. Accountable Care Organizations (ACOs) are well positioned to support end-of-life care planning processes. Within the ACO model, payment is tied to achievement of cost savings and quality measures, thereby incentivizing providers to coordinate cost conscious and high-quality care across the care continuum for their patients (Ahluwalia et al., 2017). In order to help meet quality measures for an ACO, many clinics schedule Medicare Annual Wellness Visits (MAWV). During this visit, patients are given formal information and education regarding an advance directive. Advance care planning is an ongoing process that requires multiple conversations with the patient outside of the MAWV. While primary care clinics have the ability to implement an intervention to engage patients in advance care planning, many providers find advance care planning conversations difficult and believe they have

inadequate training to assist in the process of end-of-life care communication (Scholten et al., 2018). The MAWV essentially affords the opportunity for disease detection and improving patient outcomes while lowering overall costs. The Centers for Medicare and Medicaid Services (CMS) require that certain elements be addressed at each MAWV which includes advance care planning (Moore et al., 2018). Following the passage of the PSDA, health care providers receiving Medicare or Medicaid funding are required to provide patients with information regarding their rights to participate in and to direct health care decisions affecting their treatment. As a result, the use of advance directives has become more common, though their use remains underutilized. Major advances in treatment and in research have had a profound impact on improving patient care and extending quality of life, reflected directly by the increasing average age of the population in both developed and developing countries (Teoli & Ghassemzadeh, 2022).

Problem statement

In the last year of life, Medicare beneficiary spending accounts for about 25% of total Medicare spending. The fact that a disproportionate share of Medicare spending goes to beneficiaries at the end of life is not surprising given that numerous have multiple comorbidities and often use costly services including inpatient hospitalizations, post-acute care, and hospice in the year leading up to their death (Cubanski, 2017). It is well-known that advance directives specifying wishes in end-of-life care are associated with significantly lower levels of Medicare spending, lower likelihood of in-hospital death, and higher utilization of hospice care. Although it has been proven that advance directives work to lower end of life spending, they remain underutilized (Nicholas et. al, 2011). Therefore, the purpose of this DNP project was to deliver education to primary care providers in rural Mississippi to improve provider attitudes,

knowledge, and behavior regarding the advance directive to surpass current return rates of the advance directive.

Goals

The overall goal of this quality improvement project was to assess and improve knowledge, attitudes, and behaviors of primary care providers towards advance directives (AD) to improve return rates of the AD. The development a “flag” system served to remind clinic staff to notify the patient the advance directive has not been returned. Three months following project implementation, the overall knowledge, attitudes, and behaviors of primary care providers regarding the advance directive was expected to improve by at least 50%. A secondary goal was to increase documentation of Ads, including completion and return, and was projected to increase by 25%.

Pre- and post-surveys surrounding the education sessions were administered to determine the comfort level of providers. The goal of these surveys was to determine a change in providers’ comfort level in regard to conducting patient conversations about advance directives. A planned educational program with pre and post surveys identified individual weaknesses and strengths of the selected population This also identified lack of education concerning general information as a universal gap among all providers (Oriakhi et al., 2019). Collaborating with administration to form a template to create a “flag” system reminded the provider or assigned staff to notify the patient(s) concerning missing documentation. Ensuring the correct documents were completed and returned provides for better patient outcomes should the patient become ill or an accident occur.

PICOT

Can assessing knowledge, behaviors, and attitudes of primary care providers regarding advance directives along with staff managed patient reminders improve return rates for advance directives within the clinic setting following a formal educational session?

Terms to be defined include advance directive, Medicare, patient, and primary care provider.

Advance directive

Theoretical: According to the American Cancer Society, an advance directive is a legal document that explains what medical decisions a patient wants made if he or she is unable to make a decision due to illness (American Cancer Society, 2019, Advance Directives section).

Operational: For the purposes of this study, an *advance directive* is a document by which a person makes provision for health care decisions if, in the future, he/she becomes unable to make those decisions.

