Implementation of Advance Directive Screening Education in the Hospital Setting

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Abstract

The Patient Self Determination Act of 1991 mandates that Registered Nurses (RNs) must screen patients for advance directives (ADs) during hospital admissions. When ADs are not completed, there is a possibility that unwarranted and costly treatment options will be offered. Unjustified actions create an environment of financial and emotional load for families and our national healthcare system. Over 39 million Americans are hospitalized each year (65 and older years of age). This will exceed 71.2 million by 2030 (182% increase); nationwide, only 33% of U.S. adults have an AD. To increase AD education among Medicine Intensive Care Unit (MICU) RNs at a large, urban hospital located in southeastern United States, a quality improvement (QI) study was conducted. Prior to the initiation of the Doctor of Nursing Practice (DNP) QI initiative, it was identified that a large percentage of patients admitted to the MICU were not being screened, demonstrated by AD screening completion of 57.21%. Institutional policy required 90%. Interventions were intended to address barriers to completion that were identified in a pre-implementation screening survey. The project was designed and introduced to the MICU participants. Various interventions were created and implemented throughout four PDSA cycles over four months. Fifty chart audits were completed each month from April through November, including pre-implementation and post implementation data. With the implementation of numerous interventions as well as an institutional system change specific to EHR audit requirements, compliance of 90% was achieved. The DNP project site is now equipped to maintain sustainability.

Keywords: advance directives, advanced care planning, inpatient, healthcare power of attorney, quality improvement

Table of Contents

Chapter One: Overview of the Problem of Interest

The purpose of this Doctor of Nursing Practice (DNP) quality improvement (QI) project is to improve advance directive (AD) compliance scores on admission screening questions. AD screening completion in the Medicine Intensive Care Unit (MICU) upon admission is low. A QI initiative will be designed to improve AD screening completion within 24 hours of admission.

According to HRSA (2011), QI consists of systematic and continuous actions that lead to measurable improvements in healthcare services and health outcomes among targeted patient groups. When an organization chooses specific data for QI projects, it adopts standardized performance measures, i.e., screening tools, to improve patient outcomes (HRSA, 2011).

Institute of Healthcare Improvement (IHI) designed the Plan, Do, Study, Act (PDSA) model. This model is a frequently used plan to guide QI studies. For this QI study, PDSA will be used to improve AD screening -completion rates at MICU admission.

According to Kossman (2014), any institution that provides healthcare to Medicare or Medicaid patients must inform them, on admission, about their healthcare decision rights. Patient rights include preexisting ADs discussions, guidance about how to complete ADs, and state laws on ADs. This mandate applies to hospitals, long term care facilities, home healthcare providers, palliative/hospice care centers, and health maintenance organizations (HMO). It does not, however, apply to outpatient healthcare providers or emergency medical teams (EMT) (Kossman, 2014). ACP conversations during admission helps patients and their family members make pre-emptive decisions. AD questions prompt empowering dialogues between patients and nurses.

Background Information

Over 39 million Americans, aged 65 and over, are admitted for medical or surgical treatment each year (Weiss, Berman, Howe, Fleming, 2012). This number may exceed 71.2 million by 2030 (Weiss et al., 2012). Millions of individuals may need to arrange a power of attorney before hospitalization. One variant of power of attorney is ADs.

ADs are care decisions a person would want if unable to speak (National Hospice & Palliative Care Organization, 2017). Such decisions are based on an individual's morals, preferences, and discussions with their loved ones. Patients must prepare ACP documents to maintain autonomy during incapacity or at the end-of-life (Spoelhof & Elliott, 2012). According to Wu, Newman, Lasher, & Brody (2013), AD completion was linked to palliative care, reduced stress at the end of life (EOL), and decreased hospital stay.

Advance care planning (ACP) is preferred in outpatient rather than inpatient settings; however, it may not be feasible. Detering & Silveira (2018) observed that, of 150 studies published from 2011 to 2016, 37% of study patients (n = 795,909) had completed an AD. Completion rates were high among older Americans; approximately 70% completed ADs before death (Detering & Silveira, 2018). According to Detering & Silveira (2018), only 27% of patients with advanced cancer had ACP conversations before death.

Spoelhof & Elliott (2018) described barriers to establishing AD and Healthcare Power of Attorney (HCPOA) in outpatient settings. A HCPOA is an individual selected to represent a patient unable to communicate decisions about their healthcare. HCPOA and AD barriers include lack of knowledge, fear of burdening family, and preference for physician-initiated discussions. Barriers to completion include vague language, proxy issues, unavailable notary, time

constraints, mistrust between provider and patient, prognosis denial, and AD accessibility (Spoelhof & Elliott, 2012).

ACP among inpatient settings is necessary because health circumstances are unpredictable. Inpatient settings have resources that outpatient settings do not. These resources include notaries, case managers, social workers, medical healthcare professionals, including specialists, i.e., cardiologists, pulmonologists, and oncologists. Resource availability creates an environment in which questions can be answered promptly, unlike outpatient settings.

ADs increase the likelihood that a patient's wishes will be honored, which results in less aggressive care, lower healthcare costs and a higher chance of death at home instead of in a hospital setting (Bajracharya, Crotty, Kowaloff, Safran, & Slack, 2016). According to Musich, Wang, & Hawkins (2016), EOL conversations with physicians correlated with 36% lower healthcare expenditures. Patient and family interviews indicated that less aggressive medical procedures (ICU, ventilators, feeding tubes, and resuscitation) were associated with EOL conversations and AD's (Musich et al., 2016).

Significance of Clinical Problem

HCPOA documentation is suboptimal (Bajracharya et al., 2016). Despite low HCPOA documentation, over one-third of U.S. adults have ADs (Crist, 2017). AD documents are distinct from Power of Attorney (PoA) forms but often are completed at the same time. A person may have one document without the other. AD and PoA statistics are low and need improvement. Written ADs, i.e., living wills and healthcare proxies (HCP), permit patients to formalize future healthcare wishes before they reach decisional incapacity (Bajracharya et al., 2016).

AD-screening questions help patients and families engage in difficult discussions on admission. Dialogues between a healthcare provider and/or registered nurse (RN) and a patient

encourage AD and HCPOA completion if not previously discussed. If already completed, a copy must be obtained to be certain that the patient's wishes are correctly recorded. Asking patients AD-screening questions helps bedside nurses determine if there are patient concerns. When patients voice concerns, the nurses provide guidance. This guidance includes the education involvement of patients and family members in decision making. Guidance also includes medical participation to thoroughly explain treatment options (Musich et al., 2016),

The benefit of engaging in AD conversations in hospital settings is the access to resources. For example, the hospital's inpatient services provide a notary 24 hours a day. At any time, these documents can be notarized. A copy of these documents is scanned as an official document in the EHR. The patient receives document copies to share with other providers.

Question Guiding Inquiry (PICO)

The proposed project aims to educate bedside registered nurses (RN) to complete AD screening questions within 24 hours of Medicine Intensive Care Unit (MICU) admission (see Appendix D). The current policy at a large urban hospital setting states that all elements of the admission assessment must be completed within 24 hours of admission (Doerr-Jarosz, 2016). The current policy requires enforcement.

Population & Problem. The population is nurses who work in the project site's MICU. Population age ranges from the mid-20s to late 50s. Educational preparation includes associate and baccalaureate-degrees. Experience ranges from new graduate nurses to over 20 years of experience. Experience varies from entry to executive level. Patients admitted to MICU are not routinely screened for advanced directives as measured by a completion rate below 57.21%. Nurses are expected to enter AD documentation in the EHR.

Intervention. Effective methods for changing clinical practice include face-to-face education, local opinion leader involvement, reminder systems, repeated feedback from the senior medical staff, patient-mediated interventions, and a combination of interventions deployed simultaneously (Strom, 2001). Proposed project interventions include flyers, in-person education, a brochure specific to AD documentation requirements, AD/HCPOA/ACP PowerPoint resource, incentives with educational facts and reminders, and the author's presence in staff meetings, and morning huddles. Interventions will explain: (1) what ADs are, (2) why have ACP conversations, (3) how to hold an ACP conversation, (4) AD importance, (5) common vocabulary, and (6) how to complete ACP question-screening. The author will create and present the interventions.

Comparison. ADs are often insufficiently detailed for healthcare professionals to know they are acting to patient preferences (Kossman, 2014). Having an AD does not guarantee that the patient's wishes will be honored (Kossman, 2014). If ADs are not adequately documented in a designated location in the EHR, then miscommunication risk is increased (Kossman, 2014). It is likely that a patient's wishes will not be honored if the EHR contains incorrect or invalid documentation. Without education and increased awareness about ADs, ACP screening adherence will remain low. Without screening, opportunities to identify patients who have completed ADs will be missed. Specifically, nurses will overlook opportunities to engage patients in ACP dialogue.

The hospital system's MICU AD screening completion rate is around 57.21%. This rate is much lower than the hospital system's 90% completion criteria. Completion rate data is compiled through randomized chart audits performed by MICU employees. The hospital system requires audits to be submitted monthly from each unit.

For the purpose of the proposed project, at least 50 audits will be performed monthly by solely the author. MICU staff and management will also perform their own randomized chart audits to meet unit compliance. First, randomized chart audits will be performed at least three days a week from April-November. AD screening questions will be analyzed through randomized chart audits after the patient has been in the inpatient setting for 24 hours. Then, an admission screening audit will then be entered into the hospital's system's quality improvement audit form. The randomized audit results will be automatically populated within the healthcare system's quality improvement data base. The hospital system data base will not be attached in the appendix. The author will create a data collection tool utilizing Microsoft Excel that will keep track of AD screening completion as a primary means of data comparison.

Outcome(s). Nurses in the MICU will receive education and resources on ACP through previously listed interventions. Interventions will be used to improve adherence percentages of ACP admission screening questions over a four-month timeframe, August 2019 through November 2019. Nurses will feel empowered to engage with patients in AD conversations. Shared knowledge should increase AD screening completion as well as improved AD documentation, lower healthcare costs, and fewer undesired patient outcomes. According to the hospital system's most recent statistics, 42.79% of patients do not receive information on advance care planning. The information would be provided if screening questions were completed according to hospital policy.

Summary

ADs are associated with decreased hospitalization rates. Passing away in the hospital, reduced life-prolonging treatments, and an increase in hospice referrals are linked to well documented ACP conversations and ADs. Providers and medical team members must provide

details specific to the discussion, including the patient's choices and explanations after the conclusion of any ACP conversation

ADs should be discussed and completed at every opportunity. Healthcare systems should ensure ADs can be quickly filed and be immediately available regardless of setting (Detering & Silveira, 2018). Mandatory completion of AD screening questions upon admission or transfer to the MICU ensures that patients learn about ADs. Engaging in ACP conversations upon admission certifies that HCPOA and ADs are documented appropriately. These questions confirm that the patient's wishes are clear and recorded correctly in the EHR. Despite being asked, the patient and family may still decline to complete ADs inpatient information about ACP, and HCPOA designation.

Engaging in AD conversations gives patients the knowledge to make informed care decisions. They will be encouraged to complete an AD or PoA. AD completion will not be a part of the author's measurable outcomes. Measurable outcomes include effectiveness of the designated intervention(s) as evidenced by monthly audit compliance scores. Effective practice change will be determined by analyzing the institution's monthly QI database as well as the author's Microsoft Excel data collection tool. Comparing pre-intervention to post-intervention data will help determine whether interventions were effective and determine ways to ensure sustainability. Ideally, there should be an increase in AD screening completion to the institution's goal of 90%.

A literature review was conducted and will be discussed in detail to support the proposed QI initiative in the following chapter.

Chapter Two: Review of the Literature

The literature was reviewed to gain knowledge about Advanced Directives (ADs) and Advance Care Planning (ACP). The review focused on barriers, indications, similar quality improvement (QI) projects, weaknesses within the hospital system, interventions, AD and advance care planning (ACP) perceptions. Literature findings reinforced the need for a standardized AD-screening process with the implementation of designated interventions. Literature was examined to find answers to questions. At the end of this evaluation, literature suggested and explained how to change practice through quality improvement (QI). This section summarizes the methodology, findings, review process, and weaknesses found within the literature review.

Literature Appraisal Methodology

Sampling strategies. A literature review was implemented and remains in process using Cumulative Index of Nursing and Allied Health (CINAHL), PubMed databases, Medline, and Cochrane Library databases. MeSH (Medical Subject Headings) terms included advanced directive, palliative care, advanced care planning, inpatient, outpatient, hospice, healthcare power of attorney, advance care planning documentation, chronic diseases, advance directive, advance care planning documentation, advance directives, and theoretical frameworks. Results were restricted to a five-year period dating from 2014-2019, full text, peer-reviewed articles. These limitations were set in order to likely yield state-of-the-science research reports. Furthermore, a manual evaluation of additional literature was conducted. This search generated 146 articles. Ninety-five articles were eliminated due to exclusion criteria such as population, designated interventions, and outcomes that did not align with this DNP project's purpose. After analyzing titles, abstracts, full text, and eliminating duplicates, 51 articles were reviewed in full. 25 peer-

reviewed articles remained pertinent to the proposed QI initiative from 2014-2019 (see Appendix B).

Evaluation criteria. Articles which discussed AD, ACP, barriers to completion in both the inpatient and outpatient setting, hospice, and strategies for improving AD screening completion were included. Excluded articles included those that were not in English language, unrelated to the proposed QI initiative, articles older than five years, not peer reviewed, or those that did not have full text available for review. Additionally, articles that discussed ADs and ACP, but were irrelevant to the proposed QI initiative were excluded.

Standards for Quality Improvement Reporting Excellence (SQUIRE) guidelines were used to evaluate the relevant articles. The SQUIRE guidelines describe how to report new knowledge to improve healthcare (Squire, 2017). The guidelines help authors present quality improvement (QI) ideas and projects within the healthcare setting. SQUIRE guidelines are used as a foundation in order to improve the quality, safety, and value of healthcare (Squire, 2017). These guidelines offer a basis for how scholarly work is conducted through a systematic system.

Levels of evidence range from I to VII. Melnyk & Fineout-Overholt describe the levels of evidence as:

1. Evidence from a systematic review or meta-analysis of all relevant RCTs
2. Evidence obtained from well-designed RCTs.
3. Evidence was obtained from well-designed controlled trials without randomization.
4. Evidence from well-designed case-control and cohort studies.
5. Evidence from systematic reviews of descriptive and qualitative studies.
6. Evidence from single descriptive or qualitative studies.

7. Evidence from the opinion of authorities and reports of expert committees (Melnyk & Fineout-Overholt, 2011, p. 36).

Literature Review Findings

According to Anderson, Lin, & Laux, (2014), the most frequently reported reason for not having an AD was unawareness. People who are unaware of the need to have EOL discussions represent opportunities for intervention (Rao et al., 2014). Although data suggests that most people prefer medical professionals give them EOL information, professional discomfort may be a barrier to such conversations (Rao et al., 2014). According to Kimmel et al., (2015) ACP conversations help surrogates feel assured they honored their loved one's wishes, and supported patients to the end at the EOL (Kimmel et al., 2015).

Evaluation by study design. The literature was reviewed and evaluated. Literature ranged from meta-analyses to systematic reviews. There were six systematic reviewed articles, three well designed randomized control trials, zero well designed controlled trials, two case-control or cohort studies, two systematic reviews of descriptive and qualitative studies, five single descriptive articles, and zero expert committee articles (see Appendix A).

Evaluation by intervention. Intervention(s) should have the correct objectives, be targeted at the barriers and be directed towards the facilitators (Bokhaoven, 2003). Facilitators are individuals directly related to achieving the desired performance outcome. Interventions also must consist of program components and materials adapted to specific objectives and target populations (Bokhaoven, 2003). Educational interventions to improve people's understanding of critical concepts for evaluating health intervention claims can improve knowledge and skills (Cusack, Del Mar, Chalmers, Gibson, & Hoffmann, 2016). Measures of knowledge and skills are

better among those who have received the educational intervention(s) than those who have not received an education (Cusack et al., 2016).

The literature identified a need to recognize the inevitability of increased AD-screening completion during hospital admissions. At the proposed project site, a standardized protocol is mandated; however, adherence to this protocol is low. Interventions to promote AD-screening completion will be designed, based on best evidence, to achieve Advanced Care Planning.

Few studies reported interventions to help increase AD and HCPOA completion among inpatient and outpatient settings. Throughout the literature review, interventions that were effective included: interviews, hiring an ICU communication facilitator, educational reinforcement, increased EOL discussions by staff members including HCP, increased palliative care consultation, initiating conversations in the admission phase of the hospital, family-centered ACP conversations, and increased ACP conversation documentation.

There is a gap in the literature specifically related to interventions to increase AD EHR documentation among nurses. Kimmel, Wang, Scott, Briggs, & Lyon (2015) reported that having these discussions during hospital admission were beneficial. According to Musich et al. (2016), general awareness and discussions with family members are commonly reported means of learning about ADs. Only13% of respondents described physician consultations as an information source on ACP (Musich et al., 2016).

Literature was reviewed regarding ways to increase clinical outcomes through QI interventions. Starr et al. (2015), reinforces that QI education and instruction should be directed at improving healthcare delivery and patient outcomes. QI should be focused on achieving the Institute for Health Improvement (IHI) Triple Aim. The IHI (2016) goal is to shift healthcare from the mindset of "more treatment is better," to "the right treatment and care, and no more."

Per Starr (2015), even though healthcare distribution associations pursue to expand and execute effective educational strategies and plans, no universal solution exists.

Evaluation by outcome. Evidence from empirical literature supports the idea that the more specific and current ADs are, the more likely they are to adhere to patient wishes (Kossman, 2014). Literature reinforces the idea that when work force staff including medical or legal, as well as family and friends solicit questions about ADs, it enhances the probability that a patient has an AD (Van Scoy, Howrylak, Nguyen, Chen, & Sherman, 2014). Wu et al., (2013) wrote that early initiation of palliative care (PC) consultation and ACP conversations were associated with shorter hospital stays. This finding suggests that one patient-and family-centered benefit of PC and ACP discussions is reduced inpatient hospitalization (Wu et al., 2013).

Tung et al. (2010) reinforces the idea that merging clinical decision support systems and uniform and consistent processes improves the ACP process. “Enough evidence exists to conclude that combined written and verbal educational interventions are more effective than single written interventions in increasing the percent of newly completed ADs in adult clinic outpatients and hospitalized elderly” (Durbin & Bachman, 2010). This evidence will be applied to MICU nursing education regarding admission AD screening completion.

Limitations of the Literature Review Process

The literature review identified gaps in research on AD completion in hospitals. There is inadequate evidence that links ACP documentation to enhanced EOL communication because most studies are descriptive or qualitative design (Lewis, Cardona-Morrell, Ong, Trankle, & Hillman, 2016). Lewis et al. (2016) highlights that although perceived effectiveness of AD documentation to encourage end-of-life conversations appears high, this evidence is drawn from low-level evidence. There was limited data about AD and ACP conversations in hospitals,

particularly the ICU. Few studies discussed nursing interventions to increase ACP and AD in inpatient and outpatient settings.

Discussion

Conclusion of findings. Frequently conveyed methods of erudition regarding ADs were public knowledge and conversations with family members (Musich et al., 2016). There is a need for increased discussion and knowledge in mutually the inpatient and outpatient settings. Implemented interventions to help increase AD completion rates for both providers and nurses is essential. Various methods have been tried and have been successful including interviewing patients, shared decision making among patients and their families, as well as open-ended conversations between medical staff and the patient. Educational programs and interventions have been successful in various studies, as referenced in the above sections.

Lewis et al. (2016) asserts that while health professionals report encouraging and constructive insights of the use of advance care documentation, tangible testimony of their engagement in EOL conversations or confidence achieved from retrieving previously articulated wishes in advance care documentation was not commonly accessible. The author's proposed interventions will give health professionals, specifically bedside nurses the knowledge, resources, and foundation to engage in these conversations routinely while educating and ensuring proper documentation of these conversations are being done.

Utilizing this data to help support the author's projected educational interventions along with clarification, guidance, direction, and reassurance, change can be achieved. The change will be direct through clinical practice modification. The modification will be achieved by focusing on educating staff, providing guidelines, resources, and empowering them to complete AD screening questions the proper way. With the proposed interventions directed towards AD

screening admission question completion, compliance scores will increase. Post-intervention, bedside nurses will understand the topic, expectations, hesitations regarding ACP, and will have available resources to participate in these tough conversations upon admission to the MICU.

Advantages and disadvantages of findings. Literature has identified limited studies regarding AD and ACP, especially in the inpatient setting. Furthermore, there is a lack of standardization regarding ACP conversations and documentation. Therefore, nursing education must be implemented to point out the benefits of ACP conversations, including patient and healthcare benefits. Training can aid in knowledge awareness. Standardized education interventions will ensure that all nurses receive the same information. The proposed interventions will ensure that the required screening questions be addressed. If addressed effectively, compliance scores will increase.

The literature clarified the need for increased AD completion and ACP conversations. There is currently limited indication to suggest any educational, scholastic, or informative intervention for wide-spread implementation (Fu, Bonhomme, Cooper, Joseph, & Zimet, 2014). Much of the literature identified barriers to AD completion and implemented a form of educational intervention. AD completion increase was not always a result of the identified intervention; however, the majority did identify areas of weakness, and a positive outcome was noted post-intervention. Most of the efforts in the literature review did not occur in the inpatient setting. Majority of the interventions were physician-directed versus nursing directed. Additionally, the literature supported the need for AD awareness, increased education regarding ACP, and interventions to help improve AD completion. Although education can increase cognizance and inform nurses of standards and protocol, it may be limited in its ability to change behaviors and preferences if other barriers are not recognized and discussed.

Utilization of findings in practice change. Joseph, Bayard, Gabler, Cooney & Halpern (2018) reinforced the idea that choices ought to be rendered involving the use or nonuse of healthcare services in the final days of individual's lives, yet numerous individuals are too ill to manage such choices. Unfortunately, "30% of Americans who have passed away were unable to make ACP decisions because they were too ill to participate in conversations, leaving family or loved ones to make these tough decisions for them" (Josephs et al., 2018). "Surrogate decision making is an imperfect solution since close family members commonly err in their estimates of patients' end-of-life preferences, despite most patients believing their family members would represent their wishes accurately" (Josephs et al., 2018). "Furthermore, making decisions regarding the use or nonuse of life support is associated with long-lasting pathological bereavement among surrogates, contravening most patients' desires not to burden their loved ones" (Josephs et al., 2018). "Although experimental evidence of the benefits of ADs or other forms of ACP is sparse, several observational studies suggested that patients who choose to complete ADs are more likely to receive the care they desire" (Josephs et al., 2018).

Despite guidelines, policies, and information validating these conversations and documented completion, actual AD completion rates are low, and interventions to increase AD completion have been disappointing (Josephs et al., 2018). The aim of the proposed project is to improve the completion of AD screening admission questions for patients in the MICU within the first 24 hours of hospitalization. Increasing ACP screening question documentation will provide patients with the opportunity to ask questions, utilize available resources, and complete AD along with HCPOA if they desire in the inpatient setting. Various education methods will be provided. The goal of the author's proposed intervention is to create multiple educational interventions (s) that address learning styles to include visual, auditory, and teaching methods. A

resource guide for staff and patients will be created and made available. The interventions will be implemented over a four-month period. Education intervention(s) will highlight ACP indications, benefits, barriers, and current compliance rates compared to the hospital's required rates regarding AD admission screening questions. A pre- and post- education survey will be provided to nurses to establish a knowledge level regarding ACP. This survey will also help identify barriers to completion.

Literature supports interventions to improve ACP documentation and AD completion. There is inadequate data to support what tool or intervention is best due to limited studies to support inpatient and outpatient studies regarding AD and ACP completion. There is enough data to support that educational interventions are valid and there is a positive effect on education and feedback on compliance (Doronina, Jones, Martello, Biron, & Lavoie-Tremblay, 2017).

Summary

The Institute of Healthcare Improvement's (2016) goal is to shift healthcare from the mindset of "more treatment is better," to "the right treatment and care, and no more." This project aligns with that goal. Increased conversations about AD screening involves patients in decision-making. Staff will be competent in ACP discussions. Engaging patients and families in AD screening within 24 hours of admission will increase ACP documentation and will educate patients who do not have an AD.

Providing patients with these opportunities to learn gives them awareness and power over their health. Ensuring their wishes are correctly documented ensures that undesired outcomes are not necessary. Limiting avoidable actions decreases unnecessary healthcare costs in both the acute setting as well as long term setting. Overall, with improved documentation and patient empowerment over their health, quality of care will improve, there will be a decrease in

unwanted outcomes, and there would be a projected decrease in healthcare costs through the prevention of unwanted, unnecessary, and unwarranted treatment and life-sustaining measures.

In the following chapter, Kings (1960) nursing theory will be discussed along with applied QI project concepts.

Chapter Three: Theory and Concept Model for Evidence-based Practice

Theories are a fundamental part of nursing research and nursing process. Theories guide quality improvement initiatives. The principal objective of theory in nursing is to enhance patient outcomes, health, and quality of healthcare. King's (1960) theory of goal attainment will be applied in the proposed project.

This chapter defines the project-specific concepts and key terms. These concepts and terms will be described in the concept analysis section. Project specific concepts and how they apply to AD screening question questions will be discussed. Theory of goal attainment is the intended project's theoretical framework because it focuses on process and outcomes. This theory will be applied to the evidence-based practice (EBP) model. The plan, do, study, act (PDSA) model remains a straightforward tool that guides quality improvement (QI) initiatives and will be utilized throughout the proposed project.

Concept Analysis.

There are several related concepts in this discussion. These concepts include: (1) screening, (2) education, (3) adherence, (4) experience, (5) predisposition, (6) values, (7) barriers, (8) beliefs, (9) holism, (10) needs assessment, and (11) audits. Grant (2002) defined each of these concepts:

Screening. Screening is a standardized method for classifying and assessing gaps in clinical practice. It is the first step in assessing role or purpose suitability (Merriam-Webster-Dictionary, n.d.). Screening sifts through a large amount of data to obtain specific findings (Merriam-Webster-Dictionary, n.d.).

Education. Education is the process of receiving information and instruction. It is one’s act of obtaining knowledge and using it to develop the ability to reason, judge, and formulate

new opinions. Education also involves educating (Merriam-Webster-Dictionary, n.d.). Methods include teaching and learning in multiple settings. Instruction may include auditory, visual, or teach-back methods.

Adherence. Adherence is the ability to comply with a specific process. It may also refer to as one's ability to follow a rule, policy, or method. To adhere, one should be able to follow a specific set of guidelines and instructions consistently. Adherence is a less pejorative synonym of compliance.

Knowledge. Knowledge is an understanding and mindfulness gained through involvement and experience. Knowledge empowers others and influences an individual's decision making.

Experience. Experience or skill is considered one’s expertise in a specific field or area. Experience can either be direct through personal experience or observation. Experience also includes one's feelings.

Predisposition. It is also referred to as susceptibility, defined as the likelihood of working in a specific way. May also refer to an attitude or action based on circumstances. It may also be a predicted reaction to a situation.

Values. Values or standards are core beliefs unique to an individual. Values can also be someone or something’s worth, reputation, importance, or utility. Values may differ individually. Values to an individual may be a set of principals or standards that one abides by. It is defined as what is important to them.

Barriers. Unintended or unforeseen obstacles that one must achieve or overcome that slows down progress. Barriers may be identified as physical, communication, systematic, or

attitudinal. A barrier may be any hindrance that prevents someone or something from interacting, finishing, or even starting a task.

Beliefs. Beliefs have trust in someone or something. It is the acceptance that something higher than oneself is real or exists. It is a firmly held view or opinion.

Holism. Holism is an idea that one cannot exist autonomously. It is an interpersonal interconnection. It is the impression that a system cannot be viewed as a separate part of an entity, but rather an entire unit.

Needs Assessment. A needs assessment is a systematic method for addressing a current environment's need and the desired QI outcome. A needs assessment identifies what the organization "needs." Need drives the gap analysis. Thus, an organization can close the gap between current practice and required practice (Grant, 2002). Methods of needs assessment vary.

Types of Needs Assessments.

*Discrepancy Analysis***.** Discrepancy analysis is a formal method that compares performance to, competencies by self-assessment, peer assessment, or objective testing and planning education according to deficiencies between performance and competency.

Peer-Review. Peer-review needs assessment is an assessment among comparable professionals. Peers assess each other's practice. Then, they give feedback to their peer. Feedback may include advice about education, training, or organizational strategies to improve performance.

Observation. Defined observation methods are described as observable, staff performance tasks, rated by an observer, according to known criteria. The results are

discussed, and learning needs are identified. The observer can be a peer, a senior, or an unbiased individual.

*Critical Incident Review***.** This technique is usually used to identify the competencies of a profession, or for quality assurance, it can also be used on an individual basis to identify learning needs. This method involves individuals identifying and recording self-reflections regarding their specific performance.

Practice Review. This method is a routine review of notes, charts, and documentation that can identify learning needs. This method helps identify what areas are satisfactory and which areas need improvement. (Grant, 2002, pp. 157-158).

Audit. An audit is a systematic review of documents, charts, or accounts to identify areas of success or weakness. Chart audits serve many purposes, including clinical, compliance, research, and administrative (Gregory, Horn, & Kaprielian, 2008). According to Gregory et al. (2008), if HIPAA requirements are met, any qualified healthcare professional can audit a chart for any care ordinarily documented in the medical record. Chart audits identify insufficiencies in practice methods. Best use of a chart audit is to gauge the quality of care that meets a quality improvement initiative (Gregory, Horn, & Kaprielian, 2008). The proposed QI project used the fiscal year 2018 chart audit compliance scores to develop the QI intervention.

These concepts will be applied to the projected project in several ways. Screening and randomized audits of EHR documentation is the plan's basis. Random audits will be used to detect obstacles to desired outcomes. Random audits will also validate intervention(s) necessary for clinical practice change. Identified barriers, individual values, predispositions, and beliefs during the PDSA cycle(s) will modify any non-adherence in the proposal and execution process. Selected interventions include instruction methods based on the population's knowledge about

AD. There currently is a national healthcare impediment due to primary care and acute care settings inability to obtain AD. To succeed, the current clinical practice must change from reductionism to holism. Clinical practice needs to be looked at as a whole entity versus individual components.

Key Terms

Advance Care Planning (ACP). Advance care planning helps individuals make plans about their future healthcare. ACP conversations guide healthcare professionals when an individual is unable to communicate. ACP is a process that helps adults to comprehend, appreciate and communicate their beliefs, life ambitions, and inclinations about potential medical care (Detering & Silveira, 2018). ACP's purpose is to obtain medical care consistent with an individual's values, goals, and preferences (Detering & Silveira, 2018). According to Detering & Silveira (2018), “timing and nature of ACP depend on whether a person is healthy, has mild to moderate chronic illness, or has a life-threatening illness”. Regardless of the clinical scenario, ACP should be proactive, appropriately timed, and integrated into routine care (Detering & Silveira, 2018). ACP ought to be reassessed at each point in which a person's health situation or condition changes (Detering & Silveira, 2018). Personal understanding, knowledge, experience, predisposition, values, and beliefs all influence ACP decisions. An individual's background impacts these discussions during AD-screening. ACP discussions should be interactive and should include the clinician or other medical professionals such as the nurse, the patient, and their loved ones.

Advance Directives (AD). Advance Directives (AD) are written documents that state an individual's wishes regarding specific medical treatment or procedures. It is a guide for healthcare professionals when an individual is unable to communicate. “ADs are legal

documents a person completes while still in possession of their decisional capacity about how treatment decisions should be made on their behalf" (Detering & Silveira, 2018). According to Detering & Silveira (2018), ADs are tools directing treatment decision-making. "Although a component of ACP, an AD does not certify that ACP occurred. Thorough ACP does not always yield ADs (if the patient does not express choices or declines to have their choices recorded)" (Detering & Silveira, 2018). "ADs are only acted upon when the patient has lost the ability to make decisions for himself" (Detering & Silveira, 2018). It is also important to remember that a patient may revoke ADs, orally or in writing, at any time if he or she has maintained decisional capacity (Detering & Silveira, 2018). Admission AD-screening addresses if a patient has these documents or if they want more information about them. Screening questions may not increase AD completion.

Healthcare Power of Attorney (HCPOA). A Healthcare Power of Attorney is an appointed individual responsible for making healthcare decisions for an individual if they are unable to speak for themselves. "A Durable Power of Attorney for Healthcare (DPAHC, Healthcare Proxy, or Healthcare Power of Attorney) is a signed legal document authorizing another person to make medical decisions on a patient's behalf in the event they lose decisional capacity" (Detering & Silveira, 2018).

Currently, there is no legal obligation that an entity is required to select a proxy. According to Detering & Silveira (2018), in most jurisdictions, there is specific legislation authorizing which person can make healthcare-related decisions in the absence of a formal designation. Designating a surrogate outline who the patient's chosen surrogate is. Choosing a designated surrogate is an opportunity to consider and reiterate what their healthcare wishes are

specifically related to medical, personal, emotional, and spiritual preferences in the event of a debilitating ailment.

Without an HCPOA or legal marriage, partners are unable to speak on behalf of the patient legally, receive information regarding their loved one's care, or provide healthcare consents. North Carolina recognizes a person's fundamental right to make their own healthcare decisions (Hampton, 2014). NCGS § 90-21.13 grants provider determination on who has the authority to make healthcare decisions for an incapable patient (Hampton, 2014). In NC, those who hold a valid HCP are first decision-makers (Hampton, 2014).

Surrogate Decision Maker. Surrogates serve as the patient's voice, insight, and decision-maker. Preferably, they should be selected by the patient for this role when they can make healthcare decisions. Lost decisional capability is variable due to uncertain and untimely life events. Because life is unpredictable, a surrogate decision maker should be named for all individuals, age 18 and older, if possible. In the absence of a formalized decision maker, the next of kin typically takes on this role. Surrogates make healthcare decisions based upon substituted judgment by contemplating what the patient would decide, if they were able to speak on behalf of themselves (Detering & Silveira, 2018). US Legal (n.d.) reinforces that substituted judgment permits a surrogate decision-maker to try to determine what choice an ineffectual patient would make if they were capable of doing so. If the surrogate cannot decide what the patient would choose, then the decision should be based upon the best interests of the patient, which is defined as "what most people in that condition would want" (Detering & Silveira, 2018).

Inpatient. Inpatient requires an individual admitted to a hospital. Inpatient care requires overnight hospitalization (PBMC Health, 2017). In the inpatient setting, they remain under the supervision of a nurse or doctor (PBMC Health, 2017).

Outpatient. Outpatient care is a setting where an individual receives medical treatment without being admitted to a hospital. They can leave the doctor's office, outpatient clinic, or hospital at will (PBMC Health, 2017). Patients are not closely supervised by nursing staff.

Project Outcome. The result of the PDSA cycle after implementation of the proposed intervention. The outcome is the attainment that occurred secondary to interventions that the author provided to critical stakeholders, bedside RNs. Results will be measured by the proposed intervention's success, project organization, timeliness, effectiveness, quality, and satisfaction of those involved.

Theoretical Framework

Theory of Goal Attainment. The theory driving this project is King's (1960) theory of goal attainment. King's theory explains nurses' interactions with individuals and groups within the environment (AIPPG, 2012). This theory describes the importance of a client's participation in decision-making that influences care. It also focuses on the process of nurse-client interaction and care outcomes (AIPPG, 2012). King's theory of goal attainment presents nursing as an interactional process (Butts & Rich, 2015). King's theory examines how nurses interrelate with patients to help them accomplish health goals. Nurse-patient interactions support King's theory. Nurse-patient communication helps patients set goals and achieve them through the nurse-patient relationship. King wrote the following propositions in her theory of goal attainment:

- If perceptual accuracy is present in the nurse-client interaction, the transaction will occur.
- If the nurse and the client make transactions, goals will be attained.
- If goals are attained, satisfaction will occur.
- If goals are attained, competent nursing care will occur.

- If transactions are made in the nurse-client interaction, growth and development will be enhanced
- If role expectations and role performance as perceived by the nurse and the client are congruent, the transaction will occur.
- If role conflict is experienced by the nurse, the client, or both, stress in the nurse-client interactions will occur.
- If nurses with specialized knowledge and skills communicate appropriate information to clients, mutual goal setting and goal attainment will occur (Butts & Rich, 2015, pp. 420-421).

Patient-centered care is necessary to improve ACP documentation and AD completion. Part of the IHIs goal is to shift healthcare from "more treatment is better", to "the right treatment and care, and no more" (Institute for Healthcare Improvement. 2016). In patient-centered care, the patient and their family receive information about treatment options. They can express their preferences, which produces healthcare information exchange between the patient and professional (Institute of Medicine, 2010). When an individual participates in planning their care, they are more apt to reach individual goals. The process of communication and goal setting elicits understanding, responsiveness, and empathy for an individual's principles and preferences (Institute of Medicine, 2010).

Application to practice change. An educational PowerPoint, flyers, in-person education, incentives, reminder cards, presence in staff meetings, and available resources are selected interventions to increase admission AD screening completion in the MICU. King's theory of goal attainment supports the selected proposed interventions. Each intervention is designed to increase nursing interactions, which should lead to nurse-patient transactions.

The theory of goal attainment defines concepts such as communication, growth and development, interaction, perception, role, space, stress, time, and transaction (Butts & Rich, 2015) (see Appendix E). To make an intervention more appealing for learners, it must have accessibility, compatibility, and present concepts of goal attainment such as perception, role, interaction, and time. These concepts endorse a nurse-patient relationship conducive to goal setting. By completing AD screening questions, patients will engage in dialogue so that the nurse can gather information about the patient's wishes, desires, and health literacy. In summary, King's conjecture confirms that health experts have a responsibility to disseminate evidence, information, and data in order to aid others in making advised, informed, and health conscience decisions. This theory is the framework of the proposed intervention(s) (see Appendix E).

This project will be focused on King's concept of perception. Perception is defined as a process of organizing, interpreting, and transforming information. (Theoretical Foundations of Nursing, n.d.). Perception creates meaning to one's experience, represents one's image of reality, and influences one's behavior (Theoretical Foundations of Nursing, n.d.).

AD screening questions are to be completed within the first 24 hours of admission. During this screening process, nurses use their assessment skills about patient perception of the situation to increase awareness of ACP and ADs. Comprehension of healthcare and ACP varies among patients. A patient's quality of life (QOL) perception influences their decision to engage in AD conversations. Nurses who discuss completion of AD screening questions permit patients to interact. These interactions should increase mutual goal setting, satisfaction, and goal attainment.

EBP Change Model

Plan, Do, Study, Act (PDSA). Quality improvement methods have been introduced to healthcare to support care delivery that is safe, timely, effective, equitable, and cost-effective (Reed & Card, 2016). The PDSA cycle is one of the few models that focus on the root of change: transformation of ideas and intentions into action (Reed & Card, 2016) (see Appendix F). The PDSA model for improvement provides a framework to develop, test, and implement changes that lead to improvement (NHS Improvement, n.d.). The four stages of the PDSA cycle are:

- Plan – the change to be tested or implemented.
- Do– carry out the test or change.
- Study – based on the measurable outcomes, collect data pre/post change and reflect on the change's impact and what lessons the change provides.
- Act – plan the next change cycle or full implementation (NHS Improvement, n.d.).

During the planning cycle, the goal is to design an intervention and data collection plan as well as specify how the intervention will be implemented, evaluated, and sustained (Reed & Card, 2016). The "Do" cycle involves implementing the plan, including both the QI intervention and the data collection plan (Reed & Card, 2016). The "Study" cycle focuses on analyzing data and comparing results to the definition of success as well as communicate what has been learned from the formal data analysis and unanticipated learning (Reed & Card, 2016). The "Act" cycle is centered on what has been discovered. The goal is to either reevaluate the analysis and problem framing phase or begin a new PDSA cycle at the plan phase. It also allows for the project lead to implement and sustain the intervention organization wide, or, end the project without participating and investing any further efforts (Reed & Card, 2016).

Each PDSA cycle offers trial learning; one change per cycle helps the author to know if the proposed intervention produced the anticipated outcome (Reed & Card, 2016). Succeeding PDSA cycles build on lessons learned in previous cycles (Reed & Card, 2016).

The PDSA framework must answer several questions before implementing the proposed intervention. First, what is the author trying to accomplish (NHS Improvement, n.d.). Second, how will the author know if the change is an improvement (NHS Improvement, n.d.). Third, how will success be measured and what measurement tool will be used (NHS Improvement, n.d.). Lastly, what changes could be made that will result in improvement (NHS Improvement, n.d.).

The first step of the PDSA cycle is to determine the aim. Then, teams need to set goals with measurable targets (NHS Improvement, n.d.). These goals require clinical leadership and should focus on patient or staff problems/concerns (NHS Improvement, n.d.). Goals should be relevant to project length (NHS Improvement, n.d.).

To determine if the change is an improvement, the author will need to measure outcomes such as compliance scores. Sustainability can be measured over time after an intervention has been implemented (NHS Improvement, n.d.). Evidence from scientific literature suggest that a small number of changes are most likely to result in improvement (NHS Improvement, n.d.).

Once aims, goals, outcome measures, and changes have been decided, the PDSA cycle may be initiated. The PDSA cycle is a time-intensive process. Each cycle builds upon the previous cycle. A plan must be proposed before starting the next cycle. Recorded PDSAs capture the learning and demonstrate the improvement journey, which is often unrecorded (NHS Improvement, n.d.). The author's proposed project may have more than one PDSA cycle based on the biweekly evaluation.

Application to practice change. The PDSA model is an appropriate tool for the author's proposed idea because of its emphasis on quality improvement. This author has initiated the planning phase of the PDSA cycle. The author identified low compliance scores on required admission AD-screening as a needed practice change.

The project goal is to increase admission AD screening compliance through implementing educational interventions. Outcomes will be measured by monitoring compliance scores. Compliance scores from 2018 and from April to August 2019 will be used as pre-project data. Adherence percentages from August to November 2019 will be utilized as open-source data. The data will be compared and evaluated. Based on pre and post data, intervention success will be determined. The author will routinely document and address barriers that arise during implementation. A meeting among the author, project chair, and site champion will be held after each PDSA cycle or sooner to identify weaknesses, changes needed, barriers identified, and whether the intervention succeeded.

To conclude, the author and chairs will decide if another cycle is needed to address barriers and limitations found during the initial PDSA cycle. If nursing awareness increases, but AD compliance scores remain low, the author will evaluate barriers to completion. Then, if compliance scores do not improve, the new PDSA cycle will introduce an intervention specific to identified barriers. The PDSA model helps the author determine the best process to improve admission AD screening compliance (see Appendix F).

Summary

A theory and evidence-based practice model was used for this QI project. King's (1960) theory of goal attainment was applied to the proposed study. Concepts specific to the project were defined. The most pertinent concept, nurse-patient interaction, was introduced. Key AD

planning terms were explained. The PDSA cycle was used to illustrate the plan to overcome poor, AD screening compliance rates. The plan includes bedside nurses' education about AD screening, measurable outcomes, and evaluation strategy.

Admission AD screening was identified as an area of weakness by using the PDSA model key questions provided by NHS Improvement (n.d.). Including pre-data will help bedside nurses understand why practice change is necessary. The hospital requires AD screening completion within 24 hours of admission. Current compliance is 57.21%. The project goal is 90% AD screening completion rate. Educational interventions will be directed at practice change. During implementation, the author will track compliance scores monthly to identify compliance obstacles. PDSA cycle conclusion warrants extensive results analysis.

In the next chapter, the pre-implementation plan will be described in detail.

Chapter Four: Pre-implementation Plan

In response to current literature stressing the importance of achieving and sustaining advance care planning (ACP) completion, sustainable initiatives were created to address ACP challenges. It was imperative that the nursing staff were prepared to assess and respond to these challenges. Successful implementation of a project that increased advance directive (AD) screening completion upon admission required pre-implementation planning. Before a quality improvement (QI) project can be executed, a sequence of steps must be taken to ensure DNP project success. Once an identified problem was recognized, the desire to make change was communicated. Approval was granted by both East Carolina University (ECU) faculty as well as the project site's nursing research council (NRC). An initial proposal was created and submitted to the author's faculty lead. The plan defined the project purpose, project team members, Institutional Review Board (IRB) submission, and PDSA cycle plan. Project team members, organizational site approval, and the project timeline were approved before the implementation of proposed intervention(s).

Project Purpose

The purpose of this Doctor of Nursing Practice (DNP) QI project was to improve AD screening question completion compliance within 24 hours of admission into the Medicine Intensive Care Unit (MICU). This project aims to solve the problem of poor compliance percentages to AD admission screening questions. The hospital's current policy needs to be enforced. Specifically, the institution's policy stated that the following elements of the admission assessment must be completed within 24 hours of admission (Doerr-Jarosz, 2016):

The following items 1,2,5,6 are required, while questions 3 and 4 are suggested documentation within the EHR.

1. Patient does have an AD covering medical treatment
2. Reason patient does not have an AD covering medical treatment
3. Surrogate decision-maker appointed
4. Reason there is not a surrogate decision-maker appointed
5. Information provided on AD
6. Patient requests assistance

The nurses were encouraged to incorporate a standardized process into their daily work with hopes of practice change. At the conclusion of the project, MICU staff systematically would understand how to document AD screening questions correctly. MICU staff would also have more awareness of AD concepts. These designated goals were established to ensure institution requirements were met within 24 hours of admission.

Project Management

Organizational readiness for change. The first step in the DNP process was to identify a community partner that had a weakness in their current practice. This required explanations to the institution's clinical staff and management about DNP project purpose, goals, timelines, and common AD terminology. After a meeting with the hospital system's unit manager, an area of weakness was identified. After several meetings on the author's plan for QI change, management agreed that the project would improve inpatient documentation of AD screening, which was identified as a hospital system requirement. This was the first step in organizational willingness.

To explore the unit's readiness for change, an interview was set up with the department's director. Barriers and current obstacles to change were discussed. Barriers such as time, EHR process limitations, staffing, resource availability, and administrative assistance were discussed. The author observed the ongoing process of screening patients upon admission to MICU. The

author interviewed unit employees about developing an action plan and selecting appropriate intervention(s). A validated survey tool was used with the permission of the author for the purpose of a unit needs assessment. The survey was replicated and created in Qualtrics and sent out via electronic mail. This tool helped identify barriers and narrow down pertinent information that would be included in the intervention(s). This information was incorporated into an action plan and developing intervention(s). A final project plan was developed. An official proposal was submitted to ECU for institutional approval. A second proposal was provided to the DNP project site champion for provision as well. The institution where the QI project took place required NRC approval and submission of an application to conduct a QI.

Interprofessional collaboration.

Regular communication, including in-person meetings and electronic mail correspondence with project team members, was necessary for project implementation planning. Biweekly correspondence with ECU faculty and primary site champion were essential collaboration. After the submission of the institution's application to conduct (QI) initiatives was submitted, bi-weekly correspondence with the institution's NRC was required before the implementation of the intervention(s) and the validated tool. After the institution's NRC approved the proposed project, IRB submission was required through ECU. Once IRB deemed the project a QI project versus a research study, only then could the author implement. Throughout the entire process, the author received feedback from faculty lead, site champion, and the institution's NRC weekly.

The collaboration between the author and the site champion was a critical professional relationship that helped facilitate success. The author's site champion was currently the institution's medical director. The site champion met with the author routinely as well with other

members in this process to include the unit manager and the director of the institution's NRC. These meetings ensured the author's timeline was on track. These individuals assisted in expediting the NRC approval. During project design and planning, the site champion provided the author with constructive criticism, ideas, and feedback on implementation intervention(s), validated tools, and data collection methods.

Other significant team members included the unit manager and a member of the NRC committee. These individuals helped the author with facilitating educational meetings, were available to answer critical questions concerning the implementation process and helped identify unit processes and limitations.

The partnership between the author and bedside nurses was developed before the implementation plan. The author's role in the QI project was made clear to bedside nurses who were also co-workers. Project team members, along with their role in the QI project was defined during the initial educational meetings. Routinely, team members and nurses were encouraged to raise questions and concerns.

Bedside nurses received the survey tool to help identify barriers in the current practice. These nurses received the educational interventions in various ways, which included a PowerPoint, brochure, flyers, in-person education at staff meetings, incentives, reminder cards, and a briefing in morning huddles three times a week as well as monthly staff meetings. They participated in inpatient practice change regarding AD screening question completion upon admission to the MICU. As part of their responsibilities, nurses documented AD screening questions within 24 hours. These screening questions were found in the admission screening column in the electronic health record (EHR).

Risk management assessment. DNP project risk assessment was completed using the strength, weaknesses, opportunities, and threats (SWOT) analysis model. Strengths included attributes of the organization that helped achieve the project objective. Weaknesses included characteristics of the organization that would stop the achievement of the project objective. Opportunities included external conditions that helped deliver the project objective. Threats were identified as external conditions that could impede the success of the project.

Each individual piece of the SWOT analysis was carefully considered and constructed to maximize the most efficient approach to analyzing project risks. Strengths included having a very supportive site champion and manager, a plethora of institutional resources, and thorough QI initiative. Any combination of these three strengths suggested a direct pathway to specific concepts this project was centered on.

Weaknesses were utilized to develop potential barriers within the project scope. These weaknesses included: gaps in knowledge about AD concepts, variances among how nursing completed screening questions, and competing site projects on the unit. The thought process behind developing solutions for these weaknesses was accompanied by potential opportunities that became apparent as the project continued.

Opportunities foreshadowed specific pathways that would prompt a successful project outcome. Examples of these opportunities are as followed: the ability to alter a nurses' mindset regarding AD concepts. Secondly, the utilization of nurses to lead a QI initiative. Lastly, potentially improving costs and efficiencies within the inpatient setting by increasing screening compliance. A direction was chosen by utilizing and leveraging these opportunities in order to navigate through potential project conflicts, and threats.

Threats were identified as external conditions that could impede the success of the project. Examples are as followed: a deficiency of nursing acknowledgment for the need for screening completion. An inability to complete screening questions due to identified barriers such as time, staffing, and patient inability to engage in screening due to inconsistent completion of screening questions. Furthermore, the lack of understanding of AD concepts. While this was not an exhaustive list, these threats could have potentially affected project outcome in a significant way.

Organizational approval process. Organizational approval was obtained with the help and guidance of the unit manager, site champion, and NRC members. After an initial meeting discussing the DNP project purpose and areas for QI initiatives in the unit, the proposed project was identified as an area for improvement. The author identified a project site chair that had a DNP degree. A meeting was then set up between the author and the site champion, the department director. Both the unit manager and department director agreed that the project would be beneficial for not only the institution but also for patients and their families. Following project topic identification, the approval by the institution's members was discussed. A letter of support from the medicine department director was obtained (see Appendix I). Approval by the institution’s unit manager, department director, professional coordinator, NRC council, and IRB were required prior to implementation. These individuals played a vital role in project success.

Information technology. Several forms of information technology were used throughout the planning, implementation, and conclusion of the DNP project. Electronic mail was frequently used as a primary means of communication between team members, especially between the author and site champion. Microsoft PowerPoint was used to present education to staff members during implementation. Microsoft Word was used to create flyers, brochure, and reminder cards.

Microsoft Excel spreadsheets were used to organize results throughout the DNP project. Chart audits using the institution's EHR were performed before, during, and after implementation.

Cost Analysis of Materials Needed for Project

The costs associated with this DNP project were minimal. Main costs included implementation tools, incentives and unit nursing staff education. Total cost incurred was $59.79 (see Appendix O). Staff education was provided via electronic mail with a PowerPoint attachment. Packets that included an educational brochure and a copy of AD paperwork were placed in employee's mailbox on the unit. Flyers were created and placed sporadically throughout the unit. Incentives, i.e. cookies, candy, and snacks included AD facts were handed out by DNP project lead during one-on-one education. Reminder cards highlighting required documentation were attached to computer monitors at nursing stations and in the patient rooms. Costs associated with printing documents were excluded in the cost analysis. The costs of incentives as well as lamination pouches were included in the cost analysis.

Plans for Institutional Review Board Approval

The first step to prepare for IRB was the completion of the Collaborative Institutional Training Initiative (CITI) program modules on Human Research completion. All implementation tools and documents were submitted to the project faculty lead for review and approval. These documents were introduced and sent to the site champion for evaluation and agreement. After approval by both faculty and site champion, the project was declared quality improvement. Per ECU DNP requirements, the author completed ECU's IRB approval process. The Quality Improvement Tool/Program Evaluation Self-Certification Tool was submitted to both faculty for prior approval and then submitted through ECU for IRB approval (see Appendix M). The project

was deemed quality improvement and did not require ECU IRB approval. The project site did not require IRB submission.

Plan for Project Evaluation

Demographics. Minimal demographic information was collected. A validated published survey tool was used as the project's data collection tool (see Appendix G). Years of experience as a nurse, as well as the nurse's primary shift were collected. This data was recorded using Qualtrics survey method (see Appendix N). No other demographic information was used. Patient demographics were not composed when completing randomized chart audits.

Outcome measurement. One outcome measurement tool was used for the DNP project. The measurement tool was a quantitative report in Microsoft Excel that populated data after the author entered audit results (see Appendix P). This tool measured two outcomes: staff compliance with AD screening questions and the reason why compliance was not achieved. 90% compliance of AD screening questions within the first 24 hours of admission to the MICU was the project's compliance goal.

Evaluation tool. A needs assessment was performed, and barriers to AD screening completion were identified using a screening survey (Fink,2019) (see Appendix G). A second evaluation tool (see Appendix D) was used to help guide staff and the author with randomized audits. This evaluation tool provided by the site institution was used to ensure audits were performed correctly and consistently. These guidelines were the foundation for compliance.

Data analysis. The analysis was based on one set of criteria, AD screening question standards. During the implementation phase, nurses were provided with documentation requirements (see Appendix D). These requirements were used to measure compliance

throughout the entire DNP project process. Compliance was populated within the author's data measurement tool within Microsoft Excel.

Within the data measurement tool, inputs were given a value of yes or no. Yes, being AD screening questions were completed. No, being AD screening questions were not. The sum of each “yes” inputs were divided by the total number of audits performed. This operation was performed for both pre-intervention and post-intervention data. Pre-intervention data consisted of a sample population of 250 audits from April to August 2019. This data was used as a baseline for comparing pre- to post-intervention results.

Once the pre-intervention success rates were determined, the survey tool was sent to all MICU nurses (see Appendix N). The survey consisted of three questions related to compliance barriers and two questions specific to demographic information. Qualtrics was used to create and analyze survey results. This data was used to determine specific patterns within the survey responses. These responses helped determine pertinent educational interventions. Interventions were designed and implemented based off survey responses. These interventions were directly correlated with post-intervention results. Pre-intervention and post-intervention results were compiled and compared.

Data management. Identifying patient information was not collected through data gathering. Randomized chart audits were done weekly with the goal of at least 50 audits performed each month on a 30-bed intensive care unit (ICU). These audits were performed from April 1, 2019, to November 30, 2019. Data collected was stored in a password protected Microsoft Excel document. The spreadsheet was created to prevent tampering of data by hiding cells within the text. The excel document was stored on the author's laptop and an external hard drive. Both items were kept at the author's home. The items were secure and safe in the author's

office that remained locked unless in use. A password was required for laptop use. The laptop was not left unattended. Electronic copies of the Excel document were kept on the designated devices throughout the DNP project and its dissemination. This data included randomized chart audit data and survey data that was supplied to nurses during implementation. Electronic data was deleted from both the laptop and external hard drive following dissemination of the project. Hard copies of the data were not obtained.

Summary

Planning and implementation are essential steps to a QI Initiative project. Much attention was placed on preparation, development, and application to ensure DNP project success. A thorough project proposal and plan was presented to both DNP faculty, site champion, and the project site’s nursing 's research council. IRB approval was not necessary for this project as it was deemed a quality improvement project. After all key members approved the DNP proposal, implementation was started. Implementation was set to begin soon after and earlier than expected.

Chapter Five: Implementation Process

An effective QI initiative consisted of a self-auditing tool, AD screening- specific brochure, flyers, incentives with AD facts, a PowerPoint detailing resources, e-mail reminders, face-to-face education, positive reinforcement, workstation reminders, and electronic health record (EHR) optimization request. Standardized, advance directive (AD) screening implementation was a prudent addition for the Medicine Intensive Care Unit (MICU) patient population.

Fink et al. (2019) argued that by exploring a patient's preferences for end-of-life care before the loss of decision-making capacity, advance care planning (ACP) promoted medical treatment congruent with their preferences.

Problem

Although MICU nurses screened patients upon admission, there were no standardized processes. Unit management identified poor AD screening compliance. Staff identified screening completion barriers during a need's assessment survey. The staff-identified barriers were time, patient's mental status, complicated screening questions, difficulty navigating EHR, and inability to engage patients in screening questions due to their lack of AD understanding. Interventions were devised to close staff-identified gaps.

Aim of the QI

Aim of the QI initiative was to improve AD screening questions within the first 24 hours of MICU admission. This process addressed MICU workflow improvement via the EHR. This chapter describes project setting and implementation details.

Setting

Community demographics

The project community is in central North Carolina (NC). The city in which the site is located has a population of 60,000 people. The city covers 21.3 miles. Thirty-one and half percent of the population ranges from ages 18 to 24. Females outnumber male residents. The city is 0% below the poverty line (World Population Review, 2019). The project site's community is considered NC's most educated city, with over half of the population recipients of associate degrees (World Population Review, 2019).

Project site

The project site is a non-profit, state-funded hospital ICU. This hospital treats and receives patients from across the state and the nation. The 803-bed hospital institution has an array of specialists, conducts up-to-date research, and participates in clinical trials. The project site is a 30-bed critical care unit. This unit offers care for critically ill patients with a wide range of medical and pulmonary diagnoses. These diagnoses include sepsis, drug overdose, pulmonary hypertension, diabetic ketoacidosis, renal or liver failure, acute respiratory distress syndrome, chronic obstructive pulmonary disease, pancreatitis, and cancer.

Institutional support

The institution supports QI efforts at the hospital and its outpatient clinics. The institution has team members trained in QI implementation. Its QI improvement system is founded on LEAN. The core idea of the QI lean process is to maximize customer value while minimizing waste (LEAN Enterprise Institute, n.d.). The institution uses LEAN transformation to change the organization from outdated, wasteful thinking to LEAN thinking. Specific QI initiatives include patient safety enhancement, clinical quality, and best practice improvements.

Participants

MICU management employs nursing staff who are in-state and out-of-state graduates with varying levels of experience from entry-level to executive level. Nurses were all trained in critical care nursing and safe practices during a three-month unit orientation. Orientation was required prior to caring for patients independently. Staff-to-patient ratio in the MICU is acuity dependent and ranges from 2:1 to 1:1.

Participants included all 100 MICU bedside nurses employed from July to November 2019. Participants voluntarily completed a needs assessment survey before project implementation. They subsequently engaged in personal interviews with the author. Participants were involved in receiving personal education at daily huddles, monthly staff meetings, one-on-one DNP project lead interaction, and email reminders. They received education via PowerPoint presentations, brochures, reminder cards, and flyers. Incentives, i.e., candy, cookies, cupcakes, and snacks, were provided to staff with AD- specific education.

Recruitment

Participants were a convenience sample because of their employment at the project site. All participants were MICU employees. Participants varied by gender, age, clinical experience, and background. Participants were not recruited or coerced. Consent was not required to take part in this QI project. Participation was voluntary. MICU managers were not allowed to penalize nurses if they chose not to participate. All MICU nurses were informed about these stipulations.

Project participants were informed that the proposed project would take place within the MICU. This project was presented as a unit-wide QI initiative and, although involvement was

encouraged, it was not obligatory. Nurses were eager to be QI initiative participants because the majority agreed about the importance of AD screening and its healthcare consequences.

Implementation Process

The implementation process took place from April 2019 until the end of November 2019. The implementation process comprised three phases: screening and pre-intervention data collection, intervention implementation, and post-intervention data collection.

Phase I-Screening & Data Collection

Chart audits. During phase I, the author performed randomized chart audits to collect pre-intervention data. The author completed 50 audits per month from April 1 to August 13, 2019. This data was entered into the Microsoft Excel spreadsheet. This allowed the author to compare pre-intervention data monthly and in entirety.

Pre-Intervention survey. In July 2019, Fink's survey was re-created in Qualtrics with permission and sent to employees by electronic mail. Nursing staff were instructed that their survey responses would remain anonymous and that the data would be used to create unit-specific interventions. Nursing staff was informed about the project intent before the survey was distributed. The nurses were informed about dates the survey would open and close.

The survey served as a need's assessment data collection tool. It assessed barriers to AD screening completion. Identified barriers to AD screening completion included time, patient's mental status, complicated screening questions, difficult process, and an inability to engage in screening questions due to lack of AD understanding. The survey asked how participants could improve their screening documentation. The survey included two demographic questions about years of nursing experience and the nurse's primary shift. At the survey conclusion, its results were populated and retrieved through Qualtrics.

Resourceful PowerPoint. The results of collected data were reviewed. An educational PowerPoint presentation was created that addressed barriers to screening completion (see Appendix R). This PowerPoint presentation was presented to staff one-week after the need's assessment survey. The presentation included information and resources that helped clarify the project goal. This presentation included project data prior to implementation as well as up to date literature data that supported the QI initiative. Step-by-step instructions on how to complete screening questions along with extra resources to aid in these discussions were included.