Medicare

Theoretical: Medicare is a federal system of health insurance for people over 65 years of age and for certain younger people with disabilities. It is often confused with Medicaid (Blackwell, 2022).

Operational: For the purposes of this study, *Medicare* will be defined as a federal insurance provider that sets forth quality measures.

Patient

Theoretical: A patient is an individual awaiting or under medical care and treatment (Merriam-Webster's Dictionary, 11th ed).

Operational: For the purposes of this study, *patient* will be defined as a person who is under the care of a primary care provider.

Primary care provider

Theoretical: Primary care providers are clinicians who direct the delivery of personal health services to patients and are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community (Donaldson et al., 1996).

Operational: For the purposes of this study, *primary care provider* will be defined as the clinician rendering health care services to the patient to prevent, treat and manage illness or chronic disease.

Conceptual Framework

This study was guided by Albert Bandura's Self Efficacy Theory. This model is dynamic and suggests high self-efficacy is linked with numerous benefits to daily life, such as resilience to adversity and stress, healthy lifestyle habits, and educational achievement (Wilde & Hsu, 2019). The Self-Efficacy Theory originally derived from Bandura's research which would later become the Social Cognitive Theory. Self-efficacy is defined as an individual's perception of one's ability to perform particular behaviors through four processes including cognitive, motivational, affective and selection processes. Through cognitive comparisons of one's own standard and knowledge of performance level, patients will choose what challenges they have to meet and how much effort is needed to carry out or overcome those challenges. Motivation based on goals leads to perseverance to accomplish their goals. Perceived self-efficacy determines their level of motivation. According to Bandura, "motivation, performance, and feelings of frustration associated with repeated failures determine affect and behavior relations" (Jason, 2021). In a

study by Glissen et al. (2020) a total of 196 nurses participated in a randomized controlled cluster study which found knowledge was not significantly associated with advance care planning practices; however, self-efficacy was. The study concluded increase in self-efficacy was statistically associated with an estimated 32% increase in the number of advance directive discussions. Nurses' engagement in advance care planning practices was primarily associated with their self-efficacy rather than their knowledge.

Nolan et al. (2008) completed a descriptive quantitative study which compared the preferences of patients with Amyotrophic Lateral Sclerosis (ALS) for involving family in health care decisions at the end of life with the actual involvement reported by the family after death. Researchers understood persons with ALS differ from those with other terminal illnesses in that they commonly retain capacity for decision making close to death. The role patients would opt to have their families play in decision making at the end of life may therefore be unique. Eighty-seven percent of patients issued an advance directive for this study. Patients who opted to make health care decisions independently were found most likely to have their families report that decisions were made in the style that the patient preferred. Those who preferred shared decision making with family were more likely to have their families report that decisions were made in a style that was more independent than preferred. Researchers found the structure of advance directives may suggest to families that independent decision making is the ideal, causing them to avoid or underreport shared decision making. Bandura believed that self-efficacy plays a major role in self-regulation in appraising and exercising control over potential threats. Some may perceive the death and dying process as a threat. Through the selection process, patients work through end-of-life care and exercise control over plans as they can judge their capability of handling such challenging activities.

Review of Literature

There were multiple studies that supported the need for implementation of this practice change project. The overarching theme through current literature found as suspected: patients are poorly educated about end-of-life planning and there is a knowledge gap in advance care planning.

Goswami et al. (2020) performed a quality improvement project aimed to determine if advance-care planning (ACP) discussions initiated by an advanced practice provider (APP) would enhance patient-centered end-of-life care. This pilot quality improvement project focused on enhancing patient-centered end-of-life care, as evidenced by an increase in advance directive completion and/or change in code status of patients referred to the Department of Investigational Cancer Therapeutics (ICT). A total of 40 participants in the ICT with advanced cancer enrolled in a clinical trial were selected for study participation based on the absence of a scanned advance directive in the individual patient's electronic health record (EHR).