Phase II-Staff Education

Self-auditing tool. In August, the project site was informed that Joint Commission on Accreditation of Healthcare Organizations (JACHO) would visit the institution. One of their main objectives was to review appropriate documentation upon admission. At this time, a self-auditing screening tool was presented to each staff member every shift. This tool held the nurse accountable for their own documentation. Completion of this self-auditing checklist was required daily for each of their patients. This was a unit requirement, not a DNP initiative requirement. This checklist was a reminder of required documentation that is both an institution and a national requirement. A copy of this checklist is not included in the appendices.

Weekly reminder electronic mails. One week after the PowerPoint presentation, MICU nursing staff received weekly electronic mails containing educational pointers, tips for completion, and randomized audit data. Nursing staff was encouraged to incorporate these strategies into their standardized bedside nurse practice. Nursing staff was advised to use the resourceful PowerPoint and complete required documentation within the first 24 hours of MICU admission. The DNP project lead explained to the staff that any questions, concerns, ideas, or

simple clarification were welcome via electronic mail. The DNP project lead responded to each electronic mail inquiry.

Flyers. Flyers were created with educational pointers and aids (see Appendix S). Flyers were placed on the four-unit bathroom walls. These flyers utilized graphics to attract nurse's attention. New flyers were displayed for the months of September and October.

Brochures. A brochure was created and placed in individual staff member's mailboxes (see Appendix T). The brochure included current AD screening guidelines, the institution's policy supporting practice change, recommendations, and educational tips. The brochure was concise without overwhelming the reader with information. Bold colors were used to attract the reader's attention.

Incentives. Incentives, candy, cookies, and snacks were placed in nurse's mailboxes with attached educational tips throughout the implementation process. This method was used as staff reinforcement and reminders.

Workstation reminders. Workstation reminders were created and placed on each workstation computer throughout the unit including computers within patient rooms. These reminders were attached to the computer screen on the bottom right corner. These reminders included where to document AD screening questions, 24-hour completion requirements, and which questions are required to meet institution policy requirements. This intervention was a staff request.

Daily huddles and staff meetings. Monthly staff meetings took place from August to November 2019. The author participated in daily huddles three days a week for both dayshift and nightshift. These days were randomized from week-to-week. These meetings helped the author

engage face-to-face with nurses about the QI initiative. The nursing staff was encouraged to express any concerns they identified during implementation.

Post-intervention survey. After the second and third PDSA cycle, the DNP project lead sent an anonymous survey requesting feedback about the QI initiative. The survey asked staff-specific questions on ADs, what could impact change, if they used the provided resources, barriers, and suggestions for improvement. This survey was optional. This survey was sent out to all staff members via electronic mail. The survey results helped the DNP project lead understand staff perceptions of the project.

Phase III-Post Intervention Data Collection.

Prior to the DNP project initiative, there were few resources, a lack of awareness, and no standardized process to reinforce the institution's policy. Interventions were shared with MICU staff to meet their needs. Suggested interventions were literature-based and supported institution policy. The project promoted nurse-driven ACP conversations and time-sensitive AD screening documentation.

To initiate the process, the DNP project lead first identified the most appropriate way to deliver education. It was imperative that the DNP project lead meet various learning styles of nurses. A brochure, face-to-face interaction, electronic mail, positive reinforcement, PowerPoint presentation, and EHR optimization change request were used. Interventions were implemented individually as separate PDSA cycles (see Appendix F). The information provided to staff was easy to understand as evidenced by feedback from staff. The material was brief and concise. It provided AD definitions and pertinent background information. Step-by-step instructions on how to appropriately and effectively document AD screening question responses along with screenshot visualizations were supplied. Non-verbal patient scenarios were included to aid those

who are unsure how to document in these common situations. Other resources such as whom to contact to notarize documents and where to print extra information if the patient requests further information was also presented to staff.

Throughout each PSDA, 50 randomized chart audits per month were performed. This data was entered into the Excel spreadsheet. This data identified trends and assessed project outcomes. The data was reviewed to identify whether interventions positively impacted MICU's standardized process. At each month's conclusion, the PDSA cycle was reviewed and modified to improve screening documentation. There were three completed PDSA cycles. A fourth and final cycle was initiated with the submission of an optimization EHR change and ultimately adjusting institution chart audit requirements. Randomized audits were continued through November 2019 to measure standardized, practice sustainability.

Plan Variation

Plan variation occurred during the implementation process as obstacles were encountered. Frequent site visits gave the DNP project lead the opportunity to speak to the staff personally and answer questions about project goals. The DNP project lead presence reinforced the importance of the DNP initiative goal. The site visits allowed for close project supervising and timely recognition of barriers as they arose. Site visits continued bi-weekly or more during the length of the project. Anonymous surveys, face-to-face communication, and electronic mail correspondence allowed staff to share their thoughts and concerns. Randomized chart audits were performed weekly and their results were reviewed. The results were analyzed and helped identify trends that needed to be addressed. Data collection, face-to-face interaction, electronic mail correspondence, and huddle presence remained constant throughout the entire process. The process did identify interventions that improved clinical outcomes and AD screening

documentation. Changes to each PDSA cycle was discussed with the site champion, ECU faculty and then disseminated to staff prior to new change implementation. Successful interventions that lead to project success included the following: a self-auditing tool, educational intervention(s) including a Power Point, a brochure, and flyers, tasty incentives that served as reminders, reminder cards, individual instruction provided by project lead, Qualtrics survey that identified barriers from staff perspective, an EHR optimization request for change, and modifying institution chart audit requirements.

For the initial PDSA cycle, an inpatient self-auditing tool was provided to registered nurses. This tool was required as a management obligation to help ensure that there was compliance regarding admission screening requirements prior to JCACHO arrival. This tool was provided to all RN's in the beginning of the shift and was collected at the end of the day. The nurse was required to fill out a self-auditing tool for each patient they were caring for. This was a requirement by MICU management. Data analysis trends indicated that accountability for one's documentation using a self-auditing checklist improved AD screening documentation.

For the second PDSA cycle, a PowerPoint presentation, brochure, flyers, a copy of AD paperwork, and extra resources for patients and their families were available for staff use/review. After the second PDSA cycle conclusion, there was a significant improvement in AD screening documentation, but unfortunately the project compliance goal was not reached. The DNP project lead received encouraging and appropriate feedback throughout this cycle from nursing staff, unit manager, and site champion through a Qualtrics survey which directed the third PDSA cycle.

A third PDSA focused on positive reinforcement, modified education delivery, electronic mail reminders and signage on computer workstations. This cycle provided, incentives, such as

candy and snacks, during staff meetings, huddles, as well as weekly routine visits from the DNP project lead. These incentives served as reminders of the current project, mission, and overall goals. Incentives were placed in staff mailboxes. Positive reinforcement helped motivate staff to continue and/or increase the current behaviors i.e.: completing AD screening questions and engaging in ACP conversations. These incentives contained educational facts on the outside of the items. This helped create a positive environment for practice change and encouraged staff buy-in. DNP project lead continued to follow up with staff via email and unit presence to help answer or clarify any uncertainties. A Qualtrics survey was also created to help identify barriers from a staff perspective as well as an opportunity to receive constructive feedback on the interventions implemented thus far. AD screening documentation improved once more, but still was not at goal.

Randomized audits were performed and analyzed. With Excel, trends were identified and reasons for not completing documentation were revealed. From data trends, poor adherence compliance was not only related to poor documentation completion, but also to a system failure. The DNP project lead presented up-to-date data to the Information Systems Division (ISD) department. An optimization request was submitted to the ISD asking for a change within the EHR. To the lead's surprise, the institution changed the audit requirements prior to the conclusion of project implementation. The lead continued to trend data after this system change and indicated this as PDSA cycle 4. Initially, questions 1, 2, 5, 6 were required. The most missed question was question 2. This question was ultimately eliminated from the institution's requirements. After this change, compliance reached the goal of >90% for the month of November which was both a hospital requirement and DNP initiative goal.

Both human error and a systems failure were identified for improvement and modification. These two systems together contributed to poor AD screening documentation compliance. Each PDSA cycle was modified to influence the aspect that contributed to poor documentation compliance.

Summary

Planning this QI initiative began by identifying practice gaps in the current process. Through collaboration with MICU management and nursing staff, unit intervention needs were identified. ECU faculty and institutional approval was obtained, and implementation interventions were approved. QI initiative implementation required thorough education, follow-up, EHR chart audits, and standardized practice changes among bedside nurses. Pre-intervention data review required 18 weeks, implementation required 12 weeks, for a total of 30 weeks. Although the implementation period concluded, MICU nurses were encouraged to continue the standardized practice process. This entailed nursing staff complete AD screening questions within the first 24 hours of MICU admission after the DNP QI initiative conclusion. Audits were performed through November to measure sustainability.

Chapter Six: Evaluation of the Practice Change Initiative

At the conclusion of the DNP initiative, data on Advanced Directive (AD) screening was compiled, reviewed, and analyzed to represent project findings. Data was recorded monthly. Data collection was separated into two different groups. First, whether AD screening documentation was complete per the institution's policy requirements. Second, if AD screening questions were not completed, the reason why documentation was incomplete per policy requirements.

Participant Demographics

The DNP project lead randomly audited electronic health record (EHR) nursing documentation. Approximately 100 nurses were employed in the Medicine ICU (MICU) at the time of the QI intervention. The DNP QI initiative impacted interventions that were created and directed towards MICU nurses. Nurses were hired either full time, part-time, or per-diem in the MICU. Specific demographics, including name, age, race, and sex, were not recorded. The DNP project lead was not permitted to reward nor reprimand individuals for their documentation compliance.

A pre-implementation Qualtrics survey was sent to all MICU nurses, which asked for years of experience and primary shift worked, either day shift, night shift, or rotation. This data had no impact on monthly randomized audits performed by the DNP project lead. This information determined how much one-on-one education was necessary for night shift and day shift nurses. Patient demographics were not collected. This data can be view below in tables 1 and 2.

Table 1

Years of Nursing Experience

Age	20-29	30-39	40-49	50-49	60+
n	14	8	5	5	4

Table 2

Primary Shift Nurses Work

Shift	Day	Night	Both
Percentage	52.78%	16.67%	30.56%

Intended Outcome(s)

Short Term Outcomes.

Two defined short-term outcomes were the foundation of the DNP initiative: improved AD screening documentation compliance and identified modifiable reasons why documentation was not meeting the institutional requirement. Regarding staff documentation fulfillment, a goal of 90% completion was established since this was an institutional requirement. This goal was achieved. Setting a high goal reinforcing hospital policy emphasized the importance of AD screening documentation within the first 24 hours of admission to the MICU or institution.

Intermediate Outcomes.

PDSA cycles 1-3 focused on human barriers to compliance. PDSA cycle 4 was directed at a system-wide barrier to adherence. Each cycle was directed at a different type of learning style. The self-auditing tool helped guide staff members and ensured that their required documentation was completed. This intervention was successful, evidenced by an increase in

completion. Reminders and accountability with a self-auditing tool helped reinforce adherence. Staff education using a PowerPoint presentation, brochures, and flyers proved to be an effective intervention, as demonstrated by a rise in screening completion. Incentives, project lead site visits, reminder emails, and laminated instruction cards proved to be valuable, but the overall goal was still not reached. EHR audit modification, along with previous interventions discussed, appeared to be the most effective intervention, as evidenced by adherence of 90% for November.

Long-Term Outcomes.

The DNP initiative was a clinical outcome project reinforcing the standard of practice. The intended long-term outcome was to create sustainable change through the implementation of various interventions. The goal was to separate interventions into four different PDSA cycles, each focusing on a different intervention. After the QI intervention, the anticipated outcome was to generate sustainable change through behavior modification, system change, and increased awareness. The initial step to attaining this long-term outcome was the dissemination of the findings at the project site. Dissemination allowed the author to propose additional recommendations to measure, track, and implement new interventions as deemed necessary if sustainability was not maintained.

Findings.

Staff compliance. Out of 401 total chart audit reviews from April - November, 228 audits (57%) were compliant with institution policy, 173 (43%) were not. Of those 173 charts that were not compliant, 46% of individuals did not complete AD screening questions at all, and 46 % did not comply because question 2 was not answered (see Figure 1). The following items 1, 2, 5, 6 were required, while 3 and 4 were suggested documentation within the EHR.

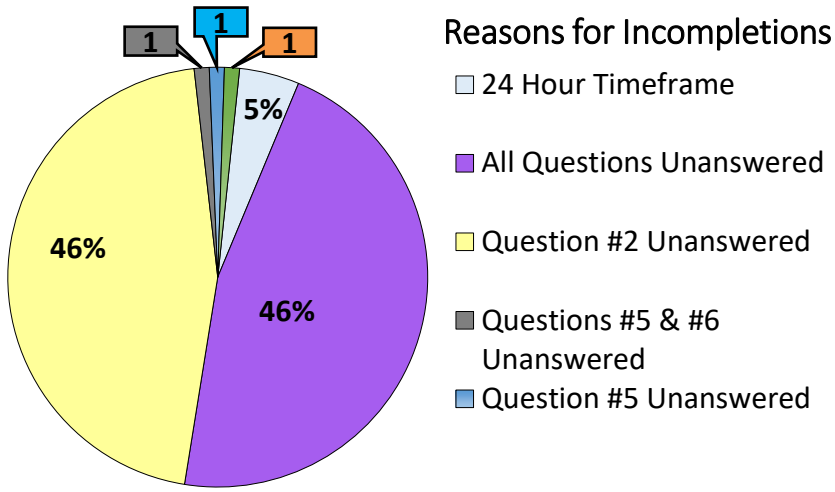
1. Patient does have an AD covering medical treatment

2. Reason patient does not have an AD covering medical treatment
3. Surrogate decision-maker appointed
4. Reason there is not a surrogate decision-maker appointed
5. Information provided on AD
6. Patient requests assistance

Four PDSA cycles were performed from August-November. The first three PDSA cycles focused on why the nurses were not completing AD screening questions and addressed various barriers through selected interventions. Interventions included an educational brochure, PowerPoint, flyers, incentives, reminder cards, electronic mails as well as one-on-one tutorials bi-weekly and staff meeting presence. Interventions and changes were made after each PDSA cycle. The fourth PDSA cycle aimed at addressing an EHR system error related to question 2 incompletion. Addressing both staff barriers to completion and system barriers allowed for a successful and sustainable QI initiative. Overall, there was an improvement in each cycle. The short and intermediate outcomes were met, respectively. Thus, overall compliance reached the project goal of greater than 90% for November after the DNP project implementation (see Figure 2). Due to the nature of the project, only one month reached the project outcome goal, identifying long-term sustainability had not been determined.

Figure 1

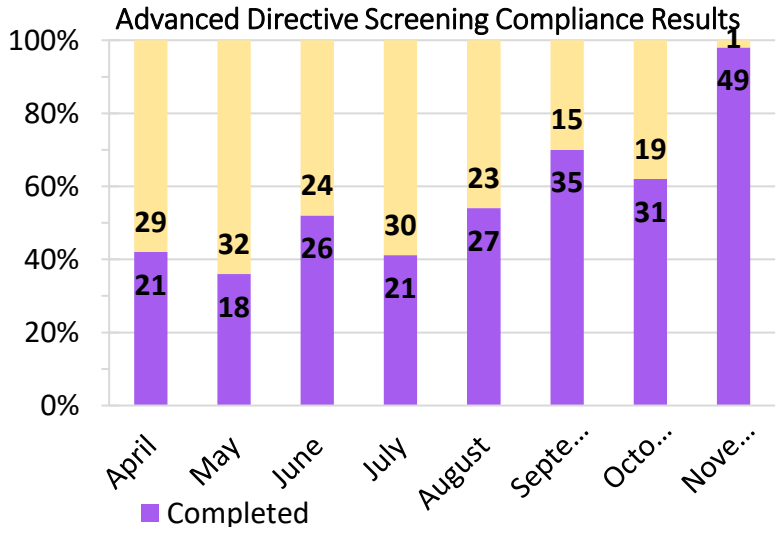
Reasons for Incompletions



Note. Four questions, as well as, a 24-hour time frame were required to be compliant. This graph depicts the main reasons why compliance was not achieved. This data was collected from April – November.

Figure 2

AD Screening Compliance Results



Note. Percentage of AD screening completion.

Summary

Overall, the QI initiative identified that to make change sustainable; one must address both human and system barriers. This QI initiative identified that if barriers remain in either structure, i.e., system or process, or human, the desired outcome may not be achieved. In this QI initiative, interventions aimed at both the structure and process component of completing AD screening questions. It was recognized that even though the first three PDSA cycles addressed the process to completion, compliance was not achieved. Conformity was not attained because only one facet was addressed, interventions directed towards human barriers to achievement. The initial PDSA cycles did not address the system-wide barriers. The fourth PDSA cycle specifically addressed the structure or system aspect. Adherence was achieved when human and system barriers were both modified, creating an effective and sustainable outcome. After project completion, the institution mandated the MICU create a formal plan for sustainability. The institution wants to ensure that sustainability was not just a possibility, but 100% achievable.

Chapter Seven: Implications for Nursing Practice

Doctoral degrees are amongst the highest level of academic degrees in most disciplines. Doctoral degrees are classified as clinical practice focused or research focused. In various fields of study, individuals can either obtain a Doctor of Philosophy (PhD) or a professional doctoral degree, such as a Doctor of Nursing Practice degree. AACN (2019) states that "research focused programs are designed to prepare nurse scientists and scholars." As such, "PhD programs require an original research project and the completion and defense of a dissertation or linked research papers" (AACN, 2019). AACN (2019) clarifies that "practice-focused doctoral programs are designed to prepare experts in specialized advanced nursing practice." These programs concentrate immensely on the application of credible, evidence-based practice (AACN, 2019). AACN (2019) makes clear that "the DNP is designed for nurses seeking a terminal degree in nursing practice. A DNP degree is an alternative approach to research-focused doctoral programs. DNP-prepared nurses are well-equipped to fully implement the science developed by doctoral prepared nurse researchers (AACN, 2019).

Practice Implications

The two types of doctoral programs differ in their graduates (AACN, 2019). Both programs exemplify integrated, alternative methods to the highest level of educational preparation in nursing, changing in objectives, proficiencies, and degree requirements. The *Essentials of Doctoral Education for Advanced Nursing Practice* is a document prepared by the American Association of Colleges of Nursing (AACN) to guide consistency between the two types of doctoral degrees. The AACN is responsible for regulating, modifying, and creating the *DNP Essentials*. There are eight DNP Essentials that each DNP student must comply with to

obtain a DNP degree (AACN, 2019). These *DNP Essentials* are a framework and curriculum guide for all advanced nursing practice roles (AACN, 2006).

Essential I: Scientific underpinnings for practice. The DNP is a terminal degree. Core curriculum requirements that are required are complex. DNP graduates can translate methodical knowledge into applicable interventions that will benefit various patient populations. AACN (2006) acknowledges that competency in this essential ensures the following:

> Nursing science is integrated with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences. This is the basis for the highest level of nursing practice. The use of science-based theories and concepts are applied to determine the significance of health and delivery phenomena. These concepts describe the actions and advanced strategies to enhance, alleviate, and improve health and health care delivery as appropriate; and evaluate outcomes. DNP prepared graduates can develop and evaluate new practice approaches based on nursing theories and theories from other disciplines (p. 9).

The implementation of the DNP quality improvement (QI) initiative in the Medicine Intensive Care Unit (MICU) was introduced after evaluating scientific evidence. This evidence advocated the necessity and value of the intervention(s). The literature review exposed weakness in our healthcare system, including inadequate AD documentation, AD detailing, and lack of ACP discussion in both the inpatient and outpatient settings. According to Anderson, Lin, & Laux, (2014), the most frequently reported reason for not having an AD was unawareness. "Lack of EOL discussions allow opportunities for improvement and intervention implementation" (Rao et al., 2014). Evidence-based literature identified the need to recognize the inevitability of

increased AD-screening completion. Screening should be completed during hospital admissions as well as in outpatient clinic settings. The purpose of completing a detailed literature review was to make sure that implemented interventions were evidence-based. The DNP initiative applied evidence-based supported strategies to execute interventions. Interventions were created to enhance health delivery and improve patient outcomes.

However, for AD screening to be successful, early adoption of the process must be established. This process must be sustained. The staff, as well as management, ought to apply evidence-based interventions into their daily practice. The institution is an academic center of excellence that supports quality improvement initiatives. Staff at the institution are capable of recognizing areas for improvement. Utilizing resources and engaging in patient advocacy will enhance healthcare delivery. Without staff acceptance, this cannot be sustained.

Essential II: Organization and systems leadership for quality improvement and systems thinking. "Doctoral-level knowledge and skills in organizational and systems leadership are consistent with nursing and health care goals to eliminate health disparities and to promote patient safety and excellence in practice" (ANCC, 2006). DNP graduates must recognize, interpret, and execute sustainable changes at organizational and policy levels. According to AACN (2006), the DNP graduate will be equipped to develop and fulfill their role based on the following:

> The DNP graduate is prepared to develop and evaluate care approach methods that meet current and future needs of patient populations based on scientific discoveries in nursing and other clinical sciences, as well as organizational, political, and economic sciences. The graduate can provide the basis to ensure responsibility for the superiority of health

> care and patient safety for populations with whom they work. DNP prepared graduates are outfitted to improve and evaluate efficient strategies for managing the ethical dilemmas inherent regarding patient care, the health care organization, and research. (p.10-11).

DNP graduates are provided the tools to execute quality improvement (QI) and sustaining changes. To effectively employ a QI initiative, an insight into these aspects is necessary.

The first step in the DNP process was to identify a community partner that had a weakness in their current practice. Facilitating an applicable QI initiative required the DNP project lead to first assess the site's willingness for transformation. This was evaluated by establishing the DNP project purpose, identifying time restraints, clarifying site requirements, goals, and the need for intervention. Interviews with leadership and staff were conducted. These interviews confirmed readiness for change. Responses from the pre-intervention survey and interviews were reviewed. A project proposal was compiled and submitted to the project site as well as ECU. The DNP project lead concluded that AD screening documentation did not meet hospital system compliance. The DNP project lead facilitated communication between the department's medical director, manager, QI department, nursing research council, and ECU faculty. These conversations constructively impacted the project's execution, efficiency, sustainability, and success. The DNP initiative was intended to enhance patient care and decrease hospital expenditures.

For project sustainability, these community partners must reinforce DNP objectives after the initiative is complete. Institution policy is in place already; staff accountability from a management standpoint is a necessity. Compliance of 90% is an institutional requirement and

must be met per policy guidelines. Support from a leadership standpoint is essential for continued improvement.

Essential III: Clinical scholarship and analytical methods for EBP. Performing a thorough literature review and identifying references that support quantifiable practice change is a necessary aspect of clinical application. AACN (2006) attests that a DNP graduate will be capable of achieving the following:

> DNP prepared graduates are equipped to use logical approaches to critically assess existing literature along with other evidence to determine and implement the best evidence for practice. Graduates will design and implement methods to evaluate outcomes of practice, practice patterns, and organizations of care within a practice setting, health care organization, or community against national benchmarks to verify inconsistencies in practice outcomes and population trends. Graduates will design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. Applying pertinent discoveries to create practice guidelines, enhance practice, and improve the practice environment will be within a DNP graduate's scope of practice. Graduates will utilize evidence, technology, and research practices properly to gather appropriate and accurate data to generate evidence for nursing practice. (p. 11-12).

DNP graduates are provided with the basis to advise, inform, and guide the design of databases. These databases within healthcare produce meaningful suggestions for nursing practice change. Graduates are prepared to evaluate and analyze data, propose evidence-based practice and interventions, forecast and scrutinize outcomes, evaluate behavior patterns, and

identify gaps in evidence for practice (AACN, 2006). Constructing and executing evidenced-based QI projects is a method to reduce the knowledge-to-action deficit.

Evidence-based practices and interventions regarding ADs were examined. Research specific to AD initiatives and similar research studies were evaluated. Reviewed research applied to various patient care settings. Findings were analytically explored to determine a need for change at the project site. Literature was reviewed regarding ways to increase clinical outcomes through QI interventions. The literature indicated the inevitability of increased AD screening completion during hospital admissions. There was a gap in the literature specifically regarding interventions to increase AD EHR documentation among nurses. The study findings were considered when the DNP project lead developed the best-supported interventions. Identified interventions from previous studies were modified and adapted to increase AD screening compliance.

With hopes of sustainment, the DNP project lead urged staff and management at the institution to remain up to date with clinical practice guidelines regarding advanced care planning (ACP). Applying practical and effective use of evidence-based resources and concepts was encouraged. Best approaches to practice change and implementation also were discussed. ACP's best practices were reviewed and communicated to staff and leadership. Monitoring audit statistics routinely was advised. Maintenance of the QI initiative or similar projects should be disseminated. Dissemination of an action helps guide successful healthcare practice change.

Essential IV: Information systems/technology and patient care technology for the improvement and transformation of healthcare. Healthcare is evolving. Technology, expertise, and knowledge are utilized in numerous care settings in various forms to improve

patient care. Despite continuous efforts to improve healthcare, opportunities for further development and enhancement are still present. Technology influences DNP graduates and provides them the ability to achieve the following according to AACN (2006):

> DNP graduates design, select, use, and evaluate systems that assess and examine outcomes of care, care systems, and quality improvement, including consumer use of health care information systems. Graduates analyze and communicate critical elements necessary to the selection, use, and evaluation of health care information systems and patient care technology. Graduates reveal the conceptual ability and technical skills to develop and execute an evaluation plan involving data extraction from practice information systems and databases. Graduates provide leadership in the evaluation and resolution of ethical and legal issues within healthcare systems relating to the use of information, information technology, communication networks, and patient care technology. Graduates can evaluate consumer health information sources for accuracy, timeliness, and appropriateness. (p. 13).

Furthermore, DNP graduates apply information systems and technology to evaluate the effectiveness of change and promote safe but efficient care to their patients.

The DNP project lead applied technology for both dissemination of the project goals and application of interventions. Various types of technology were utilized daily for multiple purposes. From the start of the DNP initiative process, access to a computer and the internet was a necessity to perform a thorough literature review and begin the QI process. The EHR was operated to improve the efficiency of AD screening documentation. Data was obtained by performing randomized chart audits retrieved from the EHR. Data collected from randomized chart audits entered Microsoft Excel. The entered data calculated and populated graphs. These

graphs determined trends throughout the DNP initiative process. Microsoft PowerPoint and Microsoft Word were tailored to meet the DNP initiative objective. The data was presented to the Information Systems Division (ISD) department. An optimization request was submitted to the ISD for a change within the EHR.

Randomized chart audits were an institutional requirement by committee members before the QI initiative. The institutional demand has always been six per month by each unit. Before the initiative, data was not reviewed on a routine basis by unit committee members. Data was reviewed by upper-level management regularly. Issues were not made apparent to specific units until a problem existed. The DNP project lead encouraged both management and committee members to follow up with statistics and monitor trends monthly routinely. A minor decrease in compliance could be identified early. Speedy recognition could warrant follow up interventions. With the use and application of technology, quick identification could help prevent heightened challenges.

Essential V: Healthcare policy for advocacy in healthcare. AACN creates standards for DNP programs to follow. These benchmarks ensure all DNP graduates can comply with guidelines after graduation. AACN (2006) states all graduates are prepared to do the following:

> Graduates are equipped to critically analyze health policy proposals, health policies, and related issues. Graduates can demonstrate leadership through the development and implementation of health policy. Graduates are proficient in influence. They are equipped to influence policymakers through active participation on committees or task forces at various levels to improve health care delivery and outcomes. Graduates are provided the tools to effectively educate others specific to nursing, health policy, and patient care

> outcomes. Graduates are taught to advocate for the nursing profession within the policy and healthcare communities. Graduates are encouraged to develop, evaluate, and provide leadership for health care policy. A DNP foundation helps ensure graduates are outfitted to advocate for social justice, equity, and ethical policies within all healthcare arenas. (p. 15).

DNP graduates are projected to accept leadership roles. They are expected to advocate for their patients, families, and their community to achieve affordable and quality healthcare. They have the skills to implement change in various community settings. The goal of a DNP prepared graduate is to advocate for new or innovated initiatives to improve patient outcomes. They are also able to apply their knowledge to understand patient outcomes within various healthcare delivery systems better.

The DNP project goal was increased AD screening upon admission. The goal's concepts improved quality of care, patient advocation, and patient-centered decision making. These concepts helped prevent unwarranted healthcare outcomes. The proposed DNP initiative was centered around educating and improving AD screening documentation to meet the institution's compliance requirement of 90%. The initiative supported the institution's policy. Interventions were intended to ensure those policy requirements were reinforced. The policy was not impacted or revised. Designated interventions were designed to address barriers that were identified throughout the DNP implementation process. The DNP project lead made staff aware that their participation in this initiative helped limit avoidable actions that overall decrease unnecessary healthcare costs in both the acute setting as well as long term setting. Overall, with improved documentation and patient empowerment over their health, quality of care will improve, there will be a decrease in unwanted outcomes, and there would be a projected decrease in healthcare

costs through the prevention of unwanted, unnecessary, and unwarranted treatment and life-sustaining measures. This initiative could potentially impact other units in the institution as well as identify other policies that need to be modified or reinforced.

The DNP project lead was transparent with project objectives and data results to both management and house-wide QI committee members. The QI initiative identified areas within the system that lacked proper support. Without an effective structure or process, compliance will never meet policy requirements. Unit management was provided the tools and resources to sustain the QI initiative. Management was also encouraged to be familiar with how to identify weaknesses and strengths within the system's structure and process to achieve successful outcomes. Advocation for effective system changes and elimination of barriers is essential in initiative sustainment.

Essential VI: Interprofessional collaboration for improving patient and population health outcomes. DNP graduates' skills after program completion make them role models for interprofessional teams. Their knowledge, educational background, and experience both personally and professionally open various qualified opportunities to enhance current practice. According to AACN (2006), a DNP graduate is capable of the following:

> Graduates are proficient in employing effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standards of care, and other scholarly products. Graduates are skilled in leading interprofessional teams in the analysis of complex practice and organizational issues. Graduates are competent in engaging in consultative and leadership skills with

> interprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems. (p. 15).

Objectives of the designated DNP initiative was propagated through face-to-face interaction, electronic mail education, pre, and post-implementation survey, as well as informative brochures and flyers. Individuals who engaged in face-to-face interaction included nursing staff, unit-specific case manager, unit manager, medical director, QI committee members, and ECU faculty. By sharing and expressing the proposals of this initiative with various members from numerous disciplines at the project site, the interventions were modified to fit the needs and learning styles of the staff.