Following an initial introduction and physical examination, the APP proceeded with the ACP discussion with patients by reviewing their current disease status, their values, their goals of care, and the blank advance directive documents. Patients had the option to complete the advance directive documents at the time of the visit, with assistance from a social worker, or to review the documents again and complete them at the next visit. Patients who expressed a clear understanding related to disease status, values, and goals of care, as reflected in their willingness to make a change in code status were referred to the physician. The physician then placed a DNR order in the EHR. The measurable outcome of this QI project was an increase in the advance directive completion rate and changes in code status via ACP discussions.

Following the eight-week trial, the expected outcome was that the number of completed advance directives would increase from 20% to 40% or greater for the sample population; this goal was met. These results demonstrate that ACP discussions by the APP were linked with increased advance directive completion and change in code status of patients with advanced cancer (Goswami et al., 2020).

Courtright et al. (2017) performed a randomized trial of expanding choice sets to motivate advance directive completion. Evidence suggests that advance directives may improve end-of-life care among chronically ill patients; however, improving completion rates remains a challenge. Although completing the advance directive may help patients avoid unwanted, costly care at the end of life, many believe the advance directive has failed to live up to its promise due to patient, provider, and health system barriers. This particular study tested the influence of increasing the number of options for completing an advance directive among chronically ill patients. For this study, 316 patients receiving dialysis across 15 dialysis centers were randomized to receive the option to complete a brief AD form or expanded options to include a brief, expanded or comprehensive AD. Patients were allowed to decline to complete the AD or take their selected version home. Patient reported measures were used to assess demographics, previous end-of-life discussions, quality of life and functional status at baseline. The primary goal of the study was to have returned, completed advance directives. The trial found that offering more options for advance directives may help overcome the lack of motivation for completion; however, initial engagement is insufficient for the majority of chronically ill patients. This trial highlights the need for scalable interventions that facilitate AD completion for motivated patients. Researchers conclude further research should consider expanding patients' options for the modality of completing advance directives.

In the year 2017, more than 46 million people were living with dementia worldwide. That number is estimated to increase to 131.5 million by 2050. Physical, psychological, and financial burdens make for an enormous challenge that caregivers face (Park & Kim, 2022). Schmidhuber et al. (2017) conducted a pilot study among persons with dementia and their caregivers. The researchers sought to find if advance directives support the autonomy of a person living with dementia. A total of 53 patients and 53 informal caregivers completed a questionnaire of two parts- one for the person with dementia and one for the caregiver. The questionnaire included the following 5 topics: (1) information acquisition about advance directives; (2) reasons for or against an advance directive; (3) difficulties in writing an advance directive; (4) knowledge about the possibilities and limitations of advance directives; (5) benefits and concerns regarding an advance directive. Sociodemographic and medical parameters were also captured. Both the person with dementia and caregivers reported the following the main reasons for writing an advance directive: (1) the possibility of self-determination, (2) wish to avoid undesired misery by unwanted treatments, and (3) self-preservation during the end-of-life period. Eighteen participants listed the main reason for not using the AD was that they never thought of it as an instrument and therefore never considered it as an option. In total, 66% of participants reported having written an advance directive. The results of the survey illustrate there is a general lack of specific knowledge regarding advance directives. Researchers concluded it is necessary to optimize public information and education concerning advance directives for persons with dementia.

Bond et al. (2018) performed a case-control study to assess the association of outpatient advance care planning with advance directive documentation, utilization, and cost of care. The study compared rates of documentation with model regression and conducted a difference-in-

difference analysis using linear models for utilization and cost. The study found advance care planning was associated with completion of Healthcare Power of Attorney and Practitioner Order for Life Sustaining Treatment documentation. The primary effect was to relieve anxiety and improve shared decision-making. Adjusted healthcare costs were \$9,500 lower for those in the advance care planning group. The study concluded advance care planning increases documentation and is associated with reduction in overall costs driven by a reduction in inpatient utilization.

Many people in the United States avoid or delay end-of-life care planning and roughly 26% - 37% have completed an advance directive. Previous studies related to advance care planning or ADs have primarily focused on the elderly or those with terminal illnesses such as cancer, cardiopulmonary disease, human immunodeficiency virus, stroke, or dementia. These studies stress the importance of ACP as it relates to aging, chronic conditions, and its impact on quality of life and healthcare resource allocation, yet relatively fewer studies have examined the role of ACP in a younger population. Recent studies explored young adults' knowledge, attitudes, and preferences regarding advance care planning. Results revealed limited knowledge but expressed a willingness to learn. Other studies show the majority of young adults never considered advance care planning indicating likelihood of limited knowledge and exposure to ADs.

In 2020, Young et al. enrolled 30 graduate students from a university in New York for a dual objective study. The goal of the study was to examine the perspective of young adults towards advance directives related to life sustaining treatment and care options. Data were collected using a structured survey questionnaire and Medical Orders for Life-Sustaining

Treatment (MOLST) form. Researchers found that a majority of participants (87%) reported being comfortable discussing death and end-of-life care and an equal proportion would prefer to make their own decisions about end-of-life care, while 63% of participants specifically reported being comfortable discussing their own death and end-of-life care. In previous research, participants reported being interested in receiving more information on ACP options. The researchers note their work mirrors previous findings that young adults report high self-efficacy with respect to planning and making difficult decisions regarding future treatment and care options (Young et al., 2022).

Research shows clinician-focused efforts to increase AD completion, such as Medicare payments for advance care planning (ACP), have been ineffective. In contrast, patient-facing interventions that enable independent completion of ADs show early promise. Self-service platforms also reveal changes in demand for ADs and preferences for future care. Auriemma et al. conducted a prospective cohort study to quantify changes in patient completion of ADs and expressed preferences during the coronavirus disease 2019 (COVID-19) pandemic by monitoring users of a web-based AD platform from January 2019 to April 2020. They evaluated monthly rates of AD completion, number of goal-setting modules completed, and distributions of preferences for care. During the COVID-19 period, researchers saw a 4.9-fold increase in monthly users in the COVID-19 period compared with the pre-COVID-19 period. This study revealed an increase in online AD completion as well as more comprehensive completion since the onset of the COVID-19 pandemic in the absence of coexistent efforts to increase uptake of the ACP platform. Researchers note increased demand for AD documentation might be explained by an increased sense of importance owing to COVID-19-induced hospital visitation restrictions, demands for providers to promote ACP, or because COVID-19 has provided new

motivation for patients who have long wanted to complete ADs but previously failed to do so (Auriemma et al., 2020).

Trobiano (2022) completed a quality improvement project in an ambulatory heart failure clinic to implement and monitor the effectiveness of a multistage approach of documenting advance care planning discussions and the completion of advance directives. A retrospective chart review between September and November 2020 revealed a 15% AD completion rate with no documentation of ACP discussions. The stakeholders instituted evidence-based workflow changes to attain the goals of the project to include integration of an ACP discussion and end-of-life goals documented via the utilization of smart phrases within the electronic health record (EHR). An inpatient heart failure census was reviewed daily for patient enrollment. Smart phrase utilization reports were pulled weekly from the EHR and ADs were manually totaled on a weekly basis from the EHR. The project yielded a 95% consistent trend in documentation of ACP conversations. There was a 3% increase in AD completion in comparison from the previous year. The researcher writes, “the aim of this project was to standardize ACP discussions and increase AD completion rates”. While that goal was met, Trobiano further notes translating evidence into practice was attainable, but highlights the need to engage with primary care providers (PCP) to further address the practice gap.

Evidence indicates numerous stakeholder advantages for completion of the advance directive. Stakeholders include the patient, the healthcare provider, and Medicare. Completion of an advance directive supports person-centered care while keeping the patient self-efficient in making end-of-life decisions. Advance care planning shows a reduction in unnecessary Medicare spending at near end of life along with prevention of unwanted treatment for the patient (Hemsley et al., 2019).