The interprofessional collaboration with various team members was vital for DNP initiative success. The DNP project lead interacted with institutional management, quality improvement leaders, and unit nursing staff. Common goals for improving patient outcomes and quality of healthcare was the forefront of the meetings. Maintaining these interprofessional team meetings will be crucial in QI initiative sustainment. Understanding and having respect for each professional's contribution to the team is necessary for QI longevity. These values were reinforced as the conclusion of the initiative was approaching. Each team member was urged to continue to strive to deliver the best patient care possible and continue to be excellent patient advocates. Collaboration and partnership are aptitudes that involve persistence and humbleness. These concepts were evident throughout the DNP initiative.

Essential VII: Clinical prevention and population health for improving the nation's health. The DNP national curriculum concentrates on providing the student with a well diverse foundation to provide safe healthcare services to patients of various backgrounds integrating

health promotion, risk reduction, and illness prevention. After the completion of an accredited DNP program, AACN (2006) asserts the graduate can achieve the following:

> The DNP graduate can analyze appropriate scientific data related to individual, aggregate, and population health. Graduates are equipped to synthesize concepts related to clinical prevention and population health in developing, implementing, and evaluating health promotion/disease prevention efforts. Graduates are qualified to assess care delivery models and strategies using concepts related to various dimensions of health. (p. 16).

DNP graduates utilize their knowledge and education to create, demonstrate, and reinforce evidence-based practice into new and innovative interventions in the clinical practice setting.

After evaluating the institutions weaknesses, apprehensions, and obstacles regarding AD screening documentation, the following was revealed: (1) without appropriate screening, opportunities to identify patients who have completed ADs were being missed, (2) it was evident that nursing staff were overlooking opportunities to engage patients in ACP dialogue, (3) exclusive of an effective screening process, patients who wished to formalize their healthcare decisions were unaware of the institution's abundant amount of resources, and (4) as a result of incomplete screening documentation, the institution was not meeting the policy compliance requirement. The initiative goal and purpose guided the improvement processes. These processes were implemented using ample resources, face-to-face education, and reinforcement. This foundation oversaw the improvement in AD screening documentation. Nurses who engaged in AD screening and documented routinely ultimately reinforced the institution's policy

requirement. Providing patients with these learning opportunities gave them power over their health. Making sure that their wishes are correctly documented ensures that undesired outcomes are unnecessary. Implementation of this project was intended to enhance healthcare delivery and empower patient decision making.

To improve healthcare delivery, it will be imperative that various interdisciplinary teams, including nursing, engage in ACP discussions and complete AD screening questions in an efficient and timely manner. Participation in AD screening conversations upon admission identifies individuals who would benefit from in-depth ACP conversations. Literature supports that active ACP conversations can decrease national healthcare costs. Effective ACP screening improves AD and HCPOA completion. With efficient ACP delivery, healthcare decision making is patient-specific, preventing unwarranted interventions and ensures a patient's wishes are honored. Decreasing overall life-prolonging interventions and lengthy hospitalizations improve a patient's quality of life as well as decrease healthcare costs.

Essential VIII: Advanced nursing practice. DNP graduates apply and utilize the core objectives taught throughout the curriculum to perform their role as an advanced practice provider (APP). Clinical judgment, assessment skills, as well as guideline application, is tailored to their area of employment. According to AACN (2006), DNP graduates upon completion of the accredited program can achieve the following:

> Graduates can conduct a comprehensive and systematic assessment of health and illness parameters in complex situations, incorporating diverse and culturally sensitive approaches. Graduates can design, implement, and evaluate therapeutic interventions. Graduates are skilled to develop and sustain therapeutic relationships and partnerships

> with patients and other professionals. Graduates demonstrate advanced levels of clinical judgment, systems thinking, and accountability to improve patient outcomes. Graduates guide, mentor, and support other nurses to achieve excellence in nursing practice. Graduates educate and guide individuals and groups through complex health and situational transitions. Graduates use conceptual and analytical skills in evaluating the links among practice, organizational, population, fiscal, and policy issues. (p. 16-17).

Although the interventions were created and tailored to address MICU staff barriers and educational needs, specifically, these interventions can be implemented in other units in the hospital or other institutions. As a DNP graduate, there is a high likelihood that similar vulnerabilities in other clinical practice settings will arise. In those instances, the project interventions could be modified to ensure effective execution is obtained in different clinical settings, or a new QI initiative could be established. The DNP curriculum taught how to address barriers. The ability to identify obstacles helps to ensure a successful outcome. The process of identification, innovation, and implementation provides a blueprint for a successful QI project. This blueprint can be applied to a variety of QI projects, no matter the topic. DNP graduates are equipped to apply QI concepts to various professional settings. This foundation helps achieve substantial, permanent, and constructive change among diverse health care settings. It all starts with discovering the opportunities.

Summary

The DNP *Essentials* define a framework with recognized core curricular aspects and proficiencies. This framework must be followed, and competencies must be obtained to achieve a DNP degree. The *Essentials* are necessary for all DNP graduates irrespective of specialty.

These *Essentials* are applied to all DNP programs nationally. The DNP is a degree title, that does not define what specialty a graduate is prepared (ANCC, 2006). DNP graduates are taught and provided the means to be successful in a variety of nursing practice roles. These eight *Essentials* deliver uniformity among advanced practice programs across the country. These proficiencies were utilized and applied throughout the DNP project lead's initiative throughout various development, execution, and assessment phases. The DNP project lead was able to impact clinical practice application change. This change was achieved with intervention implementation and demonstration of dedicated understanding, expanded responsibility, and liability in the inpatient setting.

Chapter Eight: Final Conclusions

Two outcomes were assessed following DNP initiative completion: staff compliance related to advance directive (AD) screening and the reason why compliance had not previously been achieved. The quality improvement (QI) initiative reached the project goal of 90% completion. Though project findings and results span further than the data used to analyze these outcomes. These supplementary findings are reviewed further in this chapter. Additionally, project strengths and constraints, benefits, and future suggestions for sustainability are discussed. This QI initiative supported and aligned with the purpose, and institutional policy goals, to best serve numerous patient populations that necessitate significant guidance and support.

Significance of Findings

Although ambitious, a goal of 90% of staff compliance with AD screening documentation was chosen. The target of 90% was selected based on required hospital fulfillment requirements. The DNP project lead wanted to adhere to institutional requirements. Thus, it was reinforced with each nurse, that the goal is not to comply with only this QI initiative, but ultimately adhere to institutional policy. From August to October 2019, findings fell short of the 90% goal. For November, compliance reached the project goal of 90%.

The author appreciates that to create an environment for sustainability, a standardized process, along with an overall unit acceptance, must be established and maintained. Improvements in total AD screening completion, as well as management and charge nurse involvement, were attributed to changes throughout the QI initiative. There was steady guidance and mentorship of the DNP project lead with project participants and the managerial team. Likely, the rate of completion would continue to reach 90% with additional process reform.

Although each PDSA cycle did not result in 90% compliance, rates of completions at the project conclusion were deemed successful as the changes executed transpired over a short period.

The purpose of the DNP initiative was to improve AD screening documentation through the implementation of various interventions. These interventions addressed diverse staff identified barriers. It is made apparent that no matter how many interventions addressed human barriers, compliance was not achieved unless the EHR system was modified. The QI initiative identified that the second question, which addressed the reason patients did not have an AD covering medical treatment, accounted for 46% of noncompliance. The institution eliminated this requirement. It was evident that without this change, compliance would not have been achieved.

Project Strengths

As the project design came together, and the first PDSA cycle implemented, some phases could have been conducted differently for the benefit of the project. The active engagement of nursing staff and the site champion from start to finish was significant regarding obtaining confidence, trust, and project buy-in. The enthusiastic participation of nurses had a constructive influence on the impact of the project. They were willing to participate, ask appropriate questions, and follow up with uncertainties. Another strength was the relationship between the QI project lead and nursing staff, along with the site champion. These relationships were pivotal in the success of the project. Throughout implementation, the project lead's passion for the QI initiative started to become contagious to other staff members. An environment that supported clinical practice change, guidance, and questions strengthened. With the help of the site champion, MICU nurses, as well as other institutional members, the project was able to improve the quality of care (QOC) delivered to its patients.

Limitations

There were several limitations discovered. A barrier to the QI initiative was various other QI projects being initiated at the same time at the project site, which led to information overload and QI fatigue. Another limitation was the staff workload. The QI initiative required that staff take time to speak with patients and their family members and, in the process, complete appropriate AD screening documentation. The QI survey identified that this task was not simple, was time-consuming, and required nursing staff to do more. Another limitation was the amount of time available for implementation. Each of the four PDSA cycles lasted four weeks. Lastly, an additional barrier was the varying amounts of interests between nurses. As a result, creative strategies in education and discussion with staff followed. Information provided concerning improving AD dialogue between patients and families led to more efficient AD screening documentation.

Project Benefits

As a result of the QI initiative, the unit expanded its current admissions council team to continue to perform follow up chart audits and help ensure compliance was maintained. It is now required that charge nurses check each shift, every admission screening, to ensure its completion within 24 hours. Along with charge nurse involvement, a new standard of practice has been instituted and maintained as a result of the QI initiative. If a bedside nurse admitted a patient during their shift, it's standard of practice to report off what aspects of the admission need followed up. Additionally, MICU staff became more comfortable with the admission process and participating in AD dialogue. Furthermore, MICU staff became familiar with the QI process and displayed a willingness for practice change.

ACP documents should be discussed and completed by individuals, 18 years of age and older. These conversations should be discussed routinely by both their primary care providers (PCP), specialists, and inpatient providers. Nurses and providers across the healthcare system should be comfortable with discussing and articulating ACP documents. Aforementioned interventions and QI project design could translate to other clinical practice settings and patient populations. Information provided in the PowerPoint and brochure regarding ADs are universal concepts. The applied interventions and resources specific to the institution's AD screening process could be modified and utilized in various settings. The interventions could be employed to any unit within the project site institution or facilities that use the same EHR. There are interminable opportunities related to ACP.

Recommendations for Practice

Beyond the DNP project. Practice change for the inpatient setting is inevitable as further requirements and guidelines change. As the overall growing age of Americans continues to rise, there will be an urgency to have AD and HCPOA documents complete. In the future, several additional QI initiatives could take place. Specifically, data restricted to whether ADs are getting completed in the inpatient setting, utilizing institutional resources such as a notary public would be a beneficial approach for further QI initiatives. This DNP initiative only ensures that the screening took place. The next step would be to intervene on individuals who did not have an AD with hopes of increased AD completion in the inpatient setting.

Project sustainability. Practice change must be consistent to ensure the sustainability of the project. Moving forward, the MICU took into consideration recommendations made by the DNP project lead after the project. One suggestion that has already been implemented was to designate an available person to help ensure screening documentation is complete within 24

hours. This individual is the charge nurse of the unit. The charge nurse is responsible for ensuring that screening questions are complete, if not already completed by the primary nurse. Another recommendation implemented was to have a designated set of individuals audit charts within the first 24 hours of admission to ensure patients are not getting missed. This group of individuals includes all charge nurses as well as managerial staff. A future QI initiative would be to continue chart audits to ensure project sustainability in the coming months based on these changes.

Application of finding in other settings. This DNP initiative was specific to the MICU at the designated institution. Findings from the literature review suggest that AD completion and discussion is under-reported in both the inpatient and the outpatient setting. Nationally, for the growing overall age of patients, there is a low percentage of individuals who have completed AD documents. Thus, the project incorporated interventions that apply to various inpatient and outpatient settings. Future opportunities would be to implement this DNP initiative as well as future initiatives to other clinical settings. Each site could tailor the interventions to their patient and participating partners.

Final Summary

The purpose of this DNP initiative was to create a standardized process for AD screening completion in the inpatient setting, specifically the MICU. A plan for strategy, execution, data collection, and evaluation of the project was created following a thorough literature review, along with the guidance of the King's theory of goal attainment and PDSA cycle framework. Project outcomes met the ambitious goal of 90% compliance after implementing four PDSA cycles over four months. Both staff compliance and system modification were considered auspicious for a QI project in which no previous standardized

process ever addressed AD screening. Through the implementation of various interventions, system change specific to audit requirements, as well as applied recommendations, the DNP project site is now equipped to achieve sustainability. There is a future opportunity for evolution specific to this area in both this department and other clinical settings.

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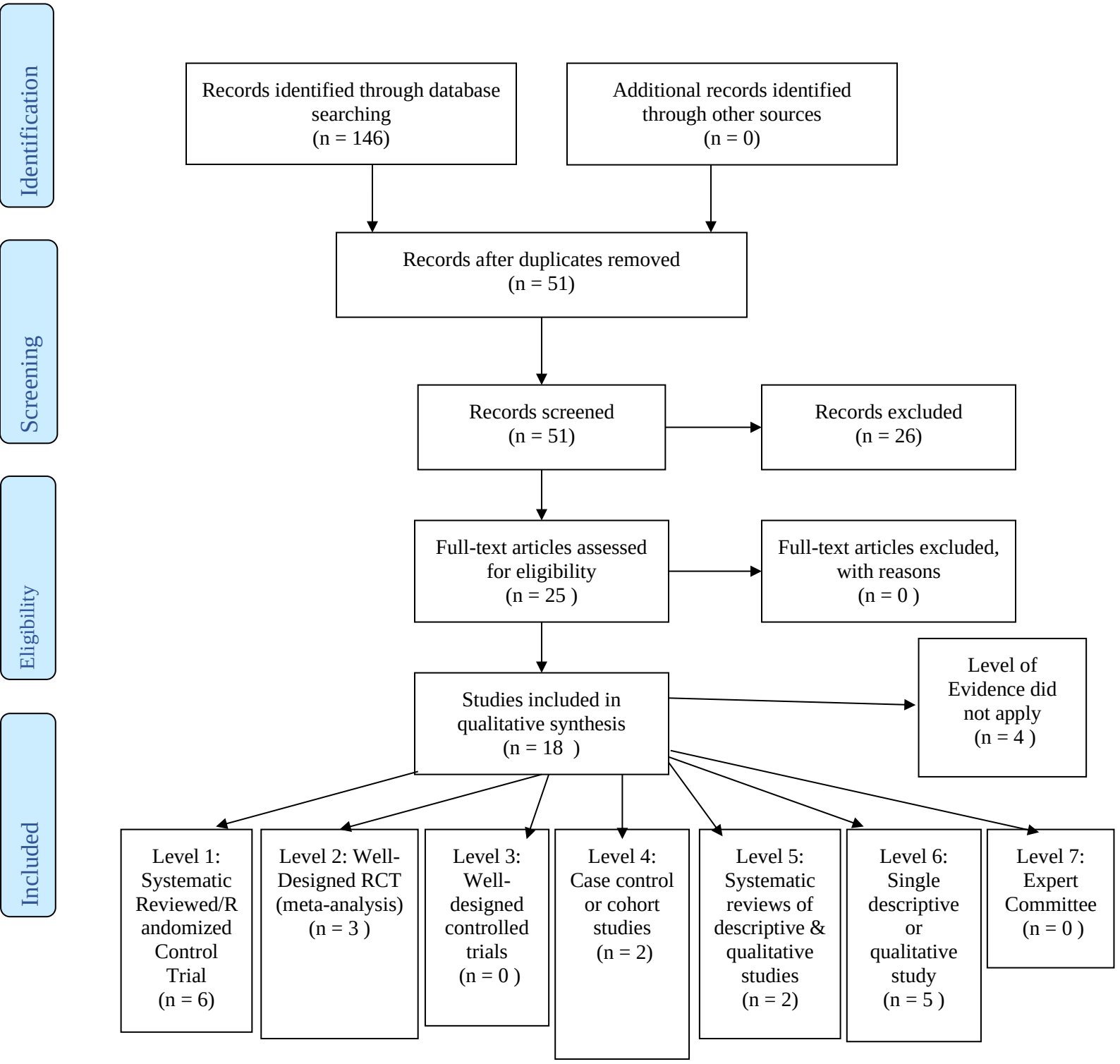
Appendix A

Prisma 2009 Flow Diagram



Appendix B

Literature Matrix

Literature Review Matrix				
Student: Melanie Kiser	**Faculty Lead:** Dr. Helene Reilly	**Date:** January 2019 - May 2020	Project: Implementation of Advance Directive Screening Education in the Hospital Setting	
Article (APA citation)	**Level of Evidence (I to VII)**	**Data/Evidence Findings**	**Conclusion**	**Use of evidence in project plan**
Bajracharya, A. S., Crotty, B. H., Kowaloff, H. B., Safran, C., & Slack, W. V. (2016). Improving health care proxy documentation using a web-based interview through a patient portal. Journal of the American Medical Informatics Association: JAMIA, 23(3), 580–587. http://doi.org/10.1093/jamia/ocv133	Level 6	Patients found an online interview convenient and helpful in facilitating selection and documentation of an HCP. The study demonstrated that a web-based interview to collect and share a patient's HCP information was both feasible and useful.	Mean age was 55 years, 63% women, 69.5% has a high school degree or higher at a 649-bed hospital.	Health care proxy (HCP) documentation is suboptimal. To improve rates of proxy selection and documentation, utilization of interviews to help guide patients may be helpful. Interviews may help to capture their choices in their electronic health record (EHR). Throughout the screening process, engaging in these conversations is a form of interview.

Bokhoven, M. A. (2003). Designing a quality improvement intervention: A systematic approach. *Quality and Safety in Health Care, 12*(3), 215-220. doi:10.1136/qhc.12.3.215	Level 1	The methodology of systematically designing quality of care improvement interventions, including problem analysis, intervention design and pretests were evaluated.	It is generally accepted that systematic development of quality improvement interventions is needed if such interventions are to be effective. Interventions should have the correct objectives, be targeted at the barriers and facilitators related to achieving the desired performance and have program components and materials adapted to specific objectives, target populations, barriers, and facilitators. In addition, it may be necessary to target the intervention not only at individual professionals but also at external factors which influence professional behavior and the quality of care. The approach is ideally theory driven.	Creating intervention(s) that are specific to the designated population (MICU RN's). Identifying barriers throughout the implementation process will be key in implementation modification.
Cusack, L., Mar, C. B., Chalmers, I., & Hoffmann, T. C. (2016). Educational interventions to improve people's understanding of key concepts in assessing the effects of health interventions: A systematic review protocol. *Systematic Reviews, 5*(1). doi:10.1186/s13643-016-0213-9	Level 1	The general public are not trained in the fundamentals of health research and do not typically possess the knowledge and skills to evaluate the accuracy and completeness of information about health interventions. Without this, the public are vulnerable to acting on inaccurate or incomplete	The results of the review were discussed throughout the study in the context of the quality of the evidence, the limitations of the review, and the strengths of findings as well as their implications for current practice and future research directions. Any educational intervention which aims to help the participants understand one or	Educating public regarding ACP and ADs is a dire need.

		health information and making ill-informed health decisions.	more of the key concepts that are relevant to evaluating the effects of health interventions and/or the interpretation of research results will be eligible.	
de Heer, G., Saugel, B., Sensen, B., Rübsteck, C., Pinnschmidt, H. O., & Kluge, S. (2017). Advance Directives and Powers of Attorney in Intensive Care Patients. *Deutsches Arzteblatt international*, *114*(21), 363–370. doi:10.3238/arztebl.2017.0363	Level 3	Advance directives and powers of attorney are increasingly common, yet data on their use in clinical situations remain sparse.	For patients hospitalized in intensive care units, there should be early discussion about the presence or absence of documents of these kinds and early evaluation of the patient's concrete wishes in critical situations.	Future studies are needed to determine how best to assure that these documents will be correctly prepared and then given over to hospital staff so that they can take their place in the patient's record.
Durbin, C. R., Fish, A. F., Bachman, J. A., & Smith, K. V. (2010). Systematic Review of Educational Interventions for Improving Advance Directive Completion. *Journal of Nursing Scholarship*, *42*(3), 234-241. doi:10.1111/j.1547-5069.2010.01357.x	Level 5	Twelve randomized and four nonrandomized studies were selected from the nursing, medical, and social work literature that met the following criteria: described educational interventions, provided information to calculate the percent of newly completed ADs as an outcome, and published between 1991 and 2009. The review focused primarily on randomized studies. Reviewers calculated the percent of	Findings were inconsistent regarding all types of educational interventions studied versus controls. Enough evidence exists to conclude that combined written and verbal educational interventions were more effective than single written interventions in increasing the percent of newly completed ADs in adult clinic outpatients and hospitalized elderly.	Intervention(s) will include various learning styles. These will include written and verbal educational intervention(s).

		newly completed ADs by determining the number of subjects per group without an AD at baseline and the percentage of those who then completed one by the end of the studies.		
Fink, R. M., Somes, E., Brackett, H., Shanbhag, P., Anderson, A. N., & Lum, H. D. (2019). Evaluation of quality improvement initiatives to improve and sustain advance care planning completion and documentation. *Journal of Hospice & Palliative Nursing*, 21(1), 71-79.	Level 5	Despite the established benefit of advance care planning (ACP), achieving and sustaining high rates of ACP completion continue to be a challenge in many health care settings.	The findings suggest strategies to further integrate ACP through interdisciplinary teams, including outpatient staff education, inpatient and outpatient quality improvement initiatives, and dedicated staff for ACP.	Barriers to completion are identified. Integrating suggestions to overcome these barriers is imperative for ACP completion in daily practice.
Fried, T. R., Redding, C. A., Martino, S., Paiva, A., Iannone, L., Zenoni, M., . . . O'Leary, J. (2018). Increasing engagement in advance care planning using a behavior change model: Study protocol for the STAMP randomized controlled trials. *BMJ Open,8*(8). doi:10.1136/bmjopen-2018-025340	Level 2	The purpose of the Sharing and Talking about My Preferences study is to examine the efficacy of three behavior change approaches to increasing ACP engagement through two related randomized controlled trials being conducted in different settings (Veterans Affairs (VA) medical center and community).	Results are pending completion of study.	N/A

Fu, L. Y., Bonhomme, L. A., Cooper, S. C., Joseph, J. G., & Zimet, G. D. (2014). Educational interventions to increase HPV vaccination acceptance: a systematic review. *Vaccine*, *32*(17), 1901–1920. doi: 10.1016/j.vaccine.2014.01.091	Level 1	Databases of PubMed and Web of Science for English-language articles describing educational interventions designed to improve HPV vaccination uptake, intention or attitude was searched and evaluated.	There is not strong evidence to recommend any specific educational intervention for wide-spread implementation. Future studies are required to determine the effectiveness of culturally competent interventions reaching diverse populations. 33 studies of HPV vaccination educational interventions: 7 tested the effectiveness of interventions with parents, 8 with adolescents or young adults, and 18 compared the effectiveness of different message frames in an educational intervention among adolescents, young adults or their parents.	There currently isn't evidence to support any specific educational intervention for the proposed intervention(s).
Goodman, D., Ogrinc, G., Davies, L.G., Baker, G.R., Barnsteiner, J., Foster, T.C., …Thor, J. (2016). Explanation and elaboration of the SQUIRE (Standards for Quality Improvement Reporting Excellence) Guidelines, V.2.0: examples of SQUIRE elements in the healthcare improvement literature. BMJ Journals. doi: 10.1136/bmjqs-2015-004480	N/A	The SQUIRE 2.0 E&E is intended to help authors 'operationalize' SQUIRE in their reports of systematic efforts to improve the quality, safety and value of healthcare.	The SQUIRE 2.0 E&E is intended to help authors 'operationalize' SQUIRE in their reports of systematic efforts to improve the quality, safety and value of healthcare.	Use of SQUIRE guidelines was utilized throughout the literature review.

Grant J. (2002). Learning needs assessment: assessing the need. *BMJ (Clinical research ed.)*, *324*(7330), 156–159.	N/A	Learning needs assessment has a fundamental role in education and training.	Learning needs assessment is thus crucial in the educational process. The literature suggests that, at least in relation to continuing professional development, learning is more likely to lead to change in practice when needs assessment has been conducted, the education is linked to practice, personal incentive drives the educational effort, and there is some reinforcement of the learning	A pre and post survey will be provided to MICU nurses to assess baseline knowledge related to ACP, AD, and the current process in the institution.
Gregory, B. H., Horn, C. V., & Kaprielian, V. S. (2008, August 01). Eight Steps to a Chart Audit for Quality. Retrieved from https://www.aafp.org/fpm/2008/0700/pa3.html	N/A	A chart audit is simply a tool physician can use to check their own performance, determine how they're doing and identify areas where they might improve.	Perhaps the most beneficial use for a chart audit is to measure quality of care so that you can improve it. Chart audits are often used as part of a quality improvement initiative.	Chart audits are currently being performed by current staff members and management of the institution. Chart audit submission is an institutional requirement. Chart audits will also be performed throughout the intervention(s) implementation process.
Josephs, M., Bayard, D., Gabler, N. B., Cooney, E., & Halpern, S. D. (2018). Active Choice Intervention Increases Advance Directive Completion: A Randomized Trial. *MDM policy & practice*, *3*(1),	Level 2	New employees were randomized to an active choice intervention (n = 642) or usual care (n = 637). The active choice intervention asked employees to complete an AD, confirm prior AD	Participants assigned to the active choice intervention more commonly completed ADs online (35.1% v. 20.4%). A young and healthy participant may not benefit from AD completion as an older or seriously ill patient would. The	Although a young and healthy participant may not benefit like an older individual would, it may provide some benefit. Providing patients and families information and guidance regardless of age

2381468317753127. doi:10.1177/2381468317753127		completion, or fill out a declination form. In usual care, participants could complete an AD, confirm prior completion, or skip the task.	active choice intervention significantly increased the proportion of participants completing an AD without changing the choices in ADs. This relationship was especially strong among men and may be a useful method to increase AD completion rates without altering choices.	is important. AD screening questions will be completed no matter one's age.
Kimmel, A. L., Wang, J., Scott, R. K., Briggs, L., & Lyon, M. E. (2015). FAmily CEntered (FACE) advance care planning: Study design and methods for a patient-centered communication and decision-making intervention for patients with HIV/AIDS and their surrogate decision-makers. *Contemporary Clinical Trials,43*, 172-178. doi: 10.1016/j.cct.2015.06.003	Level 6	This study was a prospective, longitudinal, two-arm randomized controlled clinical trial (RCCT). This trial tested the efficacy of the FACE intervention on study outcomes over 18 months post-intervention. Through recruitment at five hospital-based, out-patient clinics.	FACE offers five advancements over current standard of care: 1) promotes shared decision-making with families; 2) integrates the evidence-based Disease-Specific ACP curriculum; 3) differs from previously published research on advance directive documentation alone by involving the patient/surrogate decision-maker in conversations about treatment preferences, then sharing them with the primary HCP; 4) is grounded in Leventhal's theory of self-regulation and illness representations; and 5) acknowledges those who prefer to have their doctor or family make these decisions for them.	Having these discussions early in admission are beneficial. Surrogates can then be assured they honored their loved one's wishes, and patients can feel supported to the end, trusting that their families were there.Encouraging family and patient engagement during screening process.

Kossman, D. A. (2014). Prevalence, views, and impact of advance directives among older adults. Journal of Gerontological Nursing, 40(7), 44. doi:10.3928/00989134-20140310-01	Level 4	This article reviews the literature on advance directives among U.S. older adults published from 2008 through 2013, with a focus on advance directive prevalence, implications of advance directives on patient care, and impact of interventions to increase advance directive completion.	There remains a clear need for more experimental evidence about when and how to increase advance directive completion rates among adults 65 and older. Empirical evidence and individual reflection on clinical practice indicate that the more specific and current advance directives are, the more helpful they are as guides about how best to adhere to patient wishes.	There is a clear need for more education and/or intervention(s) directly related to advance directives in various settings. How and when to implement proposed intervention(s) is unclear. The proposed project will include various educational intervention(s).
Lewis, E., Cardona-Morrell, M., Ong, K. Y., Trankle, S. A., & Hillman, K. (2016). Evidence still insufficient that advance care documentation leads to engagement of healthcare professionals in end-of-life discussions: A systematic review. *Palliative Medicine*,*30*(9), 807-824. doi:10.1177/0269216316637239	Level 5	Administration of non-beneficial life-sustaining treatments in terminal elderly patients still occurs due to lack of knowledge of patient's wishes or delayed physician-family communications on preference.	Perceived effectiveness of advance care documentation in encouraging end-of-life discussions appears to be high but is mostly derived from low-level evidence studies. While health professionals reported positive perceptions of the use of advance care documentations (18/24 studies), actual evidence of their engagement in end-of-life discussions or confidence gained from accessing previously formulated wishes in advance care documentations was not generally available.	There is a willingness and openness of patients, surrogates and staff to perceive advance directives as an instrument to improve communication, rather than actual evidence of timeliness or effectiveness from suitably designed studies. AD completion will not be measured in the proposed project. Ultimately, the goal is to have increased AD screening documentation within 24 hours of admission increase.

Musich, S., Wang, S. S., Hawkins, K., & Yeh, C. S. (2016). Disparities among those with advance directives in a Medicare supplement population. *American Journal of Hospice and Palliative Medicine, 33*(5), 463-470. doi:10.1177/1049909115574837	Level 6	A randomly selected sample of 73 634 of these beneficiaries in 10 states was surveyed between 2009 and 2013. Those surveyed were 65 years or older and were required to have a minimum of 3 months of plan eligibility prior to completing the survey.	Among respondents, 72% (N ¼ 18 869) had completed an AD. Discussions with physicians as a source of information were noted by only 13% of respondents. Patients with ADs specifying their wishes for EOL care have significantly lower medical expenditures during the last few months of life. However, disparities exist among those with ADs that may warrant interventions.	Commonly reported means of learning about ADs are general awareness and discussions with family members. There is a need for increased discussion and awareness. Completing AD screening questions upon admission will provide patients and family members the opportunity to engage in conversations and allow those with questions
Rao, J. K., Anderson, L. A., Lin, F. C., & Laux, J. P. (2014). Completion of advance directives among U.S. consumers. *American journal of preventive medicine*, *46*(1), 65–70. doi: 10.1016/j.amepre.2013.09.008	Level 4	Data was analyzed in 2013 from adults aged 18 years and older who participated in the 2009 or 2010 Health Styles Survey, a mail panel survey designed to be representative of the U.S. population. Likelihood ratio tests were used to examine the associations between advance directive completion and demographic and socioeconomic variables (education, income, employment status); presence of a chronic condition; regular source of	Of the 7946 respondents, 26.3% had an advance directive. The most frequently reported reason for not having one lacked awareness. These data indicate racial and educational disparities in advance directive completion and highlight the need for education about their role in facilitating EOL decisions.	Intervention(s) will help close disparity gaps and create awareness.

		health care; and self-reported EOL concerns or discussions. Multiple logistic regression analyses identified independent predictors related to advance directive completion.		
Reed, J. E., & Card, A. J. (2016). The problem with plan-do-study-act cycles. *BMJ Quality & Safety, 25*(3), 147-152. doi:10.1136/bmjqs-2015-00507	N/A	PDSA provides a structured experimental learning approach to testing changes. Previously, concerns have been raised regarding the fidelity of application of PDSA method, which may undermine learning efforts, the complexity of its use in practice and as to the appropriateness of the PDSA method to address the significant challenges of healthcare improvement.	A successful PDSA process does not equal a successful QI project or program. The intended output of PDSA is learning and informed action. Successful application of the PDSA methodology may enable users to achieve their QI goals more efficiently or to reach QI goals they would otherwise not have achieved. PDSA provides a structured experimental learning approach to testing changes. Previously, concerns have been raised regarding the fidelity of application of PDSA method, which may undermine learning efforts, the complexity of its use in practice and as to the appropriateness of the PDSA method to address the significant challenges of healthcare improvement.	The plan, do, study, act (PDSA) model is a simple, yet influential tool that guides quality improvement (QI) initiatives that will be utilized throughout the proposed project.