Project Implementation/Methodology

This quality improvement project regarding primary care providers' adherence to quality measures related to advance directives was adherent to Mississippi University for Women's guidelines with approval from the Mississippi University for Women Institutional Review Board obtained prior to implementation. Convenience sampling was utilized for data collection. Participants were recruited by email. An educational session was conducted, which included an assessment survey and PowerPoint overview of the problem. Three months later, participants were asked to complete a post-survey. Current CMS guidelines for quality measures were reviewed along with education regarding the care gap in advance directive completion. Due to low initial participant turnout to the in-person educational session, materials were emailed to those who were unable to attend for completion. The pre- and post-surveys assessed knowledge, behaviors, and attitudes towards advance directives.

Tools/Instrumentation

The document entitled, "Provider Survey: Knowledge, Attitude, & Behaviors" was utilized as the pre- and post-survey for the use of this study. The survey utilized was developed by the researcher and therefore, only has face validity. Each survey was reviewed by the project advisor and committee members prior to application for IRB exemption (see Appendix A for survey).

Evaluation Methods

To determine the effectiveness of the project implementation, statistical analysis was conducted on the survey results. Data was first compiled in Microsoft Excel. The data were sent to a professional statistician to aide in statistical analysis using inferential statistics. Data was collected from seven providers for the pre-survey and seven providers for the post-survey.

Subsequent analyses were performed using IBM SPSS statistical software. The project had two goals: improving provider knowledge base and modifying attitudes and behaviors regarding the advance directive and improving the return rate of advance directives in the clinic setting.

Project Timeline

The original proposal was completed in the fall semester of 2021. The researcher continued to review literature and finalized the provider survey during the spring semester of 2022. Application for MUW IRB was submitted in March 2022. Once the IRB approval was granted, a day was scheduled for the formal education session which would take place in mid-July 2022. Post surveys were emailed via secure link to each participant three months later. After data collection was completed, data was compiled into an excel spreadsheet and sent to a statistician to aide in interpretation of findings. Results were compiled in January 2023. Final defense of the project took place at the closure of the spring 2023 semester.

Results

This quality improvement project was conducted with the goal of improving primary care providers' knowledge, attitudes, and behaviors regarding advance directives. A secondary goal was to increase the patient return rate of the advance directive. An educational session was conducted with pre- and post-surveys. Descriptive and inferential statistics were utilized to analyze the responses to the two surveys as independent samples.

Outcomes

The educational session was attended by three primary care providers. The remaining four primary care providers were sent pre-survey and study materials via email. Summary results from the pre-survey and post-survey are shown in Table 1. Inferential statistics used to answer each

research question follow Table 1. Chi-square tests and Spearman rank correlations were the primary inferential tests utilized.

Table 1. Survey response frequencies

Survey Question	Pre-Test (n=7)	Post-Test (n=7)
Question 1: How knowledgeable are you with educating patients about advance directives?		
Not knowledgeable	0.0%	0.0%
Somewhat knowledgeable	85.7%	28.6%
Very knowledgeable	14.3%	71.4%
Question 2: Have you experienced benefits to educating patients about advance directives?		
Yes	71.4%	100.0%
No	28.6%	0.0%
Question 3: How important is it for you to educate patients about advance directives?		
Not at all important	0.0%	0.0%
Not so important	14.3%	0.0%
Somewhat important	14.3%	0.0%
Very important	42.9%	57.1%
Extremely important	28.6%	42.9%
Question 4: How important is it for you to ask the patient if he or she has completed an advance directive?		
Not at all important	0.0%	0.0%
Not so important	0.0%	0.0%
Somewhat important	42.9%	0.0%
Very important	28.6%	28.6%
Extremely important	28.6%	71.4%
Question 5: To what extent would it be beneficial for you to have education regarding how to		

educate patients on the importance of completing and returning advance directives?		
Not beneficial	0.0%	0.0%
Somewhat beneficial	42.9%	14.3%
Very beneficial	57.1%	85.7%
Question 6: Do you personally educate patients about advance directives in your practice?		
Yes	57.1%	100%
No	42.9%	0.0%
Question 7: Do you feel you lack communication competency or skills to educate patients about advance directives?		
Yes	85.7%	14.3%
No	14.3%	85.7%
Question 8: Do you routinely check to verify if the patient has an advance directive in the chart?		
Yes	28.6%	100.0%
No	71.4%	0.0%
Question 9: Do you feel comfortable discussing advance directives with patients?		
Yes	57.1%	100.0%
No	42.9%	0.0%