RN, O. D., Jones, D., Martello, M., Biron, A., & Lavoie-Tremblay, M. (2017). A Systematic Review on the Effectiveness of Interventions to Improve Hand Hygiene Compliance of Nurses in the Hospital Setting. *Journal of Nursing Scholarship, 49*(2), 143-152. doi:10.1111/jnu.12274	Level 1	A systematic review was performed guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses to evaluate the short and long-term effects of interventions to promote hand hygiene practices among nurses in the hospital setting.	One RCT reported effectiveness and 6-month sustainability of the effect related to multimodal-directed and multimodal with team leadership– directed strategies. The other two RCTs found positive effect of education and feedback on compliance; however, compliance rates declined after 1 month. Education was also found to improve HHC up to 3 months postintervention. An electronic reminder and feedback system evaluated by an ITS improved HHC and detected variation in HHC through the day.	Education has been proven to be an effective intervention for behavior modification.
Starr, S. R., Kautz, J. M., Sorita, A., Thompson, K. M., Reed, D. A., Porter, B. L., . . . Ting, H. H. (2015). Quality Improvement Education for Health Professionals. *American Journal of Medical Quality, 31*(3), 209-216. doi:10.1177/1062860614566445	Level 1	Although health care delivery organizations seek to develop and implement effective educational strategies and plans, no universal solution exists. A little more than half of QI curricula evaluate outcomes most proximal to patient care. Curricula that addressed clinical outcomes were more likely to include coaching and involve interprofessional learners.	Effective quality improvement (QI) education should improve patient care, but many curriculum studies do not include clinical measures.	Incorporating educational strategies will help close current gaps in health care, but education alone may not be enough to see a change. Identifying areas of weakness with the utilization of the PDSA cycle will help identify whether education alone will be enough.

Tung, E. E., Vickers, K. S., Lackore, K., Cabanela, R., Hathaway, J., & Chaudhry, R. (2010). Clinical Decision Support Technology to Increase Advance Care Planning in the Primary Care Setting. *American Journal of Hospice and Palliative Medicine®, 28*(4), 230-235. doi:10.1177/1049909110386045	Level 6	A 23-week intervention was carefully administered to a representative population of patients seeking care at Mayo Clinic Rochester. An ACP educational packet was sent to intervention patients before their health maintenance examination (HME). Additionally, their physicians had access to a computerized clinical decision support system on AMD completion at the time of the HME. Control participants' physicians had access to the computerized decision support system and traditional resources only. All participants who received the packet were sent a follow-up survey.	In all, 21.6% of intervention participants completed an advanced medical directive, compared with 4.1% of control participants. Combining clinical decision support systems and standardized processes enhances the ACP process.	Creating intervention(s) that target the entire system (MICU) and ensuring intervention(s) help create a standardized process for completion is the goal.
Van Scoy, L. J., Howrylak, J., Nguyen, An., Chen, M., & Sherman, M. (2014). Family structure, experiences with end-of-life decision making, and who asked about advance directives impacts advance directive completion rates. *Journal of Palliative Medicine, 17*(10). 1099-1106. doi: 10.1089/jpm.2014.0033	Level 2	ADs completion rates increased for patients when asked by medical professional, friends, family, lawyer.	Age, religion, family structure, disease, experiences with death affect completion of Ads. Twenty-one percent of patients had a living will and 35% had a health care proxy. Patients with completed living wills were older ($p \leq 0.0046$), had more comorbidities ($p=0.018$), were widowed ($p=0.02$), and were more often admitted with	Having been asked about advance directives by medical staff, legal staff, or family and friends increases the likelihood that patients will possess an advance directive. The proposed project will be directed at staff asking screening questions and engaging in ACP

			chronic disease (p=0.009) compared to those without living wills.	conversations with patients and families.
Weiss, B. D., Berman, E. A., Howe, C. L., & Fleming, R. B. (2012). Medical Decision-Making for Older Adults without Family. *Journal of the American Geriatrics Society,60*(11), 2144-2150. doi:10.1111/j.1532-5415.2012. 04212.x	Level 1	Each year, more than one-third of the 39.5 million Americans aged 65 and older are hospitalized for a medicalor surgical illness	Given the burgeoning population of older adults, alongwith the trend toward smaller and more widely dispersedfamilies and the increasing number of older adults withoutfamily, the time is right for introducing health fiduciariesinto the healthcare system. Several approaches are currently used to aid in medical decision-making for people without families or designated surrogates, including hospital ethics committees, court-appointed surrogate agents, reliance on advance directives if they are available, and even the use of computer-based decision systems.	Increasing AD completion and having ACP conversations would greatlyincrease the number of people whose end-of-life preferences are honored. Identifying these "wishes" early in the hospitalization process if important.
Wu, F.M., Newman, J.M., Lasher, A., & Brody, A.A. (2013). Effects of initiating palliative care consultation in the emergency department on inpatient length of stay. *Journal*	Level 6	Included in the analysis were 1435 Palliative Care consultations, 50 of which were initiated in the ED across the 4-year study period.	Early initiation of PC consultation in the ED was associated with a significantly shorter LOS for patients admitted to the hospital, indicating that the patient- and	Having these discussions early in admission are beneficial. Per institution policy, AD screening questions are to be

of Palliative Medicine, 16, 1362-1367. doi: 10.1089/jpm.2012.0352			family-centered benefits of PC are complemented by reduced inpatient utilization.	completed within the first 24 hours of admission.

Appendix C

Project Timeline

Table 1. Timeline for Doctor of Nursing Project

Date	Task	Complete/Incomplete
January 2019	Explore project topic	**Complete**
January 2019	Locate site for project	**Complete**
Jan -February 2019	Review the literature for the topic of interest	**Complete**
January 2019	Define project topic	**Complete**
January 2019	Establish project committee	**Complete**
January-July 2019	Search educational references, establish needs assessment, and institute an intervention.	**Complete**
January-May 2019	Establish how the project will be implemented	**Complete**
January 2019	Obtain organizational support letter	**Complete**
March 2019	Explore and define theoretical framework to guide project	**Complete**
April 2019	Complete synthesis of the literature and literature matrix	**Complete**
June 2019	Evaluate resources and budget	**Complete**
June 2019	Submit project for IRB approval	**Complete**
July 2019	Create Intervention i.e.: Resources & Educational Video	**Complete**
September 2019	Provide education to staff on AD screening documentation	**Complete**
August 2019	Begin project implementation	**Complete**
August-November 2019	Identify project barriers and make changes as needed	**Complete**
April-November 2019	Collect data on percent compliance of screening	**Complete**
November 2019	Evaluate project outcomes	**Complete**
December 2019	Discuss means for sustainability of implementation in the unit	**Complete**
January 2020	Analyze data	**Complete**
April 14, 2020	ECU Project Dissemination	**Complete**
April 15, 2020	Project Site Dissemination	**Complete**
April 17, 2020	Finalize & Submit DNP Paper	**Complete**
May 2020	Upload the final paper into the ScholarShip repository	**Complete**
May 8, 2020	Graduation	**Complete**

Appendix D

Advance Directive Institutional Required Documentation

There are six questions total.

Per the institution's audit requirements **questions 1, 2, 5, 6 are required.**

Some questions require you to "add" questions in utilizing the drop-down option under the AD section.

- ***1.Patient does have an AD covering medical treatment***
- ***2.Reason patient does not have an AD covering medical treatment***
- 3.Surrogate decision maker appointed
- 4.Reason there is not a surrogate decision maker appointed
- ***5.Information provided on AD***
- ***6.Patient requests assistance***

Figure 1. Advance Directive Screening Questions

Appendix E

King's Theory of Goal Attainment

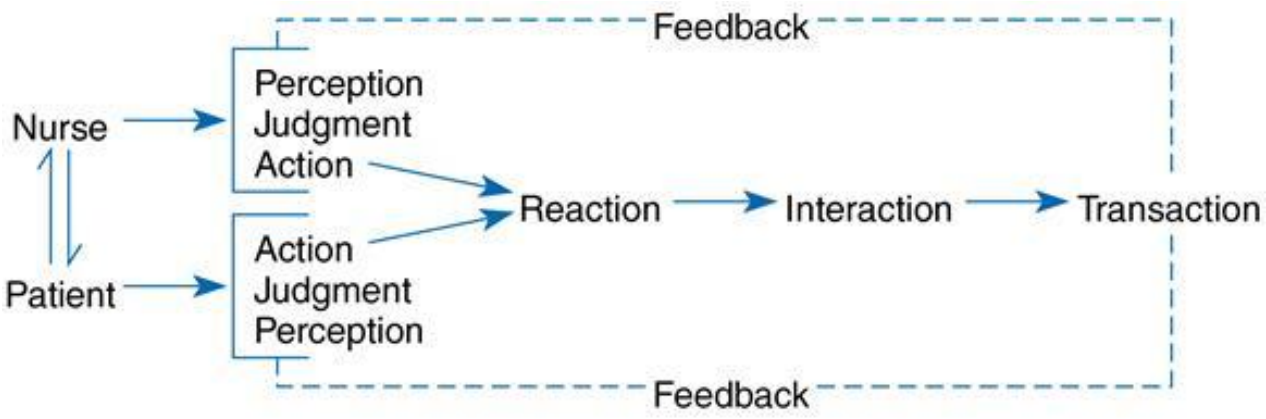


Figure 1. King's Theory of Goal Attainment

DNP project lead and MICU management identified an area for improvement. → MICU nurses and DNP project lead identified barriers to AD screening completion through the implementation of an anonymous survey. → The survey was created and bedside RN's perception, background, and areas to improve were identified. → Goals were recognized. → Project goals were created. → Interventions were created and were specific to project goals and attainment. → Interventions were implemented in four separate PDSA cycles to help identify effective interventions or areas for continued development. → Randomized chart audits were routinely performed throughout the months April to November to identify whether the specified intervention was successful or not. → Staff members along with the DNP project lead's site champion were made aware of results on a routine basis. → Communication between DNP project lead and bedside RN's was exchanged via email and in person at least 3 times per week. → RN's perception of the project and identified problem, timeframe, areas for improved growth and development, and continued awareness were discussed at each interaction along with PDSA cycle modification. → At the conclusion of the DNP quality improvement initiative sustainment measures were identified.

Figure 2. Application of King's Theory to proposed QI initiative

Appendix F

PDSA Cycles

PDSA Cycle 1 August 14,2019 – August 31, 2019

Plan • What is the objective of the test? • What do you predict will happen and why? • What change will you make? • Who will it involve (e.g. one unit, one floor, one department)? • How long will the change take to implement? • What resources will they need? • What data need to be collected?	**List your action steps along with person(s) responsible and timeline** JCACHO will be arriving to the institution in September. They will specifically be ensuring that all admission screening questions are completed as one of many requirements. A self-auditing tool will be provided to all staff members in August. This tool will help guide staff members and ensure that their required documentation is completed by the conclusion of their shift on each of their patients. This tool will be provided by MICU management to all bedside registered nursing proving care in the Medicine ICU. Randomized audits will continue to help ensure that completion of admission screening including AD screening questions are completed within 24 hours of admission.
Do • Implement the change. Try out the test on a small scale. • Carry out the test. • Document problems and unexpected observations. • Begin analysis of the data.	**Describe what happened when you ran the test** An inpatient self-auditing tool was provided to registered nurses. This tool was required as a management requirement to help ensure that there was compliance regarding admission screening requirements prior to JCACHO arrival. This tool was provided to all RN's in the beginning of the shift and was collected at the end of the day. The nurse was required to fill out a self-auditing tool for each patient that she was caring for no matter how busy or hectic their day may have been. This was a requirement by MICU management.

Study Set aside time to analyze the data and study the results and determine if the change resulted in the expected outcome. • Complete the analysis of the data. • Compare the data to your predictions. • Summarize and reflect on what was learned. Look for: unintended consequences, surprises, successes, failures.	**Describe the measured results and how they compared to the predictions** For the month of August, compliance scores increased compared to previous months. It was evidenced by the increase in compliance that reminders and accountability help reinforce compliance.
Act If the results were not what you wanted you try something else Refine the change, based on what was learned from the test. • Adapt – modify the changes and repeat PDSA cycle • Adopt – consider expanding the changes in your organization to additional residents, staff, units • Abandon – change your approach and repeat PDSA cycle	**Describe what modifications to the plan will be made for the next cycle from what you learned** In September education will be provided to all registered nurses. This education will be displayed in various methods to a brochure specific to AD screening questions, a PowerPoint that provides RN's back information including definitions, scenarios and resources to help patients and their families complete AD's in the inpatient setting if desired.

PDSA Cycle 2 September 6, 2019 – September 30, 2019

Plan • What is the objective of the test? • What do you predict will happen and why? • What change will you make? • Who will it involve (e.g. one unit, one floor, one department)? • How long will the change take to implement? • What resources will they need? • What data need to be collected?	**List your action steps along with person(s) responsible and timeline** Educational intervention(s) have been created and directed towards the academic level of staff members. Intervention(s) include a brief synopsis of what AD's are, how and why we have advance care planning (ACP) conversations, the importance of ADs, the standard vocabulary used in these discussions, how to complete ACP screening questions as well as resources that are available to patients and staff regarding ACP. The DNP project lead will also present this knowledge during staff meetings and provide reminders during daily huddles.

Do • Implement the change. Try out the test on a small scale. • Carry out the test. • Document problems and unexpected observations. • Begin analysis of the data.	**Describe what happened when you ran the test** Education was sent out to all staff members on September 6th via email as well as a brochure along with a hard copy of advance directive paperwork was provided to each RN in their mailboxes that are accessed daily. This education was also reinforced during daily huddles and DNP project lead presence on the unit answering any questions.
Study Set aside time to analyze the data and study the results and determine if the change resulted in the expected outcome. • Complete the analysis of the data. • Compare the data to your predictions. • Summarize and reflect on what was learned. Look for: unintended consequences, surprises, successes, failures.	**Describe the measured results and how they compared to the predictions** 24 randomized audits were performed after educational intervention implementation roughly halfway through the PDSA cycle 2. Thus far, staff education has proved to be successful. 25 more audits were performed and recorded throughout the remaining month of September. Results from pre-implementation have been compared and analyzed to PDSA cycle 1 and 2 using Excel. For the month of August (PDSA cycle 1) 27 randomized audits completed AD screening questions compared to September (PDSA cycle 2) of 35 randomized audits completed AD screening questions. Education thus far has proved to be successful but could be better.
Act If the results were not what you wanted you try something else Refine the change, based on what was learned from the test. • Adapt – modify the changes and repeat PDSA cycle • Adopt – consider expanding the changes in your organization to additional residents, staff, units • Abandon – change your approach and repeat PDSA cycle	**Describe what modifications to the plan will be made for the next cycle from what you learned** Incentives, such as candy and snacks, will be provided during staff meetings, huddles, as well as weekly routine visits from the DNP project lead. These incentives will serve as reminders of the current project, mission, and overall goals. Incentives will also be placed in staff mailboxes as reminders. Positive reinforcement helps motivate staff to continue and/or increase the current behaviors i.e.: completing advance directive screening questions and engaging in ACP conversations. These incentives will also contain educational facts on the outside of the items. This will help create a positive environment for practice change and encourage staff buy-in. DNP project lead will continue to follow up with staff via email and unit presence to help answer or clarify any uncertainties. DNP project lead will also reinforce the proposed project with more routine follow up via email and in person rounds on the unit. A Qualtrics survey was also created to help identify barriers from a staff

	perspective as well as an opportunity to receive constructive feedback on the interventions implemented thus far. Future PDSA cycles may be created based on feedback provided by staff.

PDSA Cycle 3 October 1, 2019-October 31, 2019

Plan • What is the objective of the test? • What do you predict will happen and why? • What change will you make? • Who will it involve (e.g. one unit, one floor, one department)? • How long will the change take to implement? • What resources will they need? • What data need to be collected?	**List your action steps along with person(s) responsible and timeline** Incentives, such as candy, snacks, cookies, and cupcakes, will be provided during staff meetings, huddles, as well as weekly routine visits from the DNP project lead. These incentives will serve as reminders of the current project, mission, and overall goals. Incentives will also be placed in staff mailboxes as reminders. Positive reinforcement helps motivate staff to continue and/or increase the current behaviors i.e.: completing advance directive screening questions and engaging in ACP conversations. These incentives will also contain educational facts on the outside of the items. This will help create a positive environment for practice change and encourage staff buy-in. DNP project lead will continue to follow up with staff via email and unit presence to help answer or clarify any uncertainties. DNP project lead will also reinforce the proposed project with more routine follow up via email and in person rounds on the unit. Computer reminders with instructions on how to complete AD screening questions, timeframe they must be answered, and where to properly document will be attached to each workstation computer monitor. These reminder cards were a result of staff feedback.
Do • Implement the change. Try out the test on a small scale. • Carry out the test. • Document problems and unexpected observations. • Begin analysis of the data.	**Describe what happened when you ran the test** Education was re-sent out via email to all staff members. The email included the resourceful PowerPoint, flyer, and brochure. The email also included a synopsis of the project objective and goals. A new flyer was created for the month of October. Incentives then were handed out in person and placed in their mailboxes as reinforcement to the resources previously provided. Educations pointers and

	reminders were attached to 135 pieces of candy along with 30 packs of cookies, and 36 packs of cheese its. The project lead made randomized visits to the unit at least twice a week. These visits allowed the project lead to ask questions, provide clarification and hear positive/negative feedback. The project lead also personally showed them within the EHR where and how to appropriately document required screening questions along with where to access extra resources. In return for their time they were provided with an educational yummy incentive. The project lead ensured that her presence was on both day shift and night shift. Laminated reminder cards were created with instructions on how to complete AD screening questions, timeframe they must be answered, and where to properly document will be attached to each workstation computer monitor.
Study Set aside time to analyze the data and study the results and determine if the change resulted in the expected outcome. • Complete the analysis of the data. • Compare the data to your predictions. • Summarize and reflect on what was learned. Look for: unintended consequences, surprises, successes, failures.	**Describe the measured results and how they compared to the predictions** 50 audits will be randomly screened by the end of October which will be the conclusion of PDSA cycle 3. Thus far, 28 audits have been completed. Audits were not initiated until after 2 weeks of PDSA cycle 3 interventions were implemented. The data currently is taking a slight dip in the wrong direction. The goal is 90% compliance, but most likely will not achieve project and institution goal.
Act If the results were not what you wanted you try something else Refine the change, based on what was learned from the test. • Adapt – modify the changes and repeat PDSA cycle • Adopt – consider expanding the changes in your organization to additional residents, staff, units • Abandon – change your approach and repeat PDSA cycle	**Describe what modifications to the plan will be made for the next cycle from what you learned** Currently, 46% of the audits that have NOT been completed is solely related to a system barrier. Questions 1, 2, 5, and 6 must be complete in order to be successfully compliant. Currently, there are red stop signs alerting staff to complete required questions within 24 hours of admission. Unfortunately, question 2 does not have a flag. The DNP project lead will contact Clinical Systems Services Division and submit an optimization request for change. This would theoretically be another

	PDSA cycle with hopes of project sustainment. The DNP project lead will also reach out to the individual responsible for creating or sustaining hospital audit requirements. There is potential that the requirements could be modified to reflect what the EHR currently supports.

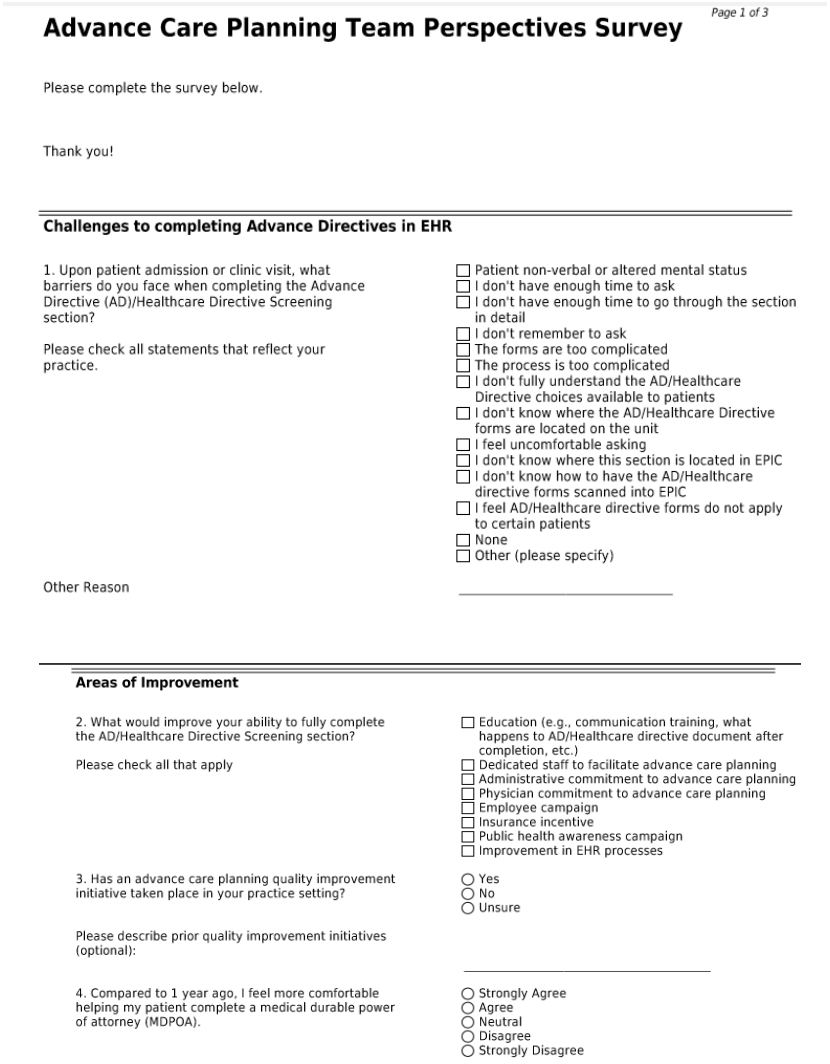
PDSA Cycle 4 November 1, 2019-November 30, 2019

Plan • What is the objective of the test? • What do you predict will happen and why? • What change will you make? • Who will it involve (e.g. one unit, one floor, one department)? • How long will the change take to implement? • What resources will they need? • What data need to be collected?	**List your action steps along with person(s) responsible and timeline** Currently, 46% of the audits that have NOT been completed is solely related to a system barrier. Questions 1, 2, 5, and 6 must be complete in order to be successfully compliant. Currently, there are red stop signs alerting staff to complete required questions within 24 hours of admission. Unfortunately, question 2 does not have a flag. The DNP project lead will contact Clinical Systems Services Division and submit an optimization request for change. This would theoretically be another PDSA cycle with hopes of project sustainment.
Do • Implement the change. Try out the test on a small scale. • Carry out the test. • Document problems and unexpected observations. • Begin analysis of the data.	**Describe what happened when you ran the test** An optimization request was submitted September 24th, 2019. The request is considered low priority and it takes 60 days. Unfortunately, I may or may not be able to collect data to reflect this change if the change is accepted. The optimization required the project lead to complete the following sections: Subject matter, summary, situation, background, assessment, and recommendation. The project lead will also contact Kathlyn Wood and discuss whether audit requirements can be modified and include only questions 1, 5, & 6.
Study Set aside time to analyze the data and study the results and determine if the change resulted in the expected outcome.	**Describe the measured results and how they compared to the predictions**

• Complete the analysis of the data. • Compare the data to your predictions. • Summarize and reflect on what was learned. Look for: unintended consequences, surprises, successes, failures.	50 audits will be randomly screened by the end of November which will be the conclusion of PDSA cycle 4. The goal is 90% compliance. If there is a modification to the audit requirements, there is potential that compliance will increase.
Act If the results were not what you wanted you try something else Refine the change, based on what was learned from the test. • Adapt – modify the changes and repeat PDSA cycle • Adopt – consider expanding the changes in your organization to additional residents, staff, units • Abandon – change your approach and repeat PDSA cycle	**Describe what modifications to the plan will be made for the next cycle from what you learned** Institution hospital audit requirements have been changed to reflect only questions 1, 5, & 6. Currently, the EHR has reminders next to these specific questions. Compliance should ultimately increase. 46% of the reason the unit was not compliant with audit requirements was due to question 2 which has now been eliminated. When submitting institutional randomized audits, there is a reminder next to this section to remind staff of the update. The optimization request can be canceled theoretically.

Figure 1. Atlantic Quality Innovation Network PDSA, 2013

Appendix G
Data Collection Tool



Page 1 of 3

Advance Care Planning Team Perspectives Survey

Please complete the survey below.

Thank you!

Challenges to completing Advance Directives in EHR

1. Upon patient admission or clinic visit, what barriers do you face when completing the Advance Directive (AD)/Healthcare Directive Screening section?

Please check all statements that reflect your practice.

- ☐ Patient non-verbal or altered mental status
- ☐ I don't have enough time to ask
- ☐ I don't have enough time to go through the section in detail
- ☐ I don't remember to ask
- ☐ The forms are too complicated
- ☐ The process is too complicated
- ☐ I don't fully understand the AD/Healthcare Directive choices available to patients
- ☐ I don't know where the AD/Healthcare Directive forms are located on the unit
- ☐ I feel uncomfortable asking
- ☐ I don't know where this section is located in EPIC
- ☐ I don't know how to have the AD/Healthcare directive forms scanned into EPIC
- ☐ I feel AD/Healthcare directive forms do not apply to certain patients
- ☐ None
- ☐ Other (please specify)

Other Reason _____

Areas of Improvement

2. What would improve your ability to fully complete the AD/Healthcare Directive Screening section?

Please check all that apply

- ☐ Education (e.g., communication training, what happens to AD/Healthcare directive document after completion, etc.)
- ☐ Dedicated staff to facilitate advance care planning
- ☐ Administrative commitment to advance care planning
- ☐ Physician commitment to advance care planning
- ☐ Employee campaign
- ☐ Insurance incentive
- ☐ Public health awareness campaign
- ☐ Improvement in EHR processes

3. Has an advance care planning quality improvement initiative taken place in your practice setting?

- ○ Yes
- ○ No
- ○ Unsure

Please describe prior quality improvement initiatives (optional):

_____

4. Compared to 1 year ago, I feel more comfortable helping my patient complete a medical durable power of attorney (MDPOA).

- ○ Strongly Agree
- ○ Agree
- ○ Neutral
- ○ Disagree
- ○ Strongly Disagree

Figure1.
Advance Care Planning Screening Tool. Obtained from Fink (2019).

Question four was eliminated.
Question four was replaced with: How long have you been a nurse ____ years
Question five: I work ___day shift ___ night shift ___ both

Melanie—
You are welcome to use our survey tool.
Let me also introduce you to [redacted]. She is the lead palliative care advance practice nurse for UCHealth in Aurora and has been intimately involved in this project.
Let us know if you have any questions.
[redacted]

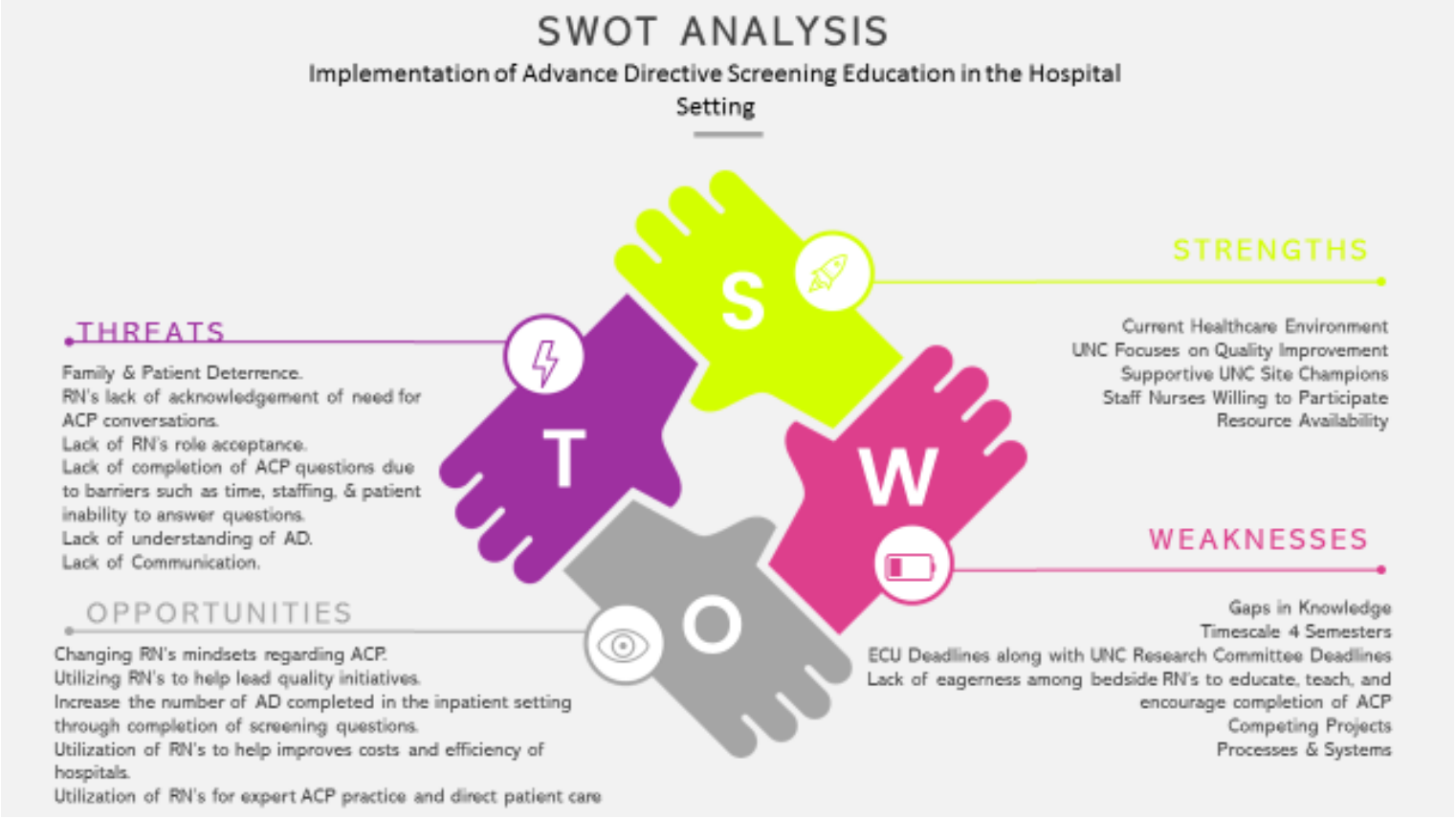
[redacted]
Box B [redacted]0
[redacted]

UNIVERSITY OF COLORADO
iPallCARE™
preparing palliative care professionals

The author will be utilizing her survey. The survey sent by Dr. Fink is available via the URL below.
file:///C:/Users/Admin/Downloads/17-0979%20Survey%207.24.17.pdf

Appendix H

SWOT Analysis



Appendix I

Project Site Champion Letter

[redacted]

February 7, 2019

To Whom It May Concern,

We at [redacted] in the Medicine Intensive Care Unit reviewed Melanie Nicole Kiser's DNP Project title "Implementation of Advance Directive Screening Education in the Hospital Setting". Ms. Melanie Kiser has organizational support and approval to conduct her project within our institution. We understand that for Ms. Melanie Kiser to achieve completion of the DNP program, dissemination of the project will be required by the University, which will include a public presentation related to the project and a manuscript submission will be encouraged.

Our organization has deemed this project as quality improvement initiative, requiring institutional IRB review.

Sincerely,

[redacted]

Appendix J

[redacted] Approval Letter

July 13, 2019
To: Melanie Kiser
Re: Proposal Number 5.15.19_72 Kiser
Dear Melanie,

Thank you for submitting your proposal to the [redacted]Nursing Research Council (NRC). The NRC has approved your proposal, *Implementation of Advance Directive Screening Education in the Hospital Setting: A DNP Quality Improvement Process.* Dr. [redacted] will be the NRC contact to assist you. You may reach her at [redacted]nchealth.unc.edu. If you have any questions, please do not hesitate to contact either Dr. [redacted], NRC Chairperson.
Because your project may be included as part of Magnet site visit materials, you are required to do the following:

1. Keep the NRC updated on the progress of your study.
2. Include "*submit a final report to* [redacted] *Nursing Research Council"* as part of the "Dissemination" plan in your IRB application.
3. Submit your NRC Final Report Form to nursingresearch@unchealth.unc.edu when your data analysis and conclusions are completed. If you have questions about the final report form, please email the Nursing Research Council email address listed above.

Thank you for choosing [redacted] as the site for your project and we appreciate the opportunity to review. We look forward to hearing the results of your project and would enjoy having you present at an NRC meeting to share your findings. If you have any questions about the above requirements, please do not hesitate to contact me.

We wish you the best.
Kind Regards,

[redacted], RN, BMTCN | CNIV
Chair, [redacted] Nursing Research Council
[redacted]

[redacted]
Nursing Research Council Application Coordinator
[redacted]

Appendix K

ECU IRB Waiver Letter

EAST CAROLINA UNIVERSITY
University and Medical Center Institutional Review Board (UMCIRB)
Brody Medical Sciences Building, 4N-64• 600 Moye Boulevard • Greenville, NC 27834
Office **252-744-2914** • Fax **252-744-2284** • **www.ecu.edu/irb**

June 27, 2019

Melanie Kiser, RN, BSN
DNP Student
College of Nursing
East Carolina University

Dear Ms. Kiser,

I have reviewed your project application to the UNC NRC and ECU Self-Certification Tool indicating your project is not human research. As such, no application to the IRB is necessary.

Please let us know if you have any questions or if you plan any future changes to your project that might include human research.

Best wishes on your project.

Sincerely,

[redacted]
Director, Human Research Protections
UMCIRB

Appendix L

ECU IRB Approval

Quality Improvement/Program Evaluation Self-Certification Tool

Purpose:
Projects that do not meet the federal definition of human research pursuant to 45 CFR 46 do not require IRB review. This tool was developed to assist in the determination of when a project falls outside of the IRB's purview.

Instructions:
Please complete the requested project information, as this document may be used for documentation that IRB review is not required. Select the appropriate answers to each question in the order they appear below. Additional questions may appear based on your answers. If you do not receive a STOP HERE message, the form may be printed as certification that the project is "not research", and does not require IRB review. The IRB will not review your responses as part of the self-certification process.

Name of Project Leader:

Melanie Nicole Kiser

Project Title:

Implementation of Advance Directive Screening Education in the Hospital Setting: A DNP Quality Improvement Process

Appendix M

IRB Quality Improvement/Program Evaluation Self-Certification Tool

Project Information:
Name of Project Leader: Melanie Nicole Kiser
Project Title: Implementation of Advance Directive Screening Education in the Hospital Setting: A DNP Quality Improvement Process

Brief Description of Project/Goals: The purpose of this Doctor of Nursing Practice (DNP) quality improvement (QI) project is to improve advance directive (AD) screening question completion compliance within 24 hours of admission into the MICU. This project aims at solving a problem related to poor compliance percentages regarding AD admission screening questions. The hospital's current policy needs to be enforced. Specifically, policy number 4823539 states that the following elements of the admission assessment must be completed within 24 hours of admission (Doerr-Jarosz, 2016).

Questions 1,2,5,6 are considered required documentation within EPIC's patient AD admission screening section. The goal will be to increase compliance specifically to this section.

1. Patient does have an AD covering medical treatment
2. Reason patient does not have an AD covering medical treatment
3. Surrogate decision maker appointed
4. Reason there is not a surrogate decision maker appointed
5. Information provided on AD
6. Patient requests assistance

Questions: Please review each question and check yes or no as related to your project.

- **Q1**: Will the project involve testing an experimental drug, device (including medical software or assays), or biologic (i.e., vaccines, blood products, gene therapy, tissues)?
    - The Research Decision Tool is based on the definition of research according to the Common Rule (45 CFR 46.102(d)). The purpose of this question is to determine whether federal regulations beyond the Common Rule, such as FDA regulations, need to be applied to a project. If the answer to this question is "Yes," IRB review is likely required. Please contact the IRB Office for additional guidance.

      [ ] Yes [X] No
- **Q2**: Has the project received funding (e.g., federal, industry) to be conducted as a human subject research study?
    - The purpose of this question is to determine whether the project has received funding to be conducted as a research study and not, for example, quality improvement or program evaluation. If you are unsure, consider contacting your program officer for the funding or funding entity to determine whether the funding source requires a specific level of IRB review and oversight. If the funding source considers the project to constitute human subjects research, this

IRB QI/Program Evaluation Self-Certification Tool is not a sufficient indicator of whether IRB review is required. If the answer to this question is “Yes,” IRB review may be required. Please contact the IRB Office for additional guidance.

[ ] Yes [X] No

- **Q3**: Is this a multi-site project (e.g., there is a coordinating or lead center, more than one site participating, and/or a study-wide protocol)?
    - This question is intended to determine whether the project is limited to local activities or whether multiple sites are conducting the same activities. The latter is an indication that the results may be generalizable. If multiple institutions are conducting the activities, it’s less likely that the outcomes will be used for quality improvement or program evaluation at the local institution. As a result, for multi-site projects, this IRB QI/Program Evaluation Self-Certification Tool is not a sufficient indicator of whether IRB review is required. If the answer to this question is “Yes,” IRB review may be required. In this case, please contact the IRB Office for additional guidance.

[ ] Yes [X] No

- **Q4**: Is this a systematic investigation designed with the intent to contribute to generalizable knowledge (e.g., testing a hypothesis; randomization of subjects; comparison of case vs. control; observational research; comparative effectiveness research; or comparable criteria in alternative research paradigms)?
    - The focus of this question is to evaluate the primary intent and design of the project.
    - Merely publishing or presenting the results of a QI project does not make it research. The critical question is what the primary intent of the project is from the outset. If the primary intent of the project is not generalizability (e.g., it is program evaluation/practice improvement related to a specific initiative) OR the project is not designed in a way that the findings would be generalizable (i.e., limitations to project design), then the answer to this question is "No".
    - The design of the project plays a crucial role in determining intent. If the project is standardized using systematic research methodologies with strong external validity in order to obtain reproducible results, then it would be considered research. If the intended outcome is to report on what happened at the institution/program, this does not indicate research design or intent as it may or may not be generalizable outside of the institution.

[ ] Yes [X] No

- **Q5**: Will the results of the project be published, presented or disseminated outside of the institution or program conducting it?
    - The purpose of this question is to determine whether, at the outset of the project, the intention is to disseminate results outside of the institution or program conducting the project. If there is no intention for disseminating results outside of the institution or program conducting the project, the answer should be "No." Lack of dissemination of information is generally a reliable indicator that a project does not constitute research. If there is a potential for results to be

disseminated outside of the institution or program conducting the project, then the answer is "Yes." Note that program evaluation and QI projects can be published or presented, but they should not be described as research studies.

[ ] Yes [X] No

- **Q6**: Would the project occur regardless of whether individuals conducting it may benefit professionally from it?
    - If the project is being done primarily to bolster one's scientific career path and advance his/her program of research, then "No" should be selected in response to this question. In contrast, if someone is required to complete a project for their medical residency, or mandated to conduct a program evaluation by a funding agency, this indicates that the project would have to be conducted regardless of any professional benefit and in this case, the answer to this question would be, "Yes."
    - The question is not focusing solely on whether an individual will professionally benefit, but rather whether they would conduct the project regardless of the potential for professional benefit.

[X] Yes DNP requirement [ ] No

- **Q7**: Does the project involve "no more than minimal risk" procedures (meaning the probability and magnitude of harm or discomfort anticipated are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests)?
    - The purpose of this question is to determine if the risk of participation in the activity would be considered above and beyond what would be acceptable or ordinarily expected with QI/PE. Increased risk secondary to participating in a project may indicate the project is human research that requires IRB review and approval.

[X] Yes [ ] No

- **Q8**: Is the project intended to improve or evaluate the practice or process within a particular institution or a specific program, and falls under well-accepted care practices/guidelines?
    - If the intention upon designing and conducting the project is not to improve or evaluate a specific practice/program, then the answer should be "No" which indicates research intent and IRB review is likely required.
    - This question is also trying to identify the specificity of a project, hence the use of "particular institution" or "specific program." If it is being conducted in a multi-site context with a standard protocol across sites, then the results could be generalizable and thus constitute research. In this case, the answer should be "No" which indicates research intent and IRB review is likely required.

[X] Yes Quality Improvement [ ] No

Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 6/9/2019

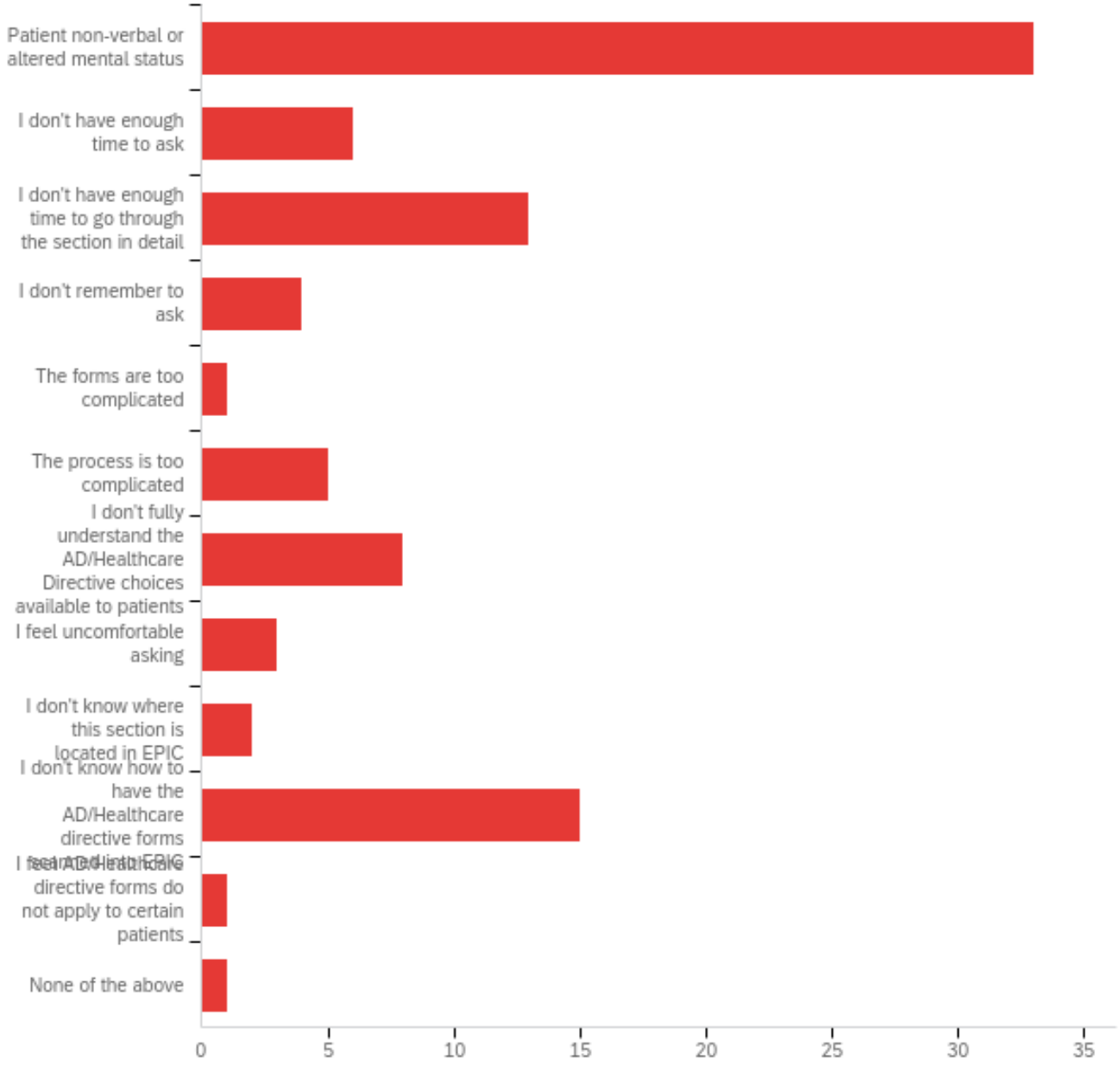
Based on your responses, the project appears to constitute QI and/or Program Evaluation and IRB review is not required because, in accordance with federal regulations, your project does not constitute research as defined under 45 CFR 46.102(d). If the project results are disseminated, they should be characterized as QI and/or Program Evaluation findings. Finally, if the project changes in any way that might affect the intent or design, please complete this self-certification again to ensure that IRB review is still not required. Click the button below to view a printable version of this form to save with your files, as it serves as documentation that IRB review is not required for this project. 6/9/2019

Appendix N

Qualtrics Survey Data Collection Results

Pre-Intervention Survey-Implementation of Advance Directive Screening Education in the Hospital Setting: A DNP QI Process

Q1 - Upon patient admission, what barriers do you face when completing the Advance Directive (AD)/Healthcare Directive Screening section? Please check all that apply.

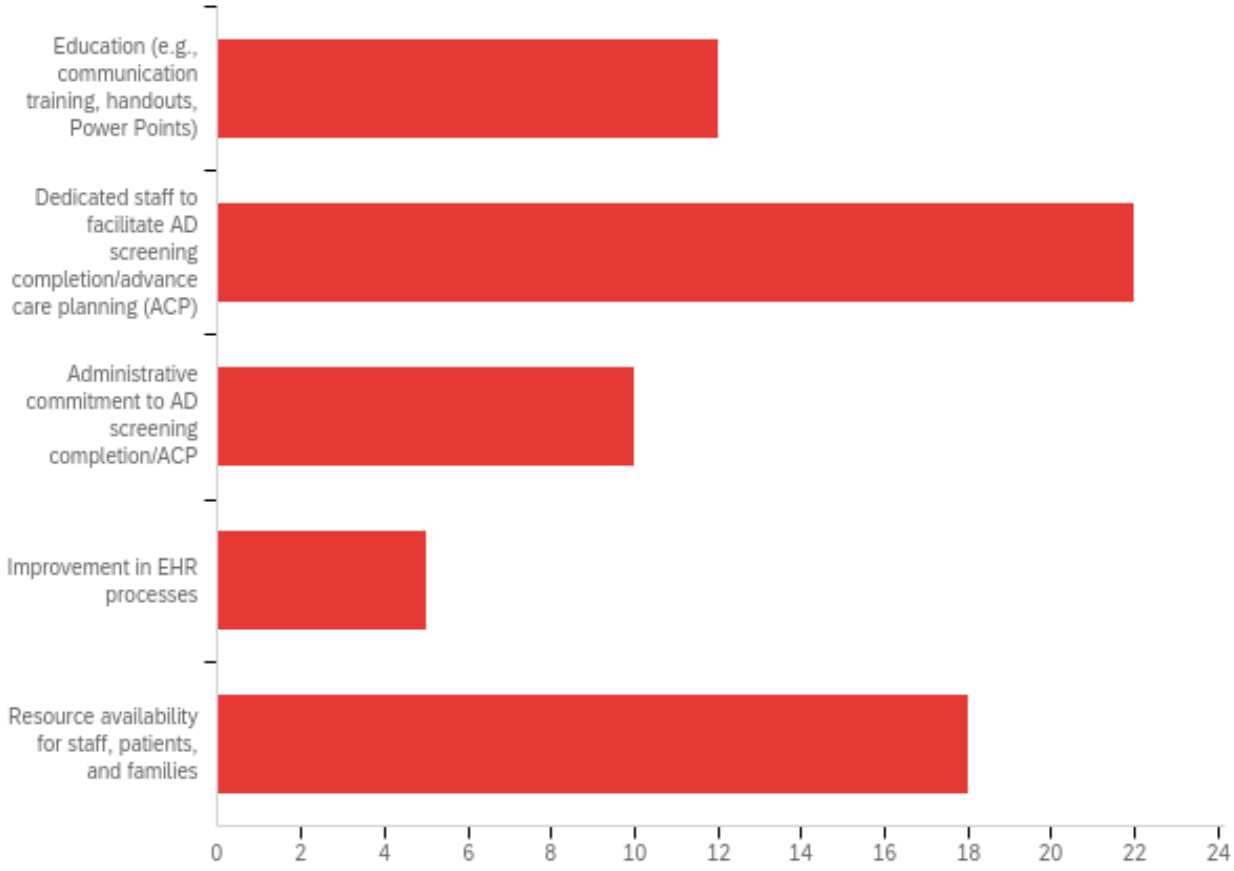


#	Answer	%	Count
1	Patient non-verbal or altered mental status	35.87%	33
2	I don't have enough time to ask	6.52%	6
3	I don't have enough time to go through the section in detail	14.13%	13
4	I don't remember to ask	4.35%	4
5	The forms are too complicated	1.09%	1
6	The process is too complicated	5.43%	5
7	I don't fully understand the AD/Healthcare Directive choices available to patients	8.70%	8
8	I feel uncomfortable asking	3.26%	3
9	I don't know where this section is located in EPIC	2.17%	2
10	I don't know how to have the AD/Healthcare directive forms scanned into EPIC	16.30%	15
11	I feel AD/Healthcare directive forms do not apply to certain patients	1.09%	1
12	None of the above	1.09%	1
	Total	100%	92

Q2 - Upon patient admission, what barriers do you face when completing the AD/Healthcare directive screening section? If any other reason(s) other than the ones depicted above, please specify below.

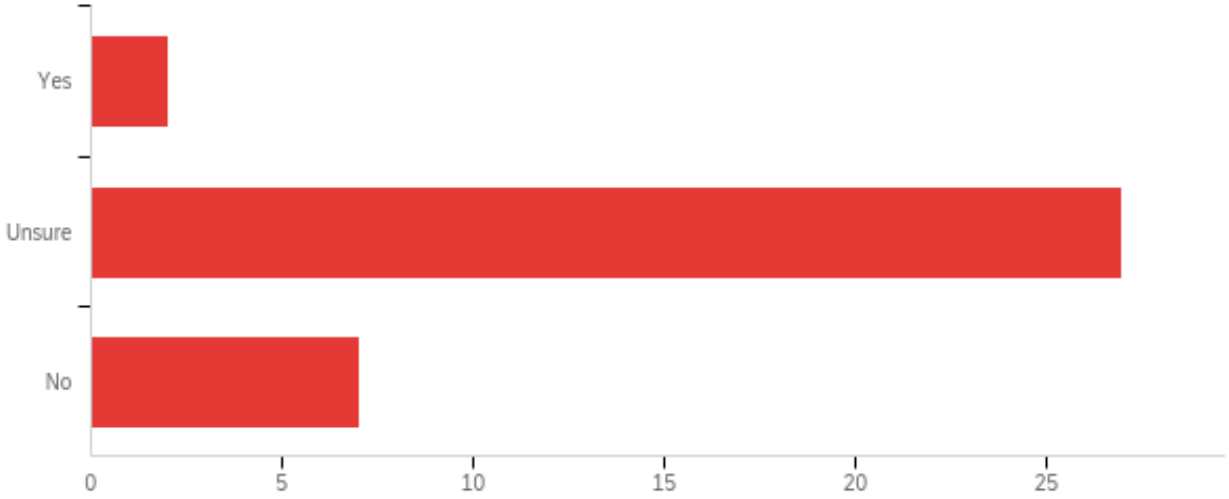
Upon patient admission, what barriers do you face when completing the AD/Healthcare directive screening section? If any other reason(s) other than the ones depicted above, please specify below.
I am able to go through the questions, but getting the AD is difficult and prolonged
not a top priority, when fresh admission come in, more focused on labs, abx, etc. especially if it's night shift
No family available to answer for pt. or provide current documents
No Case Manager to actually come talk to patient and complete forms on night shift or weekends. The “on call” person often makes excuses for why they can’t come complete the process.
Where are the forms? Do we administer forms, or do we contact Patient Relations?
N/A
patient education forms for AD not readily available and do not print from room

Q3 - What would improve your ability to fully complete the AD/Healthcare Directive Screening section? Please check all that apply.



#	Answer	%	Count
1	Education (e.g., communication training, handouts, Power Points)	17.91%	12
2	Dedicated staff to facilitate AD screening completion/advance care planning (ACP)	32.84%	22
3	Administrative commitment to AD screening completion/ACP	14.93%	10
4	Improvement in EHR processes	7.46%	5
5	Resource availability for staff, patients, and families	26.87%	18
	Total	100%	67

Q4 - Has an ACP quality improvement initiative taken place in your practice setting?



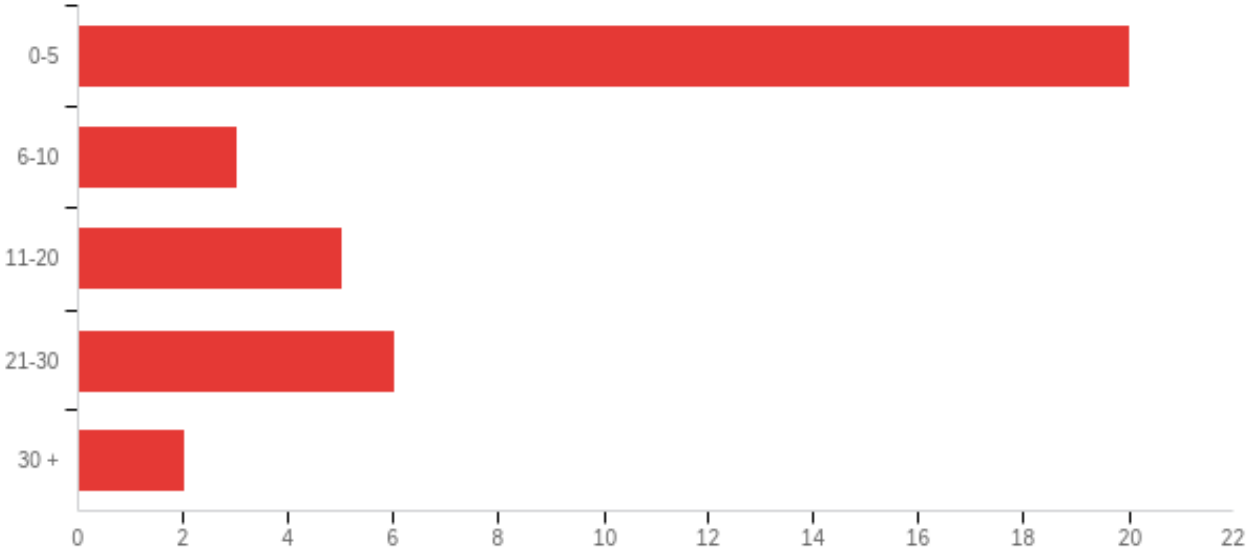
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Has an ACP quality improvement initiative taken place in your practice setting?	1.00	3.00	2.14	0.48	0.23	36

#	Answer	%	Count
1	Yes	5.56%	2
2	Unsure	75.00%	27
3	No	19.44%	7
	Total	100%	36

Q5 - Please describe prior QI initiatives either at your current practice setting or at previous institutions. (optional):

Please describe prior QI initiatives either at your current practice setting or at previous institutions. (optional):

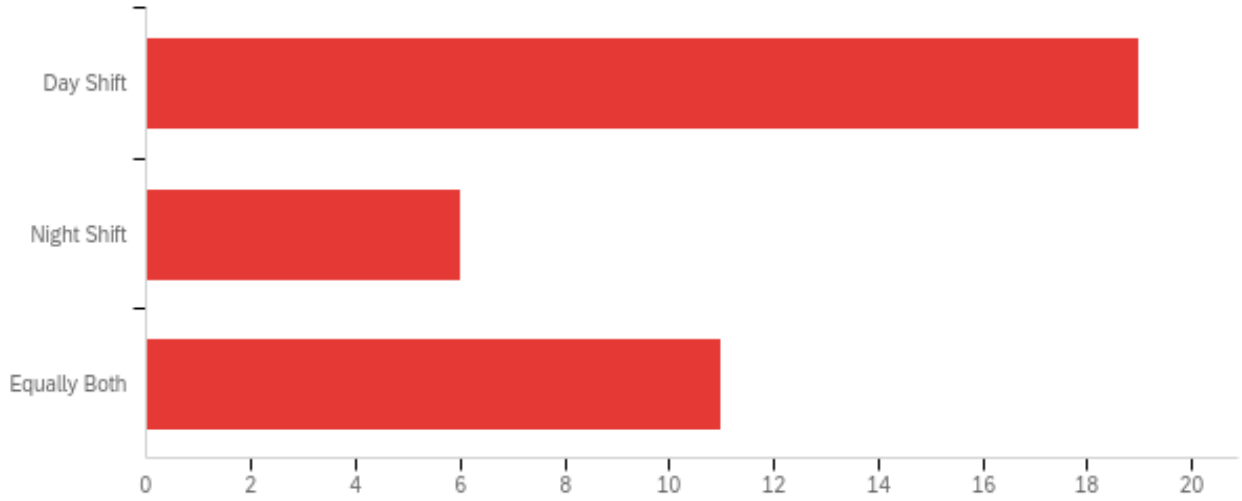
Q6 - I have been a nurse for _____ years.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I have been a nurse for _____ years.	1.00	5.00	2.08	1.36	1.85	36

#	Answer	%	Count
1	0-5	55.56%	20
2	6-10	8.33%	3
3	11-20	13.89%	5
4	21-30	16.67%	6
5	30 +	5.56%	2
	Total	100%	36

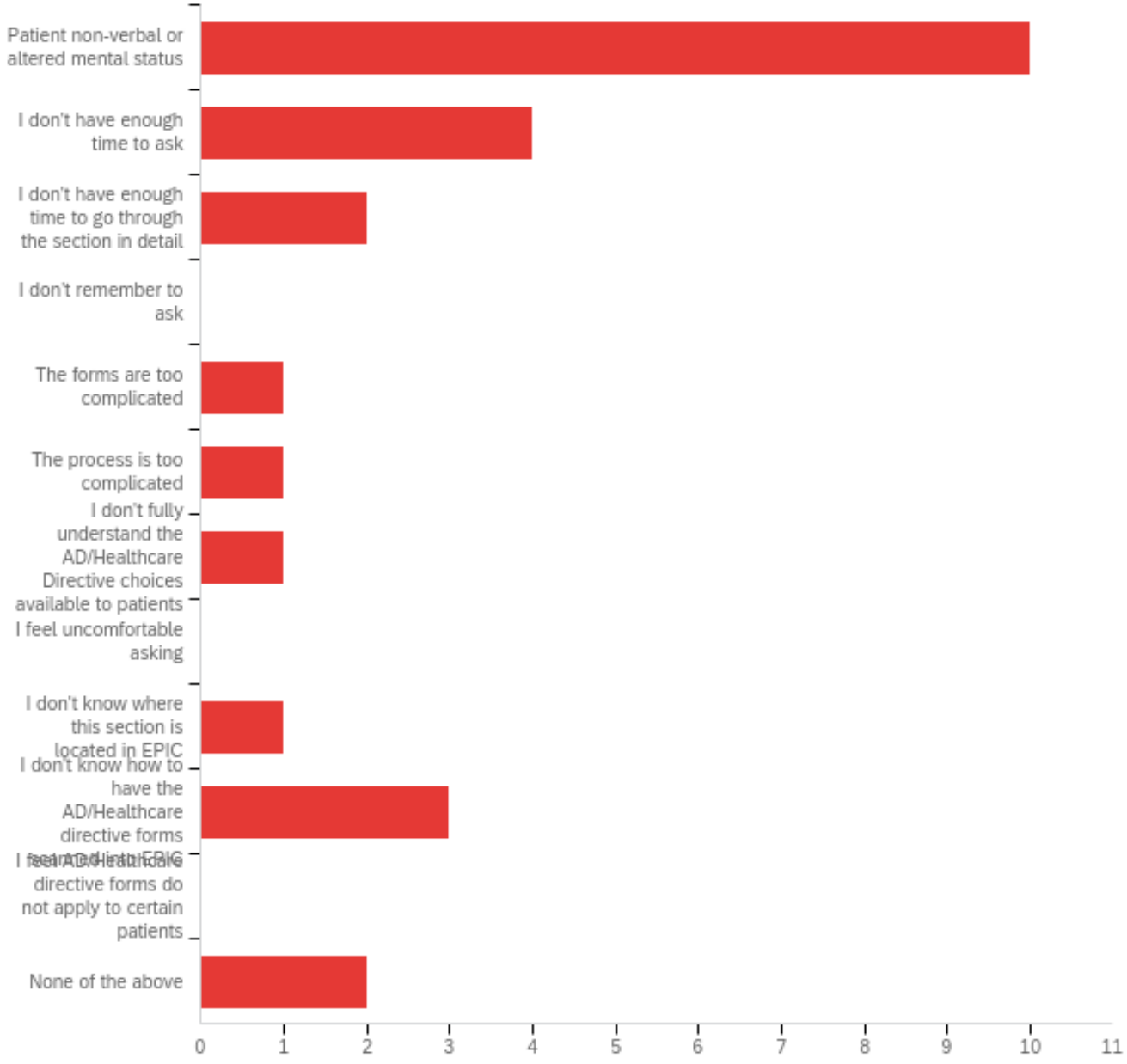
Q7 - I primarily work ____.