One of the first topics covered in the educational session was perceived barriers to discussion regarding and completion of the advance directive. Providers verbalized a potential need for formal education, lack of general knowledge and poor communication competency when discussing the advance directive. Everyone on a patient's health care team should ask what the patient wants; however, primary care providers are ideally suited for advance care planning because it builds on the long-term relationships already established with patients. Self-reported knowledge rates (survey question 1) increased significantly from pre-survey to post-

survey ($\chi^2(1, N = 14) = 4.667, p = 0.031$). The percentage of respondents who reported being “Very knowledgeable” increased from 14.3% to 71.4%. Ratings of the importance of patient education (survey question 3) did not significantly change between pre-survey and post-survey ($\chi^2(1, N = 14) = 2.343, p = 0.504$). The percentage of respondents who reported educating patients being “extremely important” increased from 28.6% to 42.9%. However, due to the small sample size, this difference was not enough to be statistically significant. While reviewing literature regarding the care gap with advance directives, a common theme of concern was lack of provider knowledge and confidence with end-of-life discussions. A large portion of this project was dedicated to improving provider knowledge base and provoking self-reflection of personal attitude and behaviors to better serve patients and meet guidelines set forth by CMS. Self-reported competency skills (survey question 7) increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.143, p = 0.008$). The percentage of respondents who reported lacking competency or skills decreased from 85.7% to 14.3%. Provider compliance (survey question 8) increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.778, p = 0.005$). The percentage of respondents who reported routine verification increased from 28.6% to 100.0%. Self-reported ratings of comfort (survey question 9) increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 3.820, p = 0.050$). The percentage of respondents who reported feeling comfortable increased from 57.1% to 100.0%. Based on pre-survey responses, there was significant correlation between knowledge (survey question 1) and comfort (survey question 9) ($r(7) = 0.354, p = 0.437$). Given that the post-survey responses for comfort were constant (e.g., all responses are “yes”), it was not possible to analyze the correlation between knowledge and comfort. There are three significant correlations between survey items on pre-

survey responses. Significant correlations include Q3/Q4 ($r(7) = 0.891$, $p = 0.007$), Q3/Q8 ($r(7) = 0.828$, $p = 0.021$), and Q4/Q8 ($r(7) = 0.837$, $p = 0.019$), and Q6/Q9 ($r(7) = 1.000$).

Of note is the perfect correlation between Q6 and Q9. All respondents who reported talking to their patients about advanced directives also reported feeling comfortable doing so.

There are no significant correlations between survey items on post-survey responses.

Correlation matrices are shown in Tables 2 and 3.

Table 2. Correlation matrix for pre-survey responses

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Q1	Correlation Coefficient	1.000	.258	.535	.540	.354	.354	.167	.645	.354
	Sig. (2-tailed)	.	.576	.216	.211	.437	.437	.721	.117	.437
Q2	Correlation Coefficient	.258	1.000	.000	.251	.091	.091	-.258	.400	.091
	Sig. (2-tailed)	.576	.	1.000	.587	.846	.846	.576	.374	.846
Q3	Correlation Coefficient	.535	.000	1.000	.891**	.076	.454	-.535	.828*	.454
	Sig. (2-tailed)	.216	1.000	.	.007	.872	.306	.216	.021	.306
Q4	Correlation Coefficient	.540	.251	.891**	1.000	-.153	.153	-.540	.837*	.153
	Sig. (2-tailed)	.211	.587	.007	.	.744	.744	.211	.019	.744
Q5	Correlation Coefficient	.354	.091	.076	-.153	1.000	.417	.471	-.091	.417
	Sig. (2-tailed)	.437	.846	.872	.744	.	.352	.286	.846	.352
Q6	Correlation Coefficient	.354	.091	.454	.153	.417	1.000	-.354	.548	1.000**
	Sig. (2-tailed)	.437	.846	.306	.744	.352	.	.437	.203	.
Q7	Correlation Coefficient	.167	-.258	-.535	-.540	.471	-.354	1.000	-.645	-.354
	Sig. (2-tailed)	.721	.576	.216	.211	.286	.437	.	.117	.437
Q8	Correlation Coefficient	.645	.400	.828*	.837*	-.091	.548	-.645	1.000	.548
	Sig. (2-tailed)	.117	.374	.021	.019	.846	.203	.117	.	.203