#	Answer	%	Count
1	Day Shift	52.78%	19
2	Night Shift	16.67%	6
3	Equally Both	30.56%	11
	Total	100%	36

Post PDSA Cycle 1 Survey-Implementation of Advance Directive Screening Education in the Hospital Setting: A DNP QI Process

Q1 - After receiving AD resources such as the resourceful PowerPoint, brochure, and flyers, what barriers do you continue to face when completing the Advance Directive (AD)/Healthcare Directive Screening section? Please check all that apply.



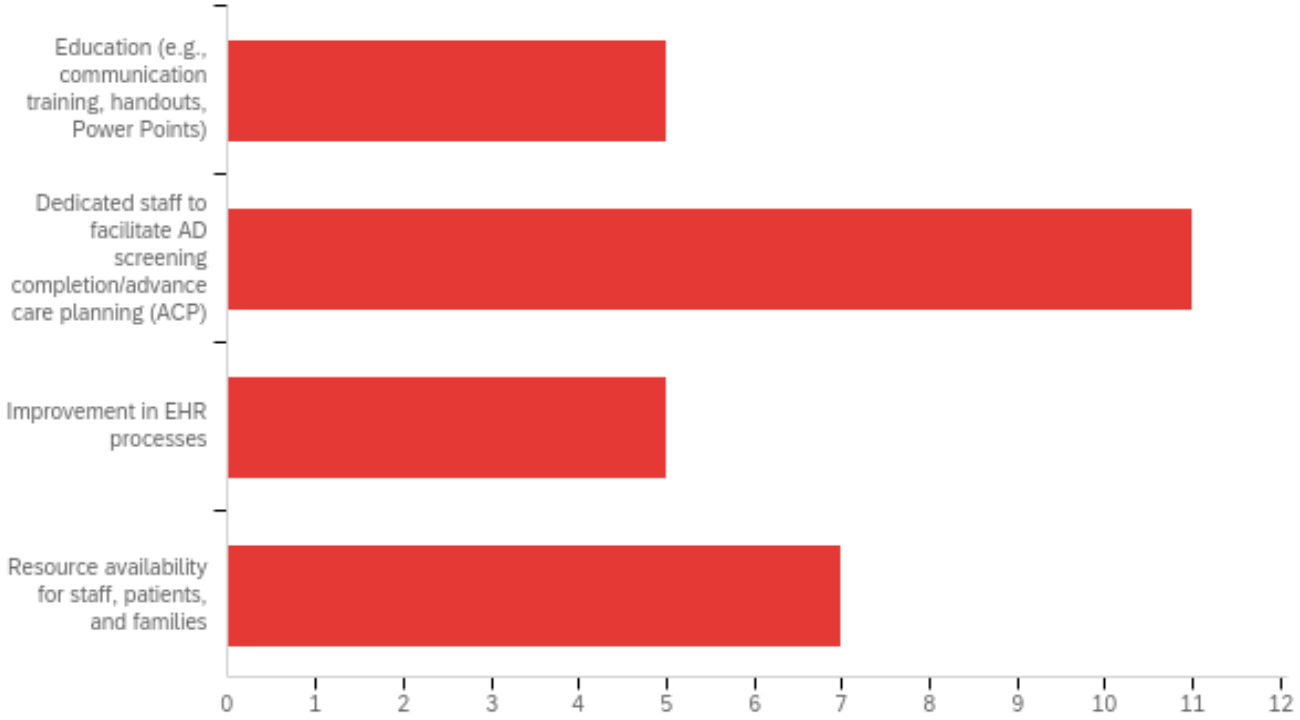
#	Answer	%	Count
1	Patient non-verbal or altered mental status	40.00%	10
2	I don't have enough time to ask	16.00%	4
3	I don't have enough time to go through the section in detail	8.00%	2
4	I don't remember to ask	0.00%	0
5	The forms are too complicated	4.00%	1
6	The process is too complicated	4.00%	1
7	I don't fully understand the AD/Healthcare Directive choices available to patients	4.00%	1
8	I feel uncomfortable asking	0.00%	0
9	I don't know where this section is located in EPIC	4.00%	1
10	I don't know how to have the AD/Healthcare directive forms scanned into EPIC	12.00%	3
11	I feel AD/Healthcare directive forms do not apply to certain patients	0.00%	0
12	None of the above	8.00%	2
	Total	100%	25

Q2 - Upon patient admission, what barriers do you face when completing the AD/Healthcare directive screening section? If any other reason(s) other than the ones depicted above, please specify below.

Upon patient admission, what barriers do you face when completing the AD/Healthcare directive screening section? If any other reason(s) other than the ones depicted above, please specify below.
I don't know how to add the additional screening questions on epic
families not ready to talk about it
Often times, family says they have already been scanned into Epic. But I am always unable to find. Also, as a night shifter--I don't know how to communicate my pts desire to complete paperwork with the day team non-RN staff that needs to follow up.
Upon patient admission, what barriers do you face when completing the AD/Healthcare directive screening section? If any other reason(s) other than the ones depicted above, please specify below.
I don't know how to add the additional screening questions on epic
families not ready to talk about it

Often times, family says they have already been scanned into Epic. But I am always unable to find. Also, as a night shifter--I don't know how to communicate my pts desire to complete paperwork with the day team non-RN staff that needs to follow up.

Q3 - What would improve your ability to fully complete the AD/Healthcare Directive Screening section? Please check all that apply.

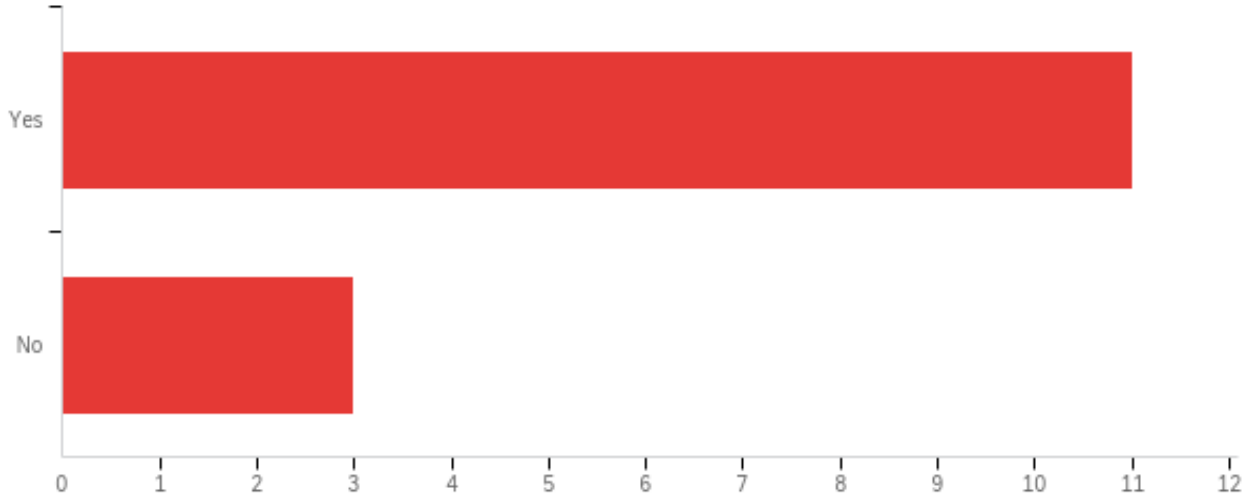


#	Answer	%	Count
1	Education (e.g., communication training, handouts, Power Points)	17.86%	5
2	Dedicated staff to facilitate AD screening completion/advance care planning (ACP)	39.29%	11
4	Improvement in EHR processes	17.86%	5
5	Resource availability for staff, patients, and families	25.00%	7
	Total	100%	28

Q4 - If any other intervention(s) other than the ones depicted above would be resourceful to help aid in the completion of the AD section, please specify below.

If any other intervention(s) other than the ones depicted above would be resourceful to help aid in the completion of the AD section, please specify below.
automatically have the line items in epic under screening instead of adding additional line items
Periodic education follow up
A way to follow up on completing ADs. On admission, family/pt. are not in the mental state to discuss completing these and follow-up rarely happens.

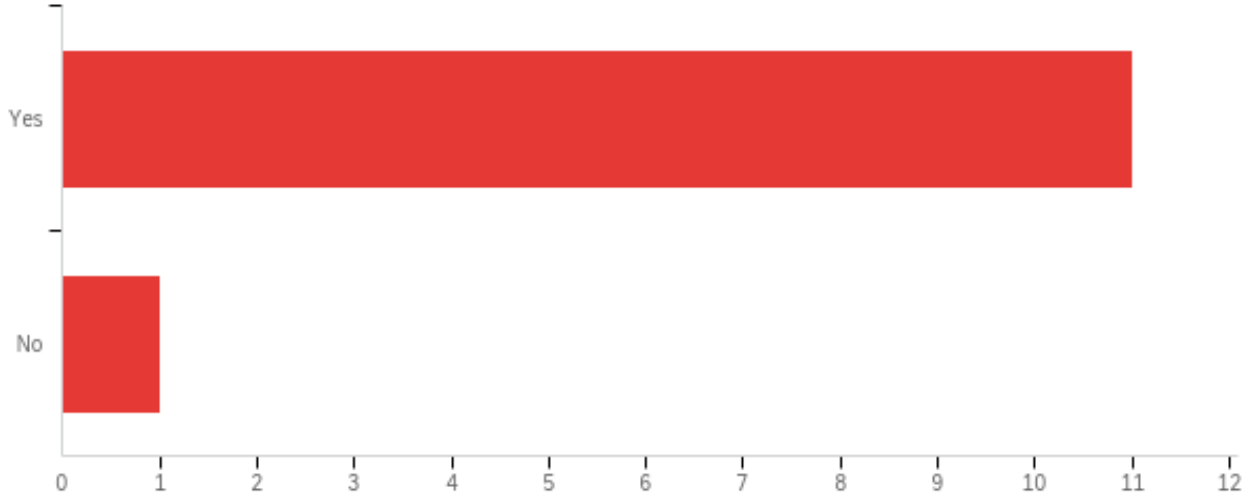
Q5 - Have you had the opportunity to utilize the resources that were provided by the DNP project lead?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Have you had the opportunity to utilize the resources that were provided by the DNP project lead?	4.00	5.00	4.21	0.41	0.17	14

#	Answer	%	Count
4	Yes	78.57%	11
5	No	21.43%	3
	Total	100%	14

Q6 - If you have, did you find them helpful and insightful?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	If you have, did you find them helpful and insightful?	33.00	34.00	33.08	0.28	0.08	12

#	Answer	%	Count
33	Yes	91.67%	11
34	No	8.33%	1
	Total	100%	12

Q7 - What feedback, if any, would you like to provide the DNP project lead?

What feedback, if any, would you like to provide the DNP project lead?
Appreciate the efforts, but I found the resources provided were confusing.
she did a great job!
great job
Thank you for providing the resources to educate patients on advanced directives
Strong work
A one page flowsheet for completion would be helpful. The brochure is packed with info but hard to read quickly when you have a question

Appendix O

Cost Analysis

Cost Analysis of DNP Project			
Item	**Cost per Item**	**Quantity**	**Total Cost**
Pack of 12 Cheese Its	$4.54/box	3	$13.62
Nabisco Cookie Packs (30)	$6.32/box	3	$18.96
Cup Cake Mix	$1.24/box	1	$1.25
Icing	$1.97	1	$1.97
Lamination Pouches (100)	$23.99/set	1	$23.99
TOTAL			**$59.79**

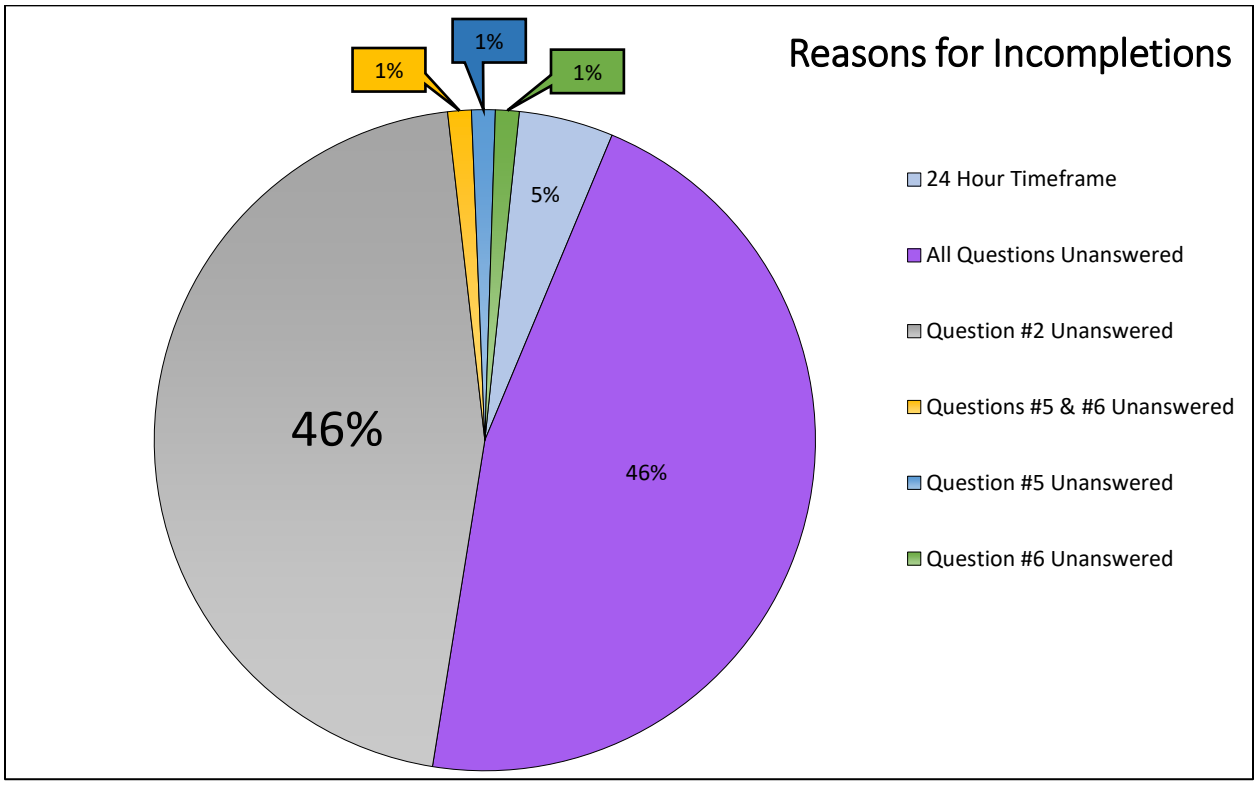
Costs incurred by the unit that was associated with printing documents were excluded in the cost analysis.

Appendix P

Advance Directive (Pre) Implementation Data and (Post) Implementation Compiled Data

Figure 1

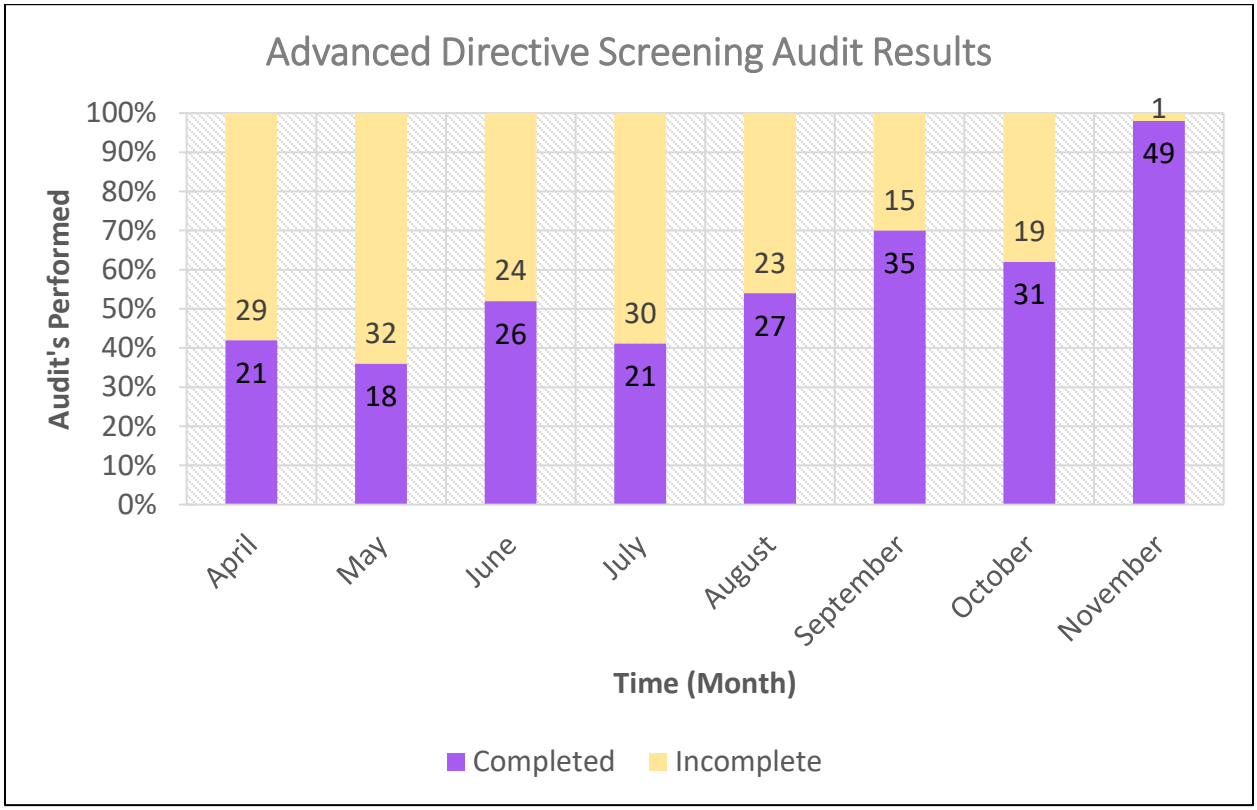
Reasons for Incompletion



Note. Four questions, as well as, a 24-hour time frame were required to be compliant. This graph depicts the main reasons why compliance was not achieved. This data was collected from April – November.

Figure 2

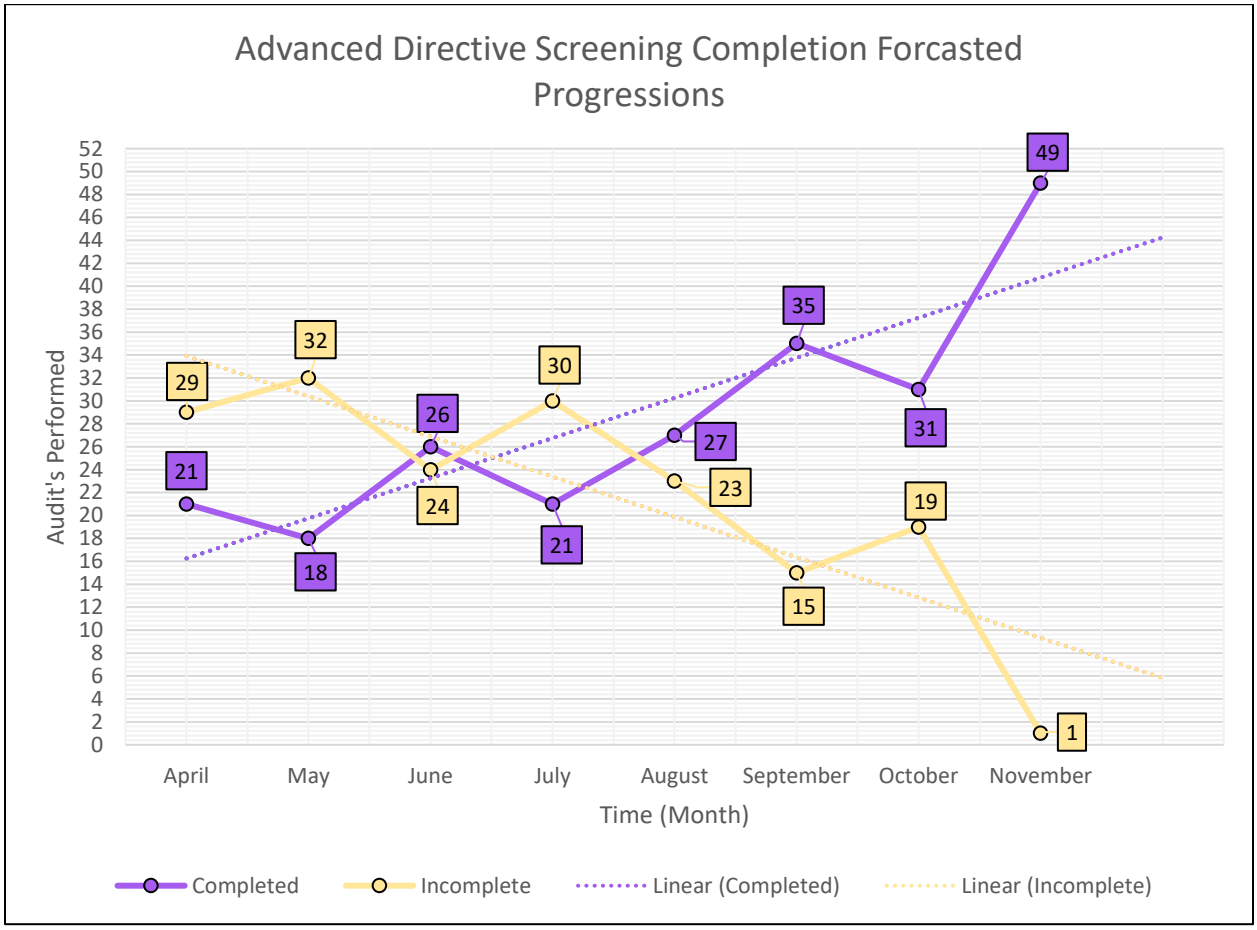
AD Screening Compliance Results



Note. Percentage of AD screening completion. April through July depicts pre-implementation data. August – November portrays implementation phase. August (Self-Auditing tool), September (Education), October (Incentives, Reminder Cards, 1:1 tutorials), November (EHR Audit requirement change, eliminating question 2).

Figure 3

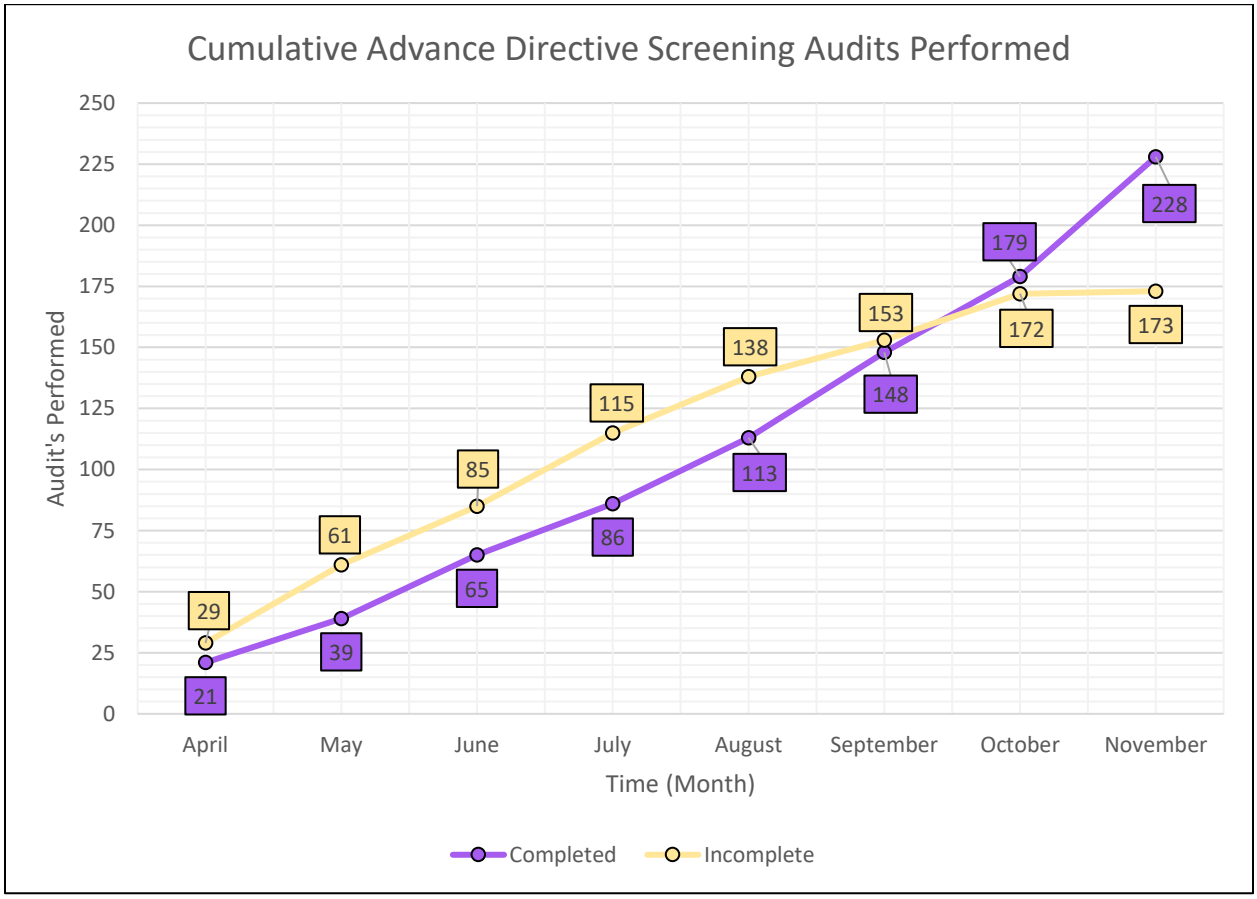
AD Screening Completion Forecasted Progressions



Note. Actual and linearly forecasted AD screening results.

Figure 4

Cumulative AD Screening Audits Performed



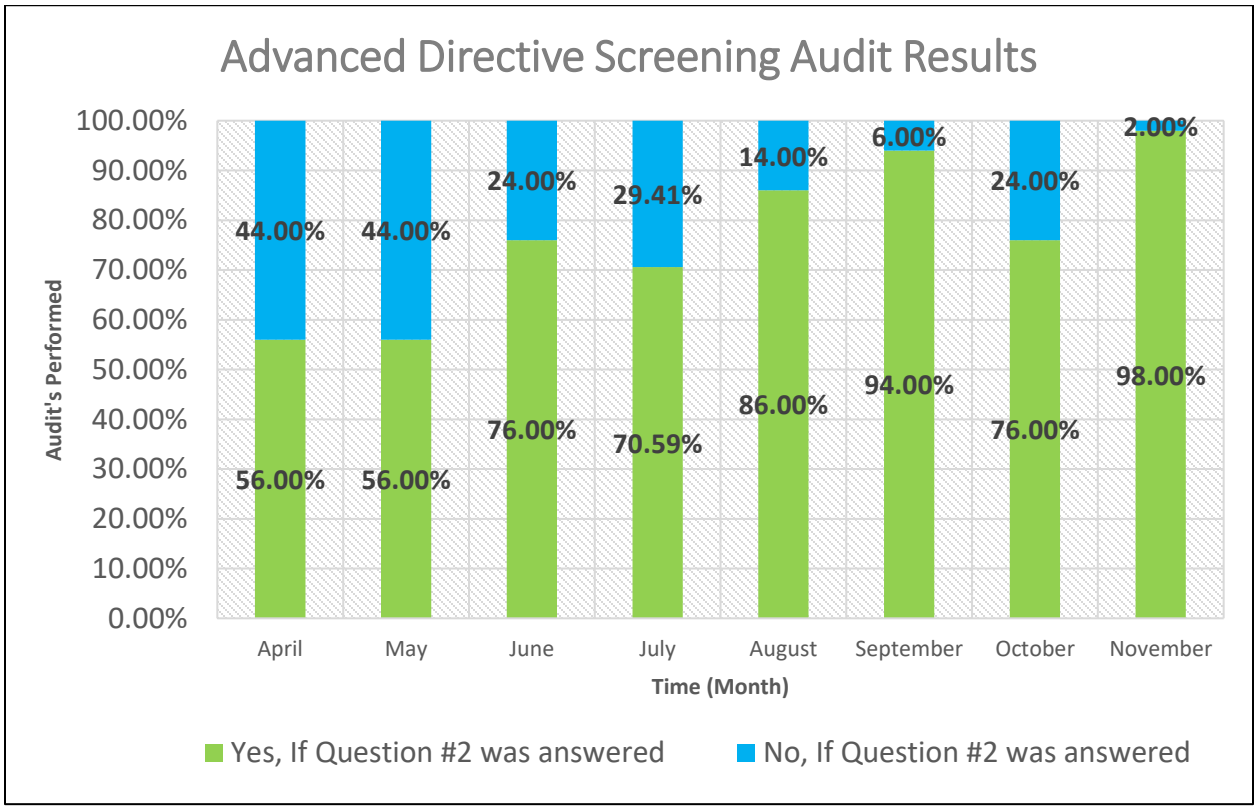
Note. Monthly cumulative totals for completed and incomplete AD screening.