Q9	Correlation Coefficient	.354	.091	.454	.153	.417	1.000**	-.354	.548	1.000
	Sig. (2-tailed)	.437	.846	.306	.744	.352	.	.437	.203	.

Table 3. Correlation matrix for post-survey responses

		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
Q1	Correlation Coefficient	1.000	.	.548	.300	.645	.	-.645	.	.
	Sig. (2-tailed)	.	.	.203	.513	.117	.	.117	.	.
Q2	Correlation Coefficient	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.
Q3	Correlation Coefficient	.548	.	1.000	.548	.354	.	-.354	.	.
	Sig. (2-tailed)	.203	.	.	.203	.437	.	.437	.	.
Q4	Correlation Coefficient	.300	.	.548	1.000	.645	.	.258	.	.
	Sig. (2-tailed)	.513	.	.203	.	.117	.	.576	.	.
Q5	Correlation Coefficient	.645	.	.354	.645	1.000	.	.167	.	.
	Sig. (2-tailed)	.117	.	.437	.117	.	.	.721	.	.
Q6	Correlation Coefficient	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.
Q7	Correlation Coefficient	-.645	.	-.354	.258	.167	.	1.000	.	.
	Sig. (2-tailed)	.117	.	.437	.576	.721	.	.	.	.
Q8	Correlation Coefficient	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.
	N	7	7	7	7	7	7	7	7	7
Q9	Correlation Coefficient	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.

When reviewing the overall project outcomes, the researcher considered the project goals to be met. Results indicated an overall improvement of provider knowledge, behavior, and

attitudes towards the advance directive among participants. The researcher was able to implement a flag system, which served as reminders to patients, and recorded return rates of the advance directive. There was a 70% increase in return from August 2022 until January 2023.

Project Limitations

When considering implementation of the project, several limitations were noted. The researcher had a smaller than anticipated in-person session. The date scheduled overlapped with a board of medicine meeting, keeping several from attendance. Another limitation was the project's overall small sample size. The project's purpose served as quality improvement for the researcher's facility. There are currently eleven providers employed in the primary care setting, and only seven chose to participate in the study. Lastly, there was a general lack of support from administration with implementation of an EHR change. The researcher had to manually set order-set reminders for each patient needing to return a completed advance directive following the Medicare Annual Wellness Visit.

Implications and Recommendations

Although the sample size was small, the results of this project were statistically significant in numerous areas. There are implications and recommendations that are easily drawn from this quality improvement project. The implications for nursing, nursing research, nursing education, and the community will be further discussed.

Nursing

This project revealed the educational session led to improved knowledge and increased confidence and competency of providers. It is recommended providers continue to educate themselves and facilitate advanced-care-planning in order to promote, advocate for, and protect the rights, health, and safety of each patient.

Nursing Research

This study could undoubtedly be used as a pilot study for future research. It is recommended that future studies obtain a larger, more diverse sample size from a broader geographical location. This study largely consisted of primary care providers in a rural health clinic in southeast Mississippi. It is also recommended that future studies are current with CMS recommendations for advance directives and advance-care-planning.