Appendix Q

Prediction Graphs

Figure 1

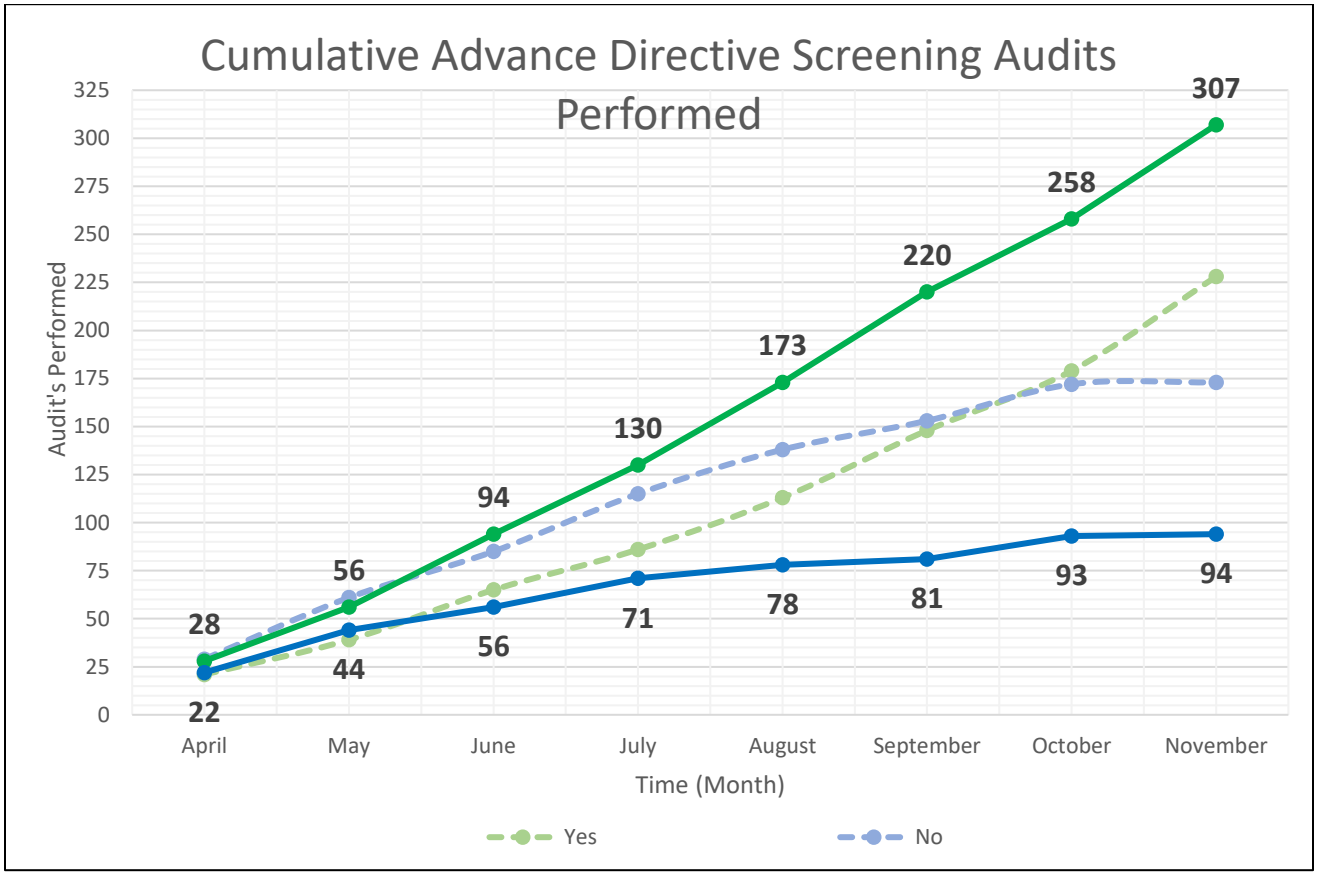
Compliance Percentages



Note. Percentage of AD screening completion if question 2 was answered consistently throughout the duration of the QI initiative. 90% goal would had been achieved sooner.

Figure 2

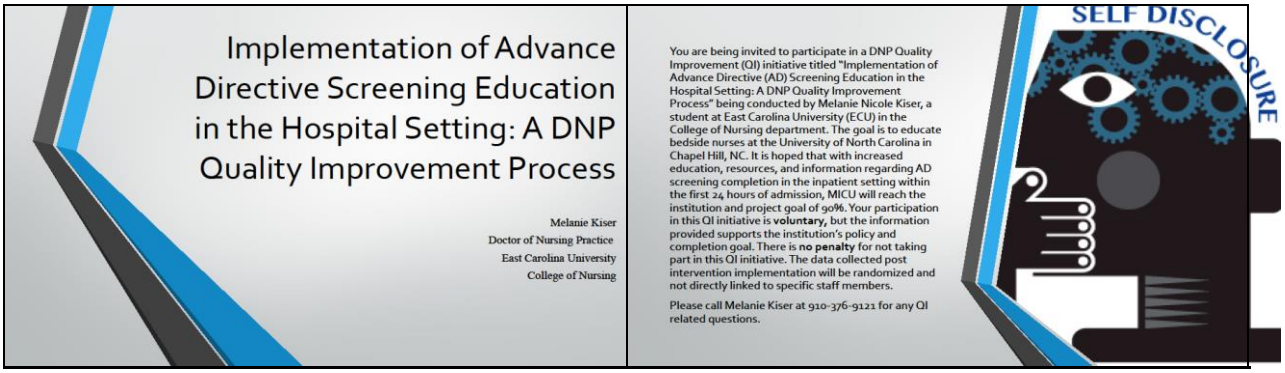
AD Screening Completion Forecasted Progressions if Question 2 was not Required

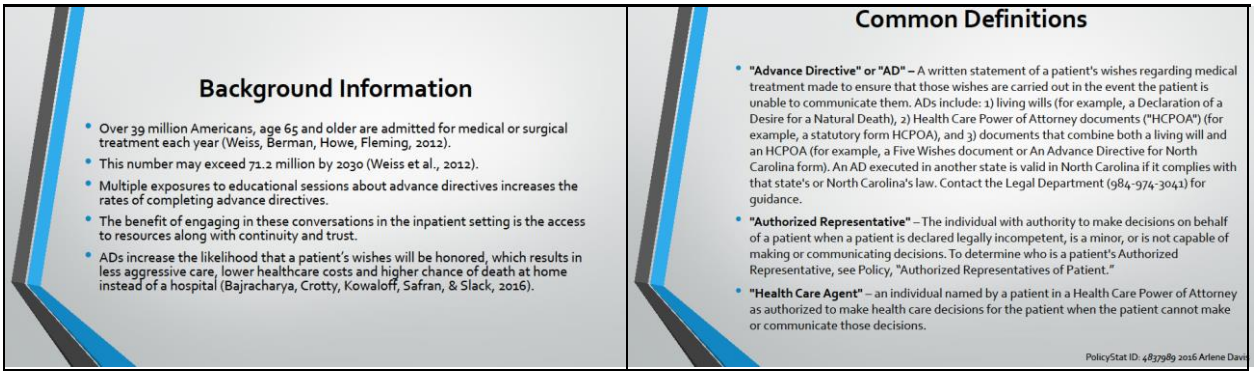


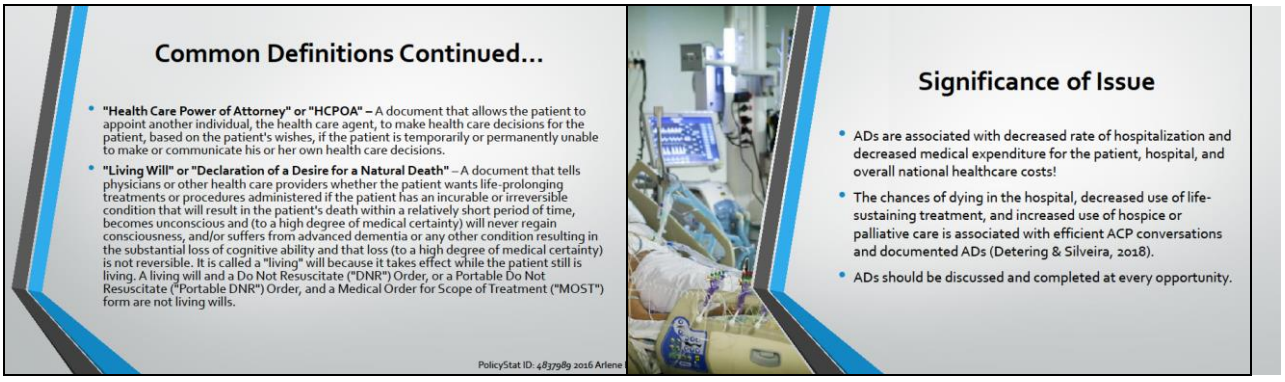
Note. Actual and linearly forecasted AD screening results if question 2 was answered consistently per chart audit requirements.

Appendix R

Educational PowerPoint







Documenting ACP Conversations and ADs in the Inpatient Setting

- Following any advanced care planning (ACP) conversation, it is critical that providers and nurses document the content of the discussion, including any choices made and explanations thereof (Detering & Silveira, 2018).
- ADs should be completed whenever possible and health care systems should ensure the ADs can be quickly filed and immediately available when needed (Detering & Silveira, 2018).
- Screening for ADs in the inpatient setting is the first step in identifying patients who would like to complete these documents or patients who have completed documents.

Importance of AD Screening in the MICU

- Ensuring completion of AD screening questions upon admission and transfer to the MICU will help ensure that patients are made aware of ADs and information was provided.
- Engaging in these ACP conversations upon admission and transfer to the MICU certifies that HCPOA and ADs are discussed and documented appropriately.
- These questions confirm that the patient's wishes are clarified and recorded properly in the electronic health record (HER).
- Engaging in these conversations will provide patients with the knowledge and resources to make informed decisions regarding their care if they wish.
- Patients will be given the opportunity to complete an AD or PoA.

Data Collection Results from November 2017-June 2019

The institution's AD screening compliance completion goal as well as the QI initiative goal is 90%.

Depicted below is Advance Directive randomized audit data collected from November 2017 to June 2019.

	Audits = 44 Nov 17 45.5%	Audits = 38 Dec 17 57.9%	Audits = 42 Jan 18 59.5%	Audits = 36 Feb 18 55.6%	—The foundation for the QI initiative was based on Fiscal year 2018 data						
4. Were Advance Directives completed?	Audits = 2 July 18 n.d.	Audits = 4 Aug 18 50.0%	Audits = 2 Sept. 18 100.0%	Audits = 1 Oct. 18 100.0%	Audits = 2 Nov18 50.0%	Audits = 2 Dec. 18 50.0%	Audits = 2 Jan 19 50.0%	Audits = 2 Feb 19 100%	Audits = 0 March 19 n.d.	Audits = 52 April 19 40.2%	Audits = 42 May 19 31%
	Audits - 33 June 19 51.5%										

Screening is a NURSING Responsibility, along with the provider, case manager, and/or social worker.

Nursing Staff Responsibilities - The admitting nurse will ask the patient or the patient's authorized representative if the patient has completed an AD and will document the presence or absence of the AD in the medical record. If the patient has an AD, the admitting nurse must ask for a copy of the AD.

- If a copy of the AD **is available**, the admitting nurse is responsible for:
  - Ensuring that the AD is scanned into the medical record;
  - Ensuring that an entry is made in the medical record that reflects the patient's wishes as set forth in the AD; and
  - Returning any original copies to the patient.

Screening is a NURSING Responsibility, along with the provider, case manager, and/or social worker continued…

- If a copy of the AD is **not** available, the admitting nurse is responsible for:
  - Asking the patient or the patient's authorized representative if a copy of the AD was received during a previous admission, and checking the medical record for a copy or reference to the patient's wishes as expressed in the AD;Asking the patient or the patient's authorized representative to have a copy brought to the hospital for placement in the patient's medical record; and
  - If no copy can be found or brought to the hospital, advising the patient to complete a new AD with the assistance of Patient Relations. The patient and patient's authorized representative should also be asked for the patient's wishes so that they can be documented in the medical record and followed accordingly.

Screening is a NURSING Responsibility, along with the provider, case manager, and/or social worker continued…

- If the patient **does not have an AD**, the admitting nurse must ask if the patient is interested in making an AD and will offer the following AD information, as appropriate:
  - A copy of the UNC Hospitals AD brochure;
  - A referral to Patient Relations in accordance with Section IV.C., below; and
  - For patients who wish to express their treatment preferences without completing formal AD documents, documenting treatment preferences in the medical record. The nurse should notify other members of the health care team as appropriate, who should document their discussions as well. Patients will be offered the opportunity to complete AD documents if at any time the patient wishes to do so.

Where to locate AD screening questions?

Advance directive screening questions are located under the admission screening section.

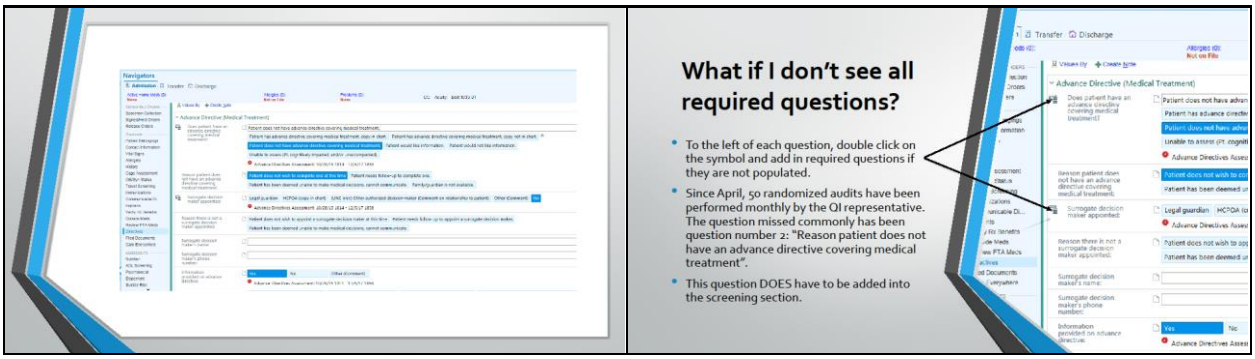
What is required to ensure AD documentation is complete?

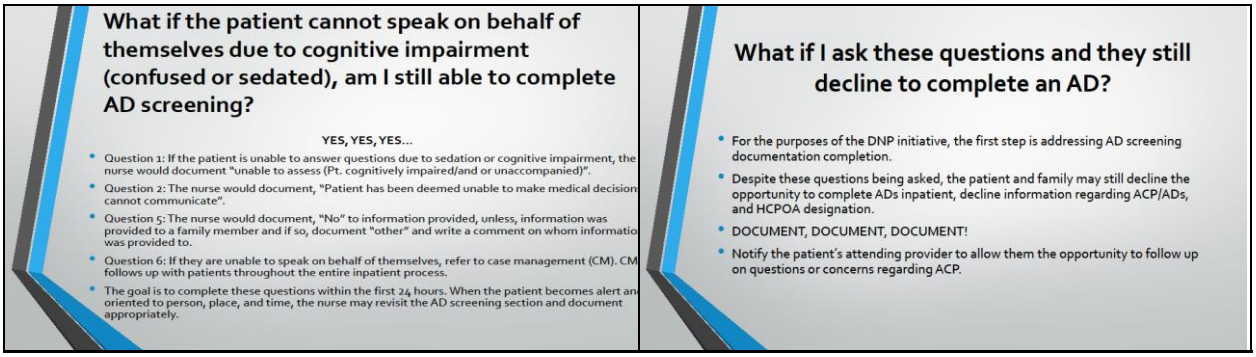
There are six questions total.

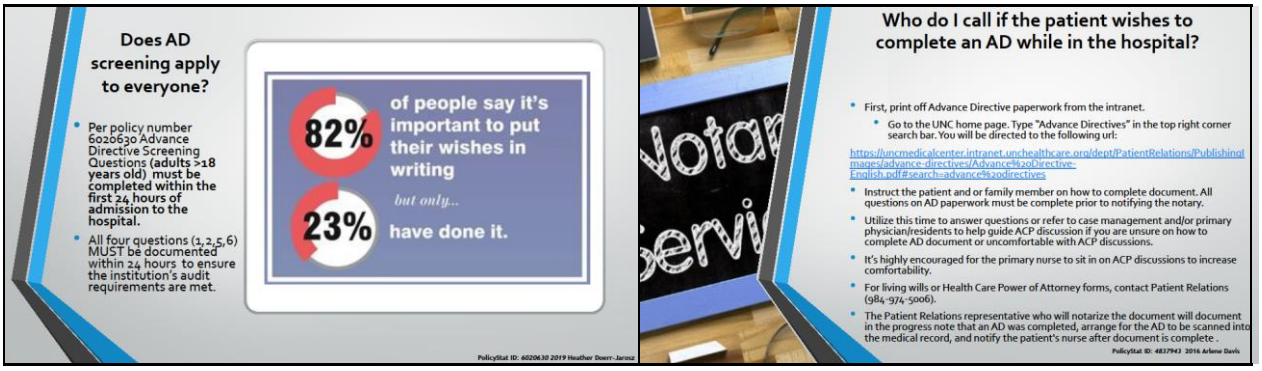
Per the institution's audit requirements **questions 1, 2, 5, 6 are required.**

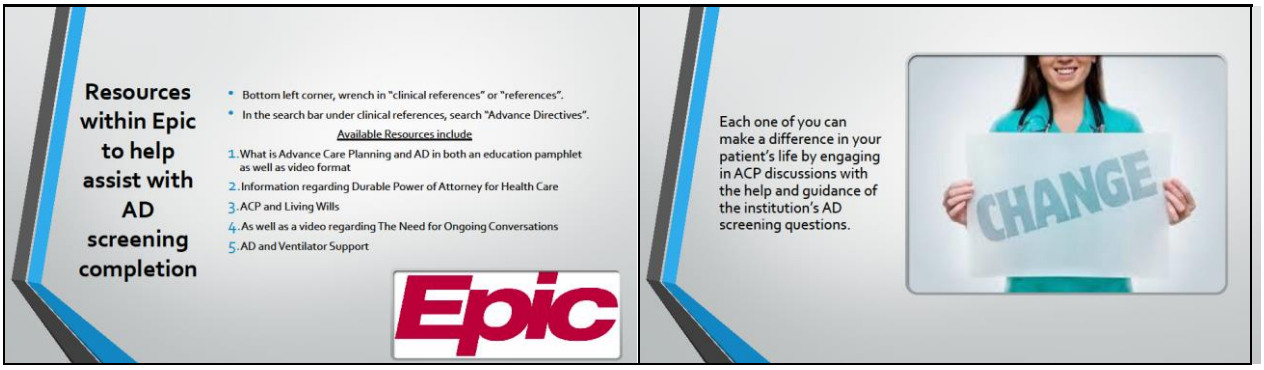
Some questions require you to "add" questions in utilizing the drop-down option under the AD section.

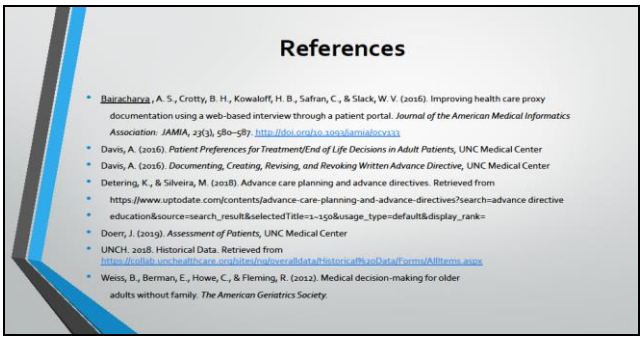
- ***1.Patient does have an AD covering medical treatment***
- ***2.Reason patient does not have an AD covering medical treatment***
- 3.Surrogate decision maker appointed
- 4.Reason there is not a surrogate decision maker appointed
- ***5.Information provided on AD***
- ***6.Patient requests assistance***


What if I don't see all required questions?
To the left of each question, double click on the symbol and add in required questions if they are not populated.
Since April, 50 randomized audits have been performed monthly by the QI representative. The question missed commonly has been question number 2: "Reason patient does not have an advance directive covering medical treatment".
This question DOES have to be added into the screening section.


What if the patient cannot speak on behalf of themselves due to cognitive impairment (confused or sedated), am I still able to complete AD screening?
YES, YES, YES…
Question 1: If the patient is unable to answer questions due to sedation or cognitive impairment, the nurse would document "unable to assess (Pt. cognitively impaired/and or unaccompanied)".
Question 2: The nurse would document, "Patient has been deemed unable to make medical decision cannot communicate".
Question 5: The nurse would document, "No" to information provided, unless, information was provided to a family member and if so, document "other" and write a comment on whom informatio was provided to.
Question 6: If they are unable to speak on behalf of themselves, refer to case management (CM). CM follows up with patients throughout the entire inpatient process.
The goal is to complete these questions within the first 24 hours. When the patient becomes alert an oriented to person, place, and time, the nurse may revisit the AD screening section and document appropriately.
What if I ask these questions and they still decline to complete an AD?
For the purposes of the DNP initiative, the first step is addressing AD screening documentation completion.
Despite these questions being asked, the patient and family may still decline the opportunity to complete ADs inpatient, decline information regarding ACP/ADs, and HCPOA designation.
DOCUMENT, DOCUMENT, DOCUMENT!
Notify the patient's attending provider to allow them the opportunity to follow up on questions or concerns regarding ACP.


Does AD screening apply to everyone?
Per policy number 6020630 Advance Directive Screening Questions (adults >18 years old) must be completed within the first 24 hours of admission to the hospital.
All four questions (1,2,5,6) MUST be documented within 24 hours to ensure the institution's audit requirements are met.
82% of people say it's important to put their wishes in writing
but only...
23% have done it.
PolicyStat ID: 6020630 2019 Heather Doerr-Jarosz
Who do I call if the patient wishes to complete an AD while in the hospital?
First, print off Advance Directive paperwork from the intranet.
Go to the UNC home page. Type "Advance Directives" in the top right corner search bar. You will be directed to the following url:
https://uncmedicalcenter.intranet.unchealthcare.org/dept/PatientRelations/PublishingImages/advance-directives/Advance%20Directive-English.pdf#search=advance%20directives
Instruct the patient and or family member on how to complete document. All questions on AD paperwork must be complete prior to notifying the notary.
Utilize this time to answer questions or refer to case management and/or primary physician/residents to help guide ACP discussion if you are unsure on how to complete AD document or uncomfortable with ACP discussions.
It's highly encouraged for the primary nurse to sit in on ACP discussions to increase comfortability.
For living wills or Health Care Power of Attorney forms, contact Patient Relations (984-974-5006).
The Patient Relations representative who will notarize the document will document in the progress note that an AD was completed, arrange for the AD to be scanned into the medical record, and notify the patient's nurse after document is complete .
PolicyStat ID: 4827943 2016 Arlene Davis


Resources within Epic to help assist with AD screening completion
Bottom left corner, wrench in "clinical references" or "references".
In the search bar under clinical references, search "Advance Directives".
Available Resources include
1. What is Advance Care Planning and AD in both an education pamphlet as well as video format
2. Information regarding Durable Power of Attorney for Health Care
3. ACP and Living Wills
4. As well as a video regarding The Need for Ongoing Conversations
5. AD and Ventilator Support
Epic
Each one of you can make a difference in your patient's life by engaging in ACP discussions with the help and guidance of the institution's AD screening questions.
CHANGE



References

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Appendix S

Educational Flyers

Advance Directive Screening Questions

Who: EVERY PATIENT AGES >18 YEARS OLD

What: COMPLETE AD SCREENING QUESTIONS 1,2,5,6

Where: MICU ☺

When: WITHIN THE FIRST 24 HOURS OF ADMISSION. IF YOU'RE BUSY, CALL YOUR CHARGE NURSE!

Why: ADs ARE ASSOCIATED WITH DECREASED HOSPITALIZATIONS & DECREASED MEDICAL EXPENDITURE FOR THE PATIENT, HOSPITAL, AND OVERALL NATIONAL HEALTHCARE COSTS, BUT IT STARTS WITH SCREENING!

Advance Directive Screening Questions

Who: EVERY PATIENT AGES >18 YEARS OLD

What: COMPLETE AD SCREENING QUESTIONS 1,2,5,6

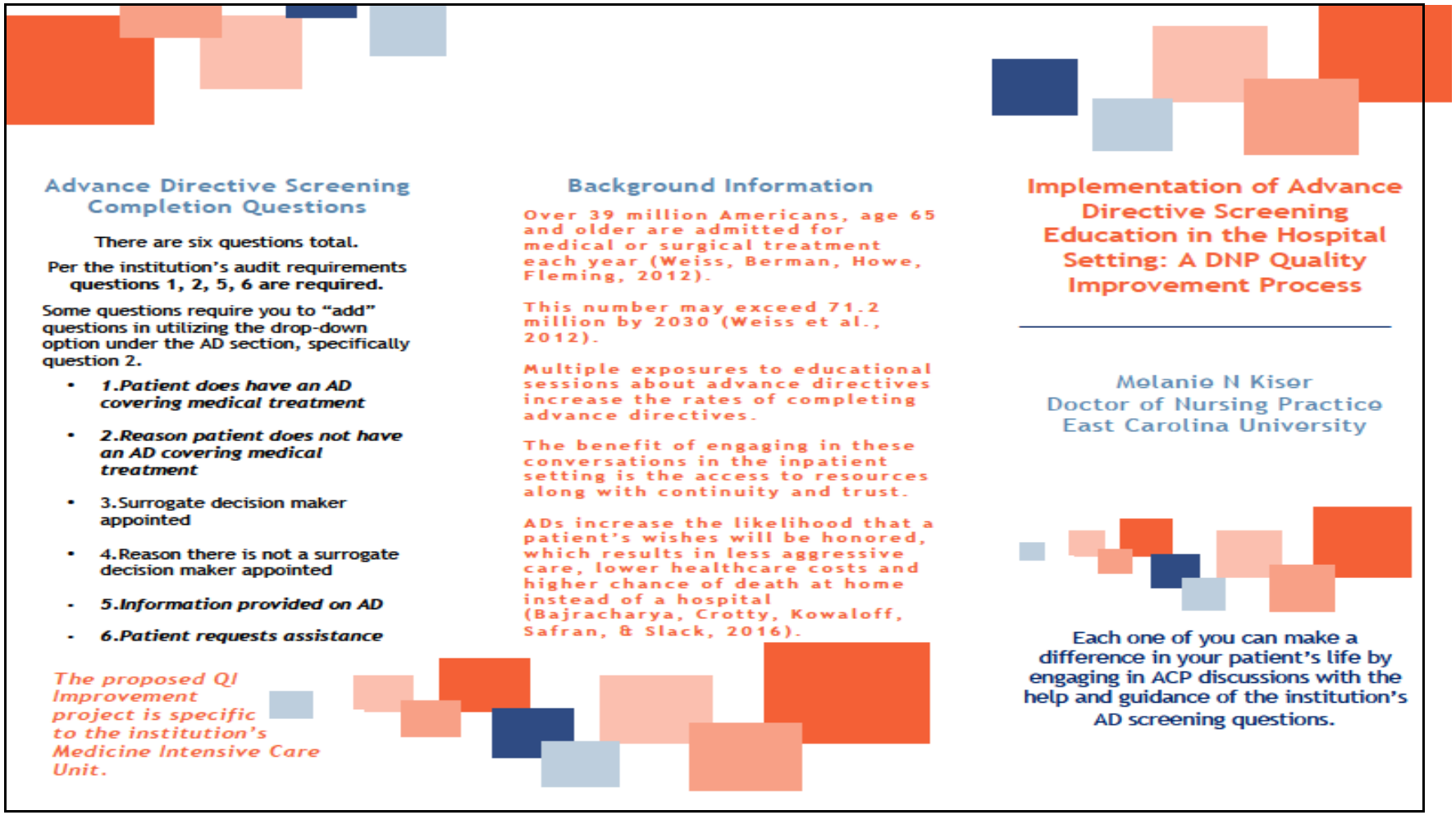
Where: MICU

When: WITHIN THE FIRST 24 HOURS OF ADMISSION. IF YOU'RE BUSY, CALL YOUR CHARGE NURSE!

Why: ADs ARE ASSOCIATED WITH DECREASED HOSPITALIZATIONS & DECREASED MEDICAL EXPENDITURE FOR THE PATIENT, HOSPITAL, AND OVERALL NATIONAL HEALTHCARE COSTS, BUT IT STARTS WITH SCREENING!

Appendix T

Educational Brochure



Nursing Staff Responsibilities When Asking Screening Questions

The admitting nurse will ask the patient or the patient's authorized representative if the patient has completed an AD and will document the presence or absence of the AD in the medical record. If the patient has an AD, the admitting nurse must ask for a copy of the AD.

If a copy of the AD is available, the admitting nurse is responsible for:

- Ensuring that the AD is scanned into the medical record;
- Ensuring that an entry is made in the medical record that reflects the patient's wishes as set forth in the AD; and
- Returning any original copies to the patient.

If a copy of the AD is not available, the admitting nurse is responsible for:

- Asking the patient or the patient's authorized representative if a copy of the AD was received during a previous admission, and checking the medical record for a copy or reference to the patient's wishes as expressed in the AD; Asking the patient or the patient's authorized representative to have a copy brought to the hospital for placement in the patient's medical record; and
- If no copy can be found or brought to the hospital, advising the patient to complete a new AD with the assistance of Patient Relations. (PolicyStat ID: 4837043, 2016, Davis, A)

WHAT IF THE PATIENT DOES NOT HAVE AN ADVANCE DIRECTIVE?

If the patient **does not have an AD**, the admitting nurse must ask if the patient is interested in making an AD and will offer the following AD information, as appropriate:

- A copy of the UNC Hospitals AD brochure (located in the information welcome handbook on page 40);
- A referral to Patient Relations in accordance with Section IV.C., below; and
- For patients who wish to express their treatment preferences without completing formal AD documents, documenting treatment preferences in the medical record. The nurse should notify other members of the health care team as appropriate, who should document their discussions as well. Patients will be offered the opportunity to complete AD documents if at any time the patient wishes to do so. (PolicyStat ID: 4837043, 2016, Davis, A)

DOES AD SCREENING APPLY TO ALL PATIENTS IN THE MICU?

YES, YES, YES

Per policy number 6020630 Advance Directive Screening Questions **(adults >18 years old) must be completed within the first 24 hours of admission to the hospital.**

All four questions (1,2,5,6) MUST be documented within 24 hours to ensure the institution's audit requirements are met. (PolicyStat ID: 6020630, 2019, Doerr-Jarosz, H)

WHO DO I CALL IF THE PATIENT WISHES TO COMPLETE AN AD WHILE IN THE HOSPITAL?

- First, print off Advance Directive paperwork from the intranet.
- Go to the UNC home page. Type "Advance Directives" in the top right corner search bar. You will be directed to the following url:

https://uncmedicalcenter.intranet.unchealthcare.org/dept/PatientRelations/PublishingImages/advance-directives/Advance%20Directive-English.pdf#search=advance%20directives

- Instruct the patient and or family member on how to complete document. All questions on AD paperwork must be complete prior to notifying the notary.
- Utilize this time to answer questions or refer to case management and/or primary physician/residents to help guide ACP discussion if you are unsure on how to complete AD document or uncomfortable with ACP discussions.
- It's highly encouraged for the primary nurse to sit in on ACP discussions to increase comfortability.
- For living wills or Health Care Power of Attorney forms, contact Patient Relations (984-974-5006).
- The Patient Relations representative who will notarize the document will document in the progress note that an AD was completed, arrange for the AD to be scanned into the medical record, and notify the patient's nurse after document is complete. (PolicyStat ID: 4836942, 2016, Davis, A)