Nursing Education

The results of this study indicated that provider knowledge, attitudes and behavior improved following formal education. There was also an increase in return of the advance directive within the clinic setting. It is recommended by the researcher that CMS quality measures be addressed as a part of the routine curriculum for all nurse practitioner programs and other graduate level nursing education programs. The researcher also recommends self-reflection, education and training regarding end-of-life decision making and discussion. Possible core subjects for planned, purposeful advance directive education include cultural sensitivity, facilitator skills, interviewing techniques, legal information, patient autonomy, and reasoning and decision making. Evidence to support this could be gathered by future research on this topic. It is also recommended that these findings be disseminated to larger groups of healthcare providers through continuing education events or nursing publications.

Community

Healthcare providers who make a change to their clinical practice because of participation in this study have potential to directly impact the health of their community. Advance care planning communication involves patients, family members, and caregivers along with providers to establish values, goals, and preferences for future care, along with discussions

concerning end-of-life care options. By initiating the conversation, primary care providers are promoting patient autonomy and improving desired outcomes for the future.

Budget/Cost

This project had minimal cost aside from personal time dedicated to its completion. The research was conducted for academic purposes, and the researcher was not reimbursed for time spent on the project. Additionally, the researcher's time spent away from work was not calculated into the project cost as the project was completed during personal time. The gross estimates for travel, material, and complimentary food for participants are calculated below.

Expense	Final Cost
Travel to present project to participants	\$50
Printing materials and PowerPoint distribution	\$100
Lunches for participants	\$300
Total	\$450

Conclusion

This quality improvement project was completed to determine if providers' knowledge, attitude and behaviors improved following an educational session. A secondary goal was to improve return rates of the advance directive within the clinic setting. Current literature and guidelines set forth by CMS were utilized to educate primary care providers in rural Mississippi. A pre- and post-survey were administered. Following statistical analysis, it was determined that

the project goals were met. Primary care provider knowledge rates increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 4.667, p = 0.031$). Self-reported competency skills increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.143, p = 0.008$). The percentage of respondents who reported lacking competency or skills decreased from 85.7% to 14.3%, and provider compliance increased significantly from pre-survey to post-survey ($\chi^2(1, N = 14) = 7.778, p = 0.005$). Therefore, it was concluded that in regard to the advance directive, improving knowledge, attitudes and behaviors of primary providers could improve the quality of care provided for residents in Mississippi.

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Appendix A

Provider Survey: Knowledge, Attitude, & Behaviors

1. How knowledgeable are you with educating patients about advance directives?

Very knowledgeable

Somewhat knowledgeable

Not knowledgeable

2. Have you experienced benefits to educating patients about advance directives?

Yes

No

3. How important is it for you to educate patients about advance directives?

Extremely important

Very important

Somewhat important

Not so important

Not at all important

4. How important is it for you to ask the patient if he or she has completed an advance directive?

Extremely important

Very important

Somewhat important

Not so important

Not at all important

5. To what extent would it be beneficial for you to have education regarding how to educate patients on the importance of completing and returning advance directives?

Somewhat beneficial

Not beneficial

Very beneficial

6. Do you personally educate patients about advance directives in your practice?

Yes

No

7. Do you feel you lack communication competency or skills to educate patients about advance directives?

Yes

No

8. Do you routinely check to verify if the patient has an advance directive in the chart?

Yes

No

9. Do you feel comfortable discussing advance directives with patients?

Yes

No

Appendix B

IRB Exemption

To: Hayden Kilgore and Dr. Shonda Phelon

From: Irene Pintado, IRB Chair *I.P*

Date: 04/22/2022

Project: Primary care provider adherence to quality measure: Advance directives

The Mississippi University for Women IRB committee has determined that your project, Primary care provider adherence to quality measure: Advance directives, is exempt under 45 CFR 46.101 (b)(4). This project is a quality assurance project.

If any changes are made to the study, the Committee must be notified. If the project is still running twelve months after the date of this memo, please be advised that we will need an update for our files.

Good luck with your work!

Appendix C

Search Strategy Map